An Anatomy of Treaty Interpretation:

Adjudicating Environmental Disputes under International Economic Law

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A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2019

Reading Committee:

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Program Authorized to Offer Degree:

School of Law

University of Washington

Abstract

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This dissertation examines regulatory space under international economic law using a narrative of interpretation. Specifically, this dissertation seeks to explain how interpretive arguments give rise to broad or narrow constructions of state's international economic obligations that restrict or uphold the state's regulatory space on environmental issues at the WTO Appellate Body and arbitral tribunals constituted under the ICSID Arbitration Rules. The dissertation designs a uniform criterion in evaluating international tribunals' interpretation. Using the mandatory VCLT rule of interpretation as the benchmark, this dissertation scrutinizes the extent to which the WTO Appellate Body and the ICSID arbitral tribunals adhere to

the VCLT's "single combined operation" approach in adjudicating environmental disputes. The narrative of interpretation breaks down the decisions' legal reasoning process based on the interpretive arguments employed to arrive at a certain construction.

This dissertation explains how the interpretive process directly impacts legitimacy of international adjudication on the issue of regulatory space. It finds that rigorous application of the VCLT's "single combined operation" approach to interpretation is more likely to generate narrow construction of obligations under international economic law that upholds state's regulatory space on environment. In contrast, slack application and non-application of the VCLT's "single combined operation" approach to interpretation is more likely to generate broad construction of obligations under international economic law that restricts state's regulatory space on environment. The findings apply to adjudication of environmental disputes under both trade law and investment law.

CONTENTS

To Mom and Dad

Abbreviations

BITs	bilateral investment treaties
CETA	Comprehensive Economic and Trade Agreement
DSB	(WTO) Dispute Settlement Body
DSU	(WTO) Dispute Settlement Understanding
EU	European Union
FET	fair and equitable treatment
FTAs	free trade agreements
ICSID	International Centre for Settlement of Investment Disputes
ICSID AF	International Centre for Settlement of Investment Disputes Additional Facility
ILC	International Law Commission
ISDS	investor-state dispute settlement
GATS	General Agreements on Trade in Service
GATT	General Agreement on Tariffs and Trade
MFN	Most Favoured Nations
NAFTA	North American Free Trade Agreement
SCM	Agreement on Subsidies and Countervailing Measures
SPS	Agreement on the Application of Sanitary and Phytosanitary
TBT	Agreement on Technical Barriers to Trade
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization
VCLT	Vienna Convention on the Law of Treaties

I. Introduction

1. Legitimacy Crisis of International Economic Law: A Narrative of Interpretation

International investment law is mired in a deep legitimacy crisis. The backlash against investment regime mainly focuses on the investor-state dispute settlement ("ISDS"). States that have been involved in investor-state dispute settlement ("ISDS") are increasingly renegotiating investment agreements after learning about the legal consequences of their treaty commitment.[1] Some states see the ISDS as a grave threat to their sovereignty and simply exit the investment regime. As of March 2019, at least eight states have terminated bilateral investment treaties or denounced multilateral treaties related to foreign investment: Bolivia, Venezuela, Ecuador, South Africa, Indonesia, Italy, Russia, and India.[2] Other states, such as Australia under the Gillard Government, decided that Australia would no longer include the ISDS provision in future investment agreements. The legitimacy crisis of investment law brought states around the world to debate the ISDS reforms under the auspice of United Nations Commission on International Trade Law ("UNCITRAL").[3] The

[1] Yoram Z. Haftel & Alexander Thompson, *When do States Renegotiate Investment Agreements? The Impact of Arbitration*, 13 THE REVIEW OF INTERNATIONAL ORGANIZATIONS 25 (2018).
[2] James Crawford, *The Current Political Discourse Concerning International Law*, 81 THE MODERN LAW REVIEW 1, 9 (2018).
[3] UNCITRAL WORKING GROUP III, http://www.uncitral.org/uncitral/en/commission/working_groups/3Investor_State.html (last visited Dec 10, 2018). The UNCITRAL debates on the ISDS reform are highly political. For a summary of the states' vying positions, *see* ANTHEA ROBERTS: EJIL: TALK! – UNCITRAL AND

tarnished reputation of the ISDS has led the International Court of Justice, the most reputable international court in the world, to prohibit its sitting judges from serving as ISDS arbitrators.[4] Beyond controversy around the ISDS, it has not been firmly established that investment treaties actually live up to their promise of increasing foreign investment,[5] which further diminishes the appeal of participating in the international investment regime.

The critiques aimed at investment law can be divided into procedural and substantive categories. Procedurally, the investment law regime suffers from legitimacy deficit on a wide range of issues including: pervasive confidentiality in dispute settlement,[6] the unrepresentative pool of arbitrators who are predominantly "male, pale, and stale,"[7] ethical issues over arbitrators' double hatting of acting

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ISDS REFORMS: WHAT ARE STATES' CONCERNS?, https://www.ejiltalk.org/uncitral-and-isds-reforms-what-are-states-concerns/ (last visited Dec 10, 2018)

[4] Speech by H.E. Mr. Abdulqawi A. Yusuf, President of the International Court of Justice, On the Occasion of the Seventy-Third Session Of The United Nations General Assembly, https://www.icj-cij.org/files/press-releases/0/000-20181025-PRE-02-00-EN.pdf.

[5] Karl P. Sauvant & Lisa E. Sachs, THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES, AND INVESTMENT FLOWS (Oxford University Press) (2009).

[6] Emilie M. Hafner-Burton & David G. Victor, *Secrecy in International Investment Arbitration: An Empirical Analysis*, 7 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 161 (2016). Emilie M. Hafner-Burton et al., *Against Secrecy: The Social Cost of International Dispute Settlement*, 42 YALE JOURNAL OF INTERNATIONAL LAW 279 (2017).

[7] http://arbitrationblog.kluwerarbitration.com/2014/04/10/icca-2014-does-male-pale-and-stale-threaten-the-legitimacy-of-international-arbitration-perhaps-but-theres-no-clear-path-to-change/

sequentially or even simultaneously as arbitrators and legal counsels,[8] tribunals' reluctance in admitting amicus curiae briefs,[9] and intimidating arbitration cost.[10]

Substantively, the backlash against investment law can be attributed to three issues. First, the ISDS has been criticized as being biased against developing countries. The majority of disputes have been brought by investors from developed countries against developing country governments. One study pointed out that arbitral tribunals were more likely to engage in broad interpretation favoring foreign investors when the respondent was a developing state.[11] Another study looked at the ISDS outcomes and found that developing country respondents were twice as likely to lose a case compared to cases against developed country respondents.[12] The differentiated treatment led to claims that investment law regime was a neo-colonial instrument to strengthen the economic interests of developed states.[13]

Second, investment law jurisprudence is highly fragmented and characteristic of flawed legal reasoning.[14] Arbitral tribunals have issued scandalously inconsistent

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[8] Malcolm Langford et al., *The Revolving Door in International Investment Arbitration*, 20 JOURNAL OF INTERNATIONAL ECONOMIC LAW 301 (2017).
[9] Eugenia Levine, *Amicus Curiae in International Investment Arbitration: The Implications of an Increase in Third-Party Participation*, 29 BERKELEY JOURNAL OF INTERNATIONAL LAW 200 (2011).
[10] Susan D. Franck, *Rationalizing Costs in Investment Treaty Arbitration*, 88 WASHINGTON UNIVERSITY LAW REVIEW 769 (2010).
[11] Gus Van Harten, *Arbitrator Behaviour in Asymmetrical Adjudication: An Empirical Study of Investment Treaty Arbitration*, 50 OSGOODE HALL LJ 211 (2012).
[12] Thomas Schultz & Cédric Dupont, *Investment Arbitration: Promoting the Rule of Law or Over-empowering Investors? A Quantitative Empirical Study*, 25 EUR J INT LAW 1147 (2014).
[13] ibid.
[14] Steven R. Ratner, *Regulatory Takings in Institutional Context: Beyond the Fear of Fragmented International Law*, 102 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 475–528 (2008). Susan Franck, *The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law Through Inconsistent Decisions*, 73 FORDHAM LAW REVIEW 1521 (2005).

arbitral awards based on virtually identical facts and investment treaties. A sequence of three investment arbitration against Argentina tellingly illustrate this point. All three cases were filed after the collapse of Argentina peso in 2001 and concerned the same legal issue of whether Argentina could use the defense of necessity for alleged breach of investment treaty obligation. All three cases invoked the US-Argentina Bilateral Investment Treaty and drew on very similar facts. The three tribunals hearing these disputes even shared two arbitrators. Yet the tribunals arrived at conflicting conclusions with the two common arbitrators changing their mind between disputes.[15] Legal reasoning in investor-state arbitral awards have been faulted as manifestly contradictory, inconsistent, or practically non-existent.[16] Many states are increasingly embracing the idea of introducing an appellate court to the ISDS to rectify the flawed and fragmented interpretation among tribunals. The recently concluded Comprehensive Economic and Trade Agreement ("CETA") between Canada and the European Union and the European Union-Vietnam FTA both instituted an appellate review mechanism for ISDS after the model of the WTO Appellate Body.[17]

Third, critiques against investment regime are concerned with the adverse arbitration rulings against states in disputes that involve the host state's regulatory

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[15] David Schneiderman, *Judicial Politics and International Investment Arbitration: Seeking an Explanation for Conflicting Outcomes*, 30 NW. J. INT'L L. & BUS. 383 (2010).
[16] Federico Ortino, *Legal Reasoning of International Investment Tribunals: A Typology of Egregious Failures*, 3 J. INT. DISPUTE SETTL. 31 (2012).
[17] Elsa Sardinha, *The New EU-Led Approach to Investor-State Arbitration: The Investment Tribunal System in the Comprehensive Economic Trade Agreement (CETA) and the EU–Vietnam Free Trade Agreement*, 32 ICSID REVIEW 48.

measures. With the ISDS taking a private mode of adjudication modelled after commercial arbitration, investment arbitration is criticized as privatizing public values in favor of foreign investors' profits: the arbitrators' broad interpretation of treaty obligations[18] and rigid views on contracts and property rights are insensitive to non-economic public values and prioritize investment protection over public welfare.[19]

With regards to the last criticism – that investment law restricts state's right to regulate – a central issue of growing concern is how to ensure that foreign investment does not impair the recipient host countries' environment and natural resources.[20] International investment law has been widely criticized as prioritizing protecting foreign investors over environmental protection.[21] The tension between domestic environmental regulation and foreign investment protection is one of the primary drivers of the legitimacy crisis.[22] At the heart of the ongoing legitimacy crisis are a number of high-profile environmental disputes where arbitrators side with foreign investors who seek damages from the host state for canceling a real estate project or mining concession due to environmental concerns. Among all the regulatory

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[18] William Burke-White, The Argentine Financial Crisis: State Liability under BITs and the Legitimacy of the ICSID System, 407.
[19] Louis T. Wells, *Backlash to Investment Arbitration: Three Causes*, in THE BACKLASH AGAINST INVESTMENT ARBITRATION: PERCEPTIONS AND REALITY 341, 342-345 (Michael Weibel et al. eds., 2010).
[20] Giorgio Sacerdoti, *Investment Protection and Sustainable Development*, in SHIFTING PARADIGMS IN INTERNATIONAL INVESTMENT LAW: MORE BALANCED, LESS ISOLATED, INCREASINGLY DIVERSIFIED 19, 19 (Steffen Hindelang & Markus Krajewski eds., 2016).
[21] UNCTAD, *Investment Policy Framework for Sustainable Development* (2012).
[22] Daniel Behn & Malcolm Langford, *Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration*, 18 THE JOURNAL OF WORLD INVESTMENT & TRADE 14, 14 (2017).

acts that have been subject to international economic tribunals' review, environmental regulations account for the lion's share and have generated the most heated contention. The prominence of environmental disputes in driving the backlash against the ISDS crisis makes environmental disputes a good starting point for understanding the legitimacy crisis of investment law.

The challenge in balancing environmental protection and investment protection is not unique to investment law. Both trade law and investment law implicate a wide range of environmental regulations by national governments. International economic law has been conceptualized as part of the "global administrative law"[23] because it establishes complex preconditions for national regulatory acts.[24] Environmental regulations have been challenged as protectionist trade barriers or regulatory expropriations at international economic courts and tribunals. This shared challenge of reconciling public policy concerns and international economic obligations has been extensively theorized as the challenge of ensuring "regulatory space" under international economic law.[25] Public policy was traditionally only subject to domestic legal and political constrains. States had almost unlimited regulatory autonomy in making decisions that implicated public interests such as environment and public health. After states joined the WTO and ratified

[23] Benedict Kingsbury et al., *The Emergence of Global Administrative Law*, 68 LAW AND CONTEMPORARY PROBLEMS 15 (2005). Joel P. Trachtman, *International Legal Control of Domestic Administrative Action*, 17 JOURNAL OF INTERNATIONAL ECONOMIC LAW 753 (2014).
[24] Trachtman, *supra* note 23.
[25] Markus Wagner, *Regulatory Space in International Trade Law and International Investment Law*, 36 UNIVERSITY OF PENNSYLVANIA JOURNAL OF INTERNATIONAL LAW 1 (2014). The term "regulatory space" has been frequently used interchangeably with terms such as "policy space" and "regulatory autonomy."

investment agreements, they no longer have complete and unconstrained autonomy in making environmental policies. Because the additional constraints on regulatory space serve as a disincentive to join these agreements, ensuring that the constraints are justified by the agreements is key to the legitimacy of this area of law.

Even though both trade law and investment law are subject to the same tensions between economic development and environmental regulation, the legitimacy concerns that plague investment law have been more artfully navigated in trade law. In stark contrast to investment law, the WTO Appellate Body has made good progress in reconciling the tension between trade and environment and is not mired in a legitimacy crisis arising from restrained regulatory space in environmental regulation. The Appellate Body, frequently referred to as the jewel of the crown of the WTO, has been widely praised as the world's most effective international court.[26] The Appellate Body progressively built up a jurisprudence on trade and environment under Article III and Article XX of the GATT that shows a rising level of deference to members' regulatory autonomy in environmental protection.[27] The Appellate Body's achievement in balancing trade and environment is particularly commendable in that little progress has been made on environmental issues within the legislative branch of the WTO.[28] The WTO Appellate Body's

[26] Andrew L. Stoler, *The WTO Dispute Settlement Process: Did the Negotiators Get What They Wanted?*, 3 WORLD TRADE REVIEW 99, 115 (2004). ("In terms of dealing effectively with important state-to-state disputes, it has no equal in the modern world.")
[27] Aaron Cosbey & Petros C. Mavroidis, *Heavy Fuel: Trade and Environment in the GATT/WTO Case Law*, 23 REVIEW OF EUROPEAN, COMPARATIVE & INTERNATIONAL ENVIRONMENTAL LAW 288–301 (2014).
[28] Michael Ming Du, *The Rise of National Regulatory Autonomy in the GATT/WTO Regime*, 14 JOURNAL OF INTERNATIONAL ECONOMIC LAW 639, 648 (2011).

adjudication of environmental cases has not raised serious legitimacy concerns among its member states:[29] the member states seldom seek to overturn the Appellate Body's interpretations; losing parties generally comply with the Appellate Body's decisions; no states dissatisfied with the Appellate Body's decision left the WTO or stopped using its dispute settlement system.[30]

The WTO Appellate Body's legitimacy in adjudicating environmental disputes has been specifically attributed to the coherence and integrity in its interpretation, which provides assurance that the tribunal engages in an impartial reasoning that does not prioritize trade liberalization over environmental protection in dispute settlement.[31] Under the WTO, the tension between trade and environment has been largely overcome, not by the decisions taken at the legislative branch of the WTO Ministerial Conferences, but by coherent and consistent interpretation of the WTO Appellate Body. It is the Appellate Body's meticulous interpretation in environmental disputes that establishes the Appellate Body's deferential approach to environmental regulation.[32] The Appellate Body's interpretation of the WTO agreements in such landmark cases of *Shrimp/Turtle*, *Reformulated Gasoline* and *Asbestos* significantly

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[29] One prominent exception to this observation is that the Appellate Body's decision in China-Raw Materials and China-Rare Earths generated an avalanche of critiques from trade law pundits. The critiques are reviewed in Chapter VI.

[30] Christiane Gerstetter, *Substance and Style—How the WTO Adjudicators Legitimize their Decisions*, in THE JUDICIALIZATION OF INTERNATIONAL LAW 64, 82-85 (Andreas Follesdal & Geir Ulfstein eds., 2018).

[31] Robert Howse, *Adjudicative Legitimacy and Treaty Interpretation in International Trade Law: The Early Years of WTO Jurisprudence*, *in* THE EU, THE WTO, AND THE NAFTA: TOWARDS A COMMON LAW OF INTERNATIONAL TRADE? (2001).

[32] Thomas Schoenbaum, Natural Resources and the Rules of the Multilateral Trading System, in INTERNATIONAL ECONOMIC LAW AND GOVERNANCE: ESSAYS IN HONOUR OF MITSUO MATSUSHITA 284 (Julien Chaisse &Tsai-yu Lin eds., 2016).

preserved states' regulatory flexibility under the WTO regime and greatly contributed to the Appellate Body's legitimacy as a supporter of the sustainable development.[33] In particular, the Appellate Body has been praised for accommodating the emerging paradigm of sustainable development and for integrating evolving understanding of environmental protection through an evolutionary and dynamic interpretation of the WTO agreements. [34] Deference to states' environmental regulation demands more flexible interpretation of the non-discrimination principle of the WTO, as the Appellate Body incorporated the consideration of environmental objectives in its interpretation of "less favourable treatment" in *Asbestos*.[35] The WTO Appellate Body has demonstrated a high level of sensitivity to regulatory space by situating its interpretation of the trade obligation within the broad context of public international law and international environmental law. For example, in interpreting whether living species of animals could be considered "exhaustible natural resources" within the meaning of Article XX(g) of the GATT, the Appellate Body referred to a range of international environmental agreements to provide justification for the otherwise GATT-inconstant trade measures that aim for protecting endangered species.

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[33] *Ibid.*
[34] Gabrielle Marceau, *Evolutive Interpretation by the WTO Adjudicator*, 21 JOURNAL OF INTERNATIONAL ECONOMIC LAW 791 (2018).
[35] Won-mog Choi, *Reinterpretation of the National Treatment Principle: Making International Economic Law a Friend of Global Governance of Environmental Protection*, in INTERNATIONAL ECONOMIC LAW AND GOVERNANCE: ESSAYS IN HONOUR OF MITSUO MATSUSHITA 314 (Julien Chaisse &Tsai-yu Lin eds., 2016).

Comparative studies have frequently suggested that investment law suffers from deeply flawed legal reasoning and can benefit from looking to the Appellate Body's consistent and reasoned interpretation in environmental disputes to alleviate its own legitimacy crisis.[36] Accordingly, this dissertation uses the experience of trade law to offer a narrative theory of interpretation as a key factor in resolving the legitimacy crisis inflicting investment law. In particular, resolving the tension of regulatory space in the environmental dispute context is critical to address the legitimacy crisis of investment. Currently, investment law's handling of regulatory space is counter-intuitive: Investment law should show a higher degree of deference to host states' environmental regulation than trade law, as investment tends to have a deeper impact on the host state than trade by getting directly involved in the host country's economy, ecology and social fabric.[37] In reality the opposite holds true: the WTO Appellate Body is a lot more deferential to state's regulatory autonomy in environmental protection than investment arbitral tribunals.

Coherence and integrity in the process of interpretation contributes to the legitimacy of dispute settlement by disciplining the adjudication process.[38] Fairness of adjudication requires principled, reasoned, and consistent interpretation.[39] A well-

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[36] Frank J. Garcia et al., *Reforming the International Investment Regime: Lessons from International Trade Law*, 18 JOURNAL OF INTERNATIONAL ECONOMIC LAW 861 (2015).
[37] Nicholas DiMascio & Joost Pauwelyn, *Nondiscrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?*, 102 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 48, 57 (2008).
[38] Robert Howse, *Adjudicative Legitimacy and Treaty Interpretation in International Trade Law: The Early Years of WTO Jurisprudence*, in THE EU, THE WTO, AND THE NAFTA: TOWARDS A COMMON LAW OF INTERNATIONAL TRADE? 35 (J. H. H. Weiler ed., 2001).
[39] Laurence R. Helfer & Anne-Marie Slaughter, *Toward a Theory of Effective Supranational Adjudication*, 107 YALE LAW JOURNAL 273 (1997).

reasoned judicial decision allows the community directly impacted by the decision to assess whether the decision is a product of impartial legal reasoning, or merely the adjudicators' own personal choice of the values.[40] This is particularly crucial in environmental disputes that implicate the competing values of economic liberalization and environmental welfare. Interpretation is a rule-bounded practice under international law. The rule of treaty interpretation is codified in the Vienna Convention on the Law of Treaties ("VCLT") Article 31-32 and reflects customary international law binding on all states. To structure the legal reasoning under the general rule of interpretation as enshrined in the VCLT rule enhances the legitimacy of the tribunals in adjudicating environmental disputes: the VCLT rule of interpretation applies to all types of international treaties that prioritize a wide range of different values including environmental protection, sustainable development, and economic liberalization.

The VCLT's "single combined operation" approach of interpretation enhances international tribunals' legitimacy in environmental disputes by obligating the adjudicators to examine a wide range of interpretive means. The VCLT rule itself does not favor either economic values or environmental values. Rather, it prescribes a holistic and open-minded approach that is capable of incorporating a multitude of norms and accommodating changing dynamics in international law.[41] If followed

[40] Howse, *supra* note 38.
[41] Katharina Berner, *Reconciling Investment Protection and Sustainable Development: A Plea for an Interpretive U-Turn*, in SHIFTING PARADIGMS IN INTERNATIONAL INVESTMENT LAW: MORE BALANCED, LESS ISOLATED, INCREASINGLY DIVERSIFIED 177 (Steffen Hindelang & Markus Krajewski eds., 2016).

rigorously, the "single combined operation" approach provides a safeguard against interpreters prioritizing a certain purpose where competing values are at stake, and therefore enhances the legitimacy of the dispute settlement.[42] In particular, it is mandatory to examine the relevant rules of international law under Article 31(3)(c) which prevents the adjudicators to interpret the treaties in isolation of the broader context of international law. Although faithfully following the VCLT rule in interpretation does not guarantee a certain adjudication outcome, it imposes a common discipline for the interpreter with regards to which means of interpretation are admissible[43] and forces the interpreters to make their reasoning visible and transparent.[44] States are more likely to stay committed to an international legal regime if the legal reasoning is built upon high-quality interpretation: states need to understand and accept why they have been defeated in a given claim. To discipline the interpretive process by the VCLT rule further enhances the tribunal's legitimacy by promoting a consistent jurisprudence. Continuity and consistency are an important source of legitimacy for any legal regime. It is essential to treat like cases alike, apply the same rules to the same factual issues independent of the parties involved.[45] Consistency increases predictability and credibility for the legal regime.

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[42] Howse, *supra* note 38. RICHARD GARDINER, TREATY INTERPRETATION (2nd ed., 2017).
[43] Fuad Zarbiyev, *The 'Cash Value' of the Rules of Treaty Interpretation*, 32 LEIDEN JOURNAL OF INTERNATIONAL LAW 33 (2019).
[44] Thomas Kleinlein, *Matters Of Interpretation: How To Conceptualize And Evaluate Change Of Norms And Values In The International Legal Order* 14 (2018), https://papers.ssrn.com/abstract=3292051 (last visited Dec 11, 2018).
[45] DAVID PALMETER & PETROS MAVROIDIS, DISPUTE SETTLEMENT IN THE WORLD TRADE ORGANIZATION: PRACTICE AND PROCEDURE 41 (1999).

Although it is extensively theorized that interpretation impacts international tribunals' legitimacy on regulatory space, few studies have been conducted to systematically evaluate the process and dynamics of interpretation in environmental disputes. Even fewer are studies that compare interpretive process at different international tribunals. Existing scholarship on regulatory space gravitates towards analysis into the outcome and examines the legitimacy challenge from the perspective of jurisprudence evolution. Examination into the interpretive process is typically scattered among commentaries on individual case and relegated to a background status. The stark contrast between trade law and investment law on the issue of regulatory space provides a valuable setting to compare the interpretive process at different tribunals. This dissertation proposes to study regulatory space through a systematic analysis of the interpretive process. The narrative of interpretation offers new insights on how interpretive arguments are related to the regulatory space and augment the legitimacy of international tribunals.

To provide the background information for the analysis into the interpretative process, the rest of the chapter briefly surveys the history of the trade law and investment law. It then articulates the research question of the dissertation. The chapter concludes with laying out the roadmap for this dissertation.

2. A Brief Survey of International Trade Law and Investment Law

Trade and investment are the twin peaks of international economic law.[46] Although they are distinct areas of law in contemporary times, these two major forms of foreign commerce share a common genealogy. Ancient laws and treaties that governed the commercial relations between economic hubs (such as ancient Athens, Rome, and ChangAn of the Tang Dynasty) and the periphery rarely treated trade and investment separately.[47] In the colonial era, trade and investment continued to be jointly administered as an integral part of imperialistic competition among Western powers.[48] During the colonial time, investment was typically made by the imperial state and received sufficient protection from the imperial legal systems. The demand for a separate international legal regime to provide imperial investors with property protection was minimal.[49] For commercial relations outside the colonial context, disputes were usually settled with the threat or the actual use of force.[50] It was also during this era that the fledging power of the United States concluded with other

[46] It is generally agreed that the three most important subfields of international economic law are international trade law, international investment law, and international financial law. The third pillar of international financial law has not yet developed a common dispute settlement institution. The American Society of International Law defines international economic law broadly to encompass "significant legal and institutional developments in the areas of trade, foreign direct investment, sanctions, economic integration and development, business regulation and taxation, intellectual property, and issues related to the transnational movement and regulation of goods, services, labor, and capital." See https://www.asil.org/topics/international-economic-law, accessed on Dec. 3, 2018. For a survey into the intellectual history of international economic law as a field of study, see Steve Charnovitz, *The Field of International Economic Law*, 17 JOURNAL OF INTERNATIONAL ECONOMIC LAW 607–626 (2014).
[47] Sungjoon Cho & Jürgen Kurtz, *Convergence and Divergence in International Economic Law and Politics*, 29 EUROPEAN JOURNAL OF INTERNATIONAL LAW 169, 172 (2018).
[48] *Id.* at 173.
[49] M. SORNARAJAH, THE INTERNATIONAL LAW ON FOREIGN INVESTMENT, 19-20 (3rd ed.2010).
[50] RONALD FINDLAY & KEVIN H. O'ROURKE, POWER AND PLENTY: TRADE, WAR, AND THE WORLD ECONOMY IN THE SECOND MILLENNIUM (2007).

colonial powers and colonies the friendship, commerce and navigating treaties, which became the prototype of the modern-day bilateral investment treaties.[51]

Trade and investment law parted ways as the colonial empires started to dissolute at the end of World War II. As the newly independent states regained control of major sectors of their economy from colonial investors, they strongly opposed any new international legal institution on foreign investment protection.[52] At the Bretton Woods Conference, the post-World War II international economic architecture initially sought to discipline trade and investment under a unitary organization called the International Trade Organization. The effort was ultimately defeated.[53] What remained was the signing of the General Agreement on Trade and Tariffs ("GATT") in 1947, which primary focus was to reduce tariffs for foreign goods. The GATT 1947 made no attempt to provide investment protection. In the aftermath of the World War II, modern trade law and investment law were institutionally separated and began to take distinct pathways.

Today, trade and investment law has developed their own institutions, rules and jurisprudence. Institutionally, trade law is constituted multilaterally under the WTO providing for state-state dispute settlement. After eight rounds of multilateral negotiations, the WTO was established in 1995 under the Marrakesh Agreement Establishing the World Trade Organization ("WTO Agreement") to which a number of multilateral trade agreements were annexed including the GATT 1994 that

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[51] M. SORNARAJAH, *supra* note 49, at 20.
[52] *Id.* at 21-22.
[53] The failure of the International Trade Organization to come into being was due to domestic opposition of the United States rather than the opposition from newly independent nations.

preserves the main articles of the GATT 1947. The package of agreements is binding upon all member states as a single body of law through the "single undertaking" approach. Institutionally, the highest authority is the Ministerial Conference that meets once every two years. A General Council is in charge of the organization's business in the intervals between Ministerial Conferences including the dispute settlement. Decision making at both the Ministerial Conference and the General Council is by consensus. A Geneva-based Secretariat provides support to the WTO Member States on a plethora of activities including dispute settlement.

The rules for dispute settlement are set out in the Uruguay Round Understanding on Rules and Procedures Governing the Settlement of Disputes ("Disputes Settlement Understanding" or "DSU"). The Dispute Settlement Body ("DSB") works under the General Council as a two-tiered court of international trade. Under the DSU rules, the first step of dispute settlement is to make a request for consultations. If consultations fail to resolve the dispute within sixty days, the complaining party may request the establishment of a Panel. The Panel is composed of three members from an indicative list of international trade experts prepared by the WTO Secretariat. The Panelists are selected on *ad hoc* basis for each dispute, which means there is no institutional continuity of personnel between the Panels. The Panel functions like a first instance court: it receives written submissions, holds hearings with parties and third parties, and has a wide discretion in accepting evidence. The Panel has sixty days to issue its decision in the form of Panel Report. Any party to a dispute may appeal the Panel Report to the Appellate Body that has

the power to uphold, modify, or reverse the interpretations adopted by the Panel. Unlike the Panel, the Appellate Body is a standing body consisting of seven members from which three members will hear a case. The Appellate Body members are appointed for a four-year term that can be renewed once. The seven members are representative of the WTO's broad membership, although the U.S. and the EU have always had a seat.[54] With regards to the WTO's legal rules, the GATT mainly focuses on ensuring market access for foreign goods through the principles of national treatment and the most-favoured-nations ("MFN"). This pro-market agenda is not boundless. Various GATT provisions provide exceptions for public values such as health, environmental protection and domestic economic stability. The balance between free trade and welfare has been described as the compromise of "embedded liberalism."[55]

In contrast, investment law is built on a network of thousands of bilateral investment treaties plus a few multilateral ones[56] and provides for investor-state dispute settlement that grants foreign investors standing to bring suits directly against the host state governments. So far, the efforts to create a multilateral international legal framework of foreign investment have largely failed.[57] Current investment legal regime consists of 2970 bilateral investment agreements and 383

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[54] Bradly J Condon, *Captain America and the Tarnishing of the Crown: The Feud Between the WTO Appellate Body and the USA*, 52 JOURNAL OF WORLD TRADE 535, 536.
[55] Cho & Kurtz, *supra* note 47, at 175. The term "embedded liberalism" was coined by John Ruggie. See John Ruggie, *Embedded Liberalism and Postwar Economic Regimes*, in CONSTRUCTING THE WORLD POLITY: ESSAYS ON INTERNATIONAL INSTITUTIONALIZATION (John Ruggie ed., 1998).
[56] Most notable are the Energy Charter Treaty and the investment chapter in the North American Free Trade Agreement ("NAFTA").
[57] DOLZER & SCHREUER, 8-11.

treaties with investment provisions.[58] The multiplication of investment treaties is a recent phenomenon. The decolonization period following the end of World War II was characterized by waves of nationalization of foreign property[59] and strong hostility against an international legal regime providing protection to foreign investment. These developing countries took to the United Nations General Assembly, where they held the majority of votes, to pass the Declaration of Permanent Sovereignty over Natural Resources and resolutions that called for a "New International Economic Order."[60] Towards the late 1980s, the antagonism towards foreign investment had largely receded amid widespread economic stagnation and foreign investment gained political traction as stimulant of economic growth. In order to attract more foreign investment, developing countries entered into bilateral investment treaties to provide legal assurance to foreign investors against political risks.[61] The number of bilateral investment treaties ("BITs") expanded from 385 (1989) to 1,857 (1999) within ten years.[62] The modern investment regime was born.[63]

Modern BITs are similar in structure. They typically begin with a preamble stating the goals of the treaty including encouragement and protection of investment between the two countries. BITs usually define investment broadly and accord foreign

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[58] https://investmentpolicyhub.unctad.org/IIA
[59] Cho & Kurtz, *supra* note 47, at 176.
[60] DOLZER & SCHREUER, 4.
[61] It remains empirically contested whether BITs encourage more inward investment. See Jeswald W. Salacuse & Nicholas P. Sullivan, *Do BITs Really Work: An Evaluation of Bilateral Investment Treaties and Their Grand Bargain*, 46 HARVARD INTERNATIONAL LAW JOURNAL 67 (2005). Also Jennifer L. Tobin & Susan Rose-Ackerman, *When BITs have some bite: The political-economic environment for bilateral investment treaties*, 6 THE REVIEW OF INTERNATIONAL ORGANIZATIONS 1 (2011).
[62] Cho & Kurtz, 177.
[63] ibid.

investors substantive standards of protection including national treatment, most-favoured-nation treatment, fair and equitable standard of treatment, and full protection and security. Under most BITs, foreign investors can initiate arbitration proceedings against the host state to settle disputes arising from the foreign investment. The exponential growth of investment agreements highlights the prominence of private investment and property protection in international economics and reflects the prevailing discourse of Washington Consensus since the 1990s.[64]

It is the dispute settlement mechanism that most profoundly distinguishes trade law from investment law. While trade disputes under the WTO are handled multilaterally by a centralized Dispute Settlement Body applying the WTO agreements, investor-state arbitrations take place under various institutions and procedural rules pursuant to heterogenous bilateral agreements and investment chapters in trade agreements. Among the different institutions and procedural rules governing investor-state arbitration, the most frequently used one is the International Centre for Settlement of Investment Disputes ("ICSID") and the ICSID Convention Arbitration Rules.[65] Under the ICSID Arbitration Rules, foreign investors initiate the proceedings by submitting a request to the Secretary-General of the ICSID. A three-member arbitral tribunal will be constituted to adjudicate the dispute. Each party appoints one arbitrator and the third is selected by agreement of the parties. After the parties complete their pleadings, the tribunal will render a final

[64] DOLZER & SCHREUER, 87-88.
[65] The Arbitration Rules apply to proceedings under the Convention on the Settlement of Investment Disputes between States and Nationals of Other States, commonly abbreviated as the ICSID Convention.

and binding award that is subject to review only under exceptional circumstances. The remedy for the grieved investors consists of monetary compensation. This structure departs from the two-tiered framework of the WTO where the Appellate Body addresses the divergence in interpretations arising from Panel decisions. In the absence of an appellate review mechanism like the WTO Appellate Body or institutional continuity of arbitrators between tribunals, jurisprudence of investor-state arbitration remains fragmented and incoherent.

Unlike the state-state WTO dispute settlement that originated from the public international law tradition, investor-state arbitration is governed by procedural rules modelled after those of commercial arbitration.[66] One of the characteristic features of the ISDS is the absence of a standing court but a tribunal consisting of party-appointed arbitrators. Many of the arbitrators represent clients in ISDS while serving as arbitrators, raising serious conflict of interests concerns. In international investment arbitration that implicates regulatory concerns, the legacy of commercial arbitration in the ISDS can be in favor of a private law paradigm that treats the host state government no more than another party in a private contract.[67] Without a standing appellate mechanism that exerts sufficient oversight, the adjudication's legitimacy largely depends on the individual quality and impartiality of the arbitrators.

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[66] Joost Pauwelyn, *The Rule of Law Without the Rule of Lawyers? Why Investment Arbitrators Are from Mars, Trade Adjudicators from Venus*, 109 AMERICAN JOURNAL OF INTERNATIONAL LAW 761, 803 (2015).
[67] Cho & Kurtz, 185.

This dissertation joins a growing body of scholarship drawing parallels between trade law and investment law.[68] International trade and international investment increasingly complement each other in global production and market integration.[69] Despite their divergence after the end of the World War II, modern trade and investment law are being reintegrated. Foreign investment in the service sector is now regulated by the WTO General Agreement on Trade in Services. Intellectual property is regulated by both bilateral investment treaties and the WTO Agreement on Trade-Related Intellectual Property Rights. Trade law and investment law share a number of key norms such as national treatment and most-favored-nations treatment. Actors have made strategic use of the parallels by bringing the same dispute to both dispute settlement procedures, as illustrated in the Australia cigarette packaging case litigated under both the WTO rules and the Australia-Hong Kong Bilateral Investment Treaty. Growing numbers of investment agreements incorporate public policy exception provisions that are modelled after the GATT Article XX to enhance regulatory flexibilities under investment law. Though cross-

[68] Representative pieces include Cho & Kurtz. Frank J. Garcia et al., *Reforming the International Investment Regime: Lessons from International Trade Law*, 18 JOURNAL OF INTERNATIONAL ECONOMIC LAW 861 (2015). JURGEN KURTZ, THE WTO AND INTERNATIONAL INVESTMENT LAW: CONVERGING SYSTEMS (2015). Sergio Puig, *The Merging of International Trade and Investment Law*, 33 BERKELEY JOURNAL OF INTERNATIONAL LAW. 1 (2015). Roger Alford, *The Convergence of International Trade and Investment Arbitration*, 12 SANTA CLARA JOURNAL OF INTERNATIONAL LAW 35 (2014). Andrew Mitchell & Caroline Henckels, *Variations on a Theme: Comparing the Concept of "Necessity" in International Investment Law and WTO Law*, 14 CHICAGO JOURNAL OF INTERNATIONAL LAW 93 (2013).

[69] Roberto Echandi & Maree Newson, *The Influence of International Investment Patterns in International Economic Law Rulemaking: A Preliminary Sketch*, 17 JOURNAL OF INTERNATIONAL ECONOMIC LAW 847 (2014).

fertilization of jurisprudence between the two fields is still limited and uneven,[70] a compartmentalized knowledge of trade law and investment law is incapable of addressing the common challenge of preserving regulatory space on environmental issues. It is essential to carry out a comparative study of the two subfields of international economic law amid their growing convergence.

3. Research Question and Statement

This dissertation examines regulatory space under international economic law using a narrative of interpretation. Specifically, this dissertation seeks to explain how interpretive arguments give rise to broad or narrow constructions of state's international economic obligations that restrict or uphold the state's regulatory space on environmental issues at the WTO Appellate Body and arbitral tribunals constituted under the ICSID Arbitration Rules. The dissertation designs a uniform criterion in evaluating international tribunals' interpretation. Using the mandatory VCLT interpretation rule as the benchmark, this dissertation scrutinizes the extent to which the WTO Appellate Body and the ICSID arbitral tribunals adhere to the VCLT's "single combined operation" approach in adjudicating environmental disputes. The narrative of interpretation breaks down the decisions' legal reasoning process based on the interpretive arguments employed to arrive at a certain construction. The analysis not only examines whether the legal reasoning used the

[70] Mark Wu, *The Scope and Limits of Trade's Influence in Shaping the Evolving International Investment Regime*, in THE FOUNDATIONS OF INTERNATIONAL INVESTMENT LAW: BRINGING THEORY INTO PRACTICE 169 (Zachary Douglas, Joost Pauwelyn & Jorge E. Vinuales eds., 2014).

VCLT-mandated interpretive means and non VCLT-mandated interpretive means such as case law, scholarly works, and canon of interpretation. It also examines the "density" of interpretive arguments, i.e. whether the driving analytical force of legal reasoning lied in the VCLT based interpretive arguments or in the non VCLT interpretive arguments.

The dissertation explains how the interpretive process directly impacts legitimacy of international adjudication on the issue of regulatory space. It finds that rigorous application of the VCLT's "single combined operation" approach to interpretation is more likely to generate narrow construction of obligations under international economic law that upholds state's regulatory space on environment. In contrast, slack application and non-application of the VCLT's "single combined operation" approach to interpretation is more likely to generate broad construction of obligations under international economic law that restricts state's regulatory space on environment. The findings apply to adjudication of environmental disputes under both trade law and investment law.

The WTO Appellate Body's interpretive practice in adjudicating environmental disputes stands in stark contrast to the ICSID arbitral tribunal's interpretive practice in adjudicating environmental disputes. In most environmental cases, the WTO Appellate Body rigorously follows the VCLT rule of interpretation and arrives at narrow construction of obligations under the WTO. Its sophisticated interpretive process features meticulous analysis into every available interpretive element covered under the VCLT. By contrast, the ICSID arbitral tribunals' crude

interpretation of standard of treatment in environmental cases mostly falls short of the "single combined operation" approach and lead to very expansive construction of obligations under investment agreement. The arbitral tribunals' interpretation features excessive reliance on pro-investor case law and scholarly works, the interpretive means of which are not provided in the VCLT. In some cases, the arbitral tribunals' interpretation is not based on any interpretive means. The undisciplined and un-transparent interpretive process is a critical reason for the diminished regulatory space under investment law and the legitimacy crisis that investment law is grappling with.

4. Roadmap

The prominence of international courts in contemporary international law raises the important question of how to study dispute settlement at international courts. Turning to its close intellectual cousin of international relations for inspirations, international law scholars are no longer satisfied with the classic doctrinal approach and increasingly employ empirical methods to make descriptive and causal inference about international courts.[71] Lately, this empirical agenda starts to advocate for a data-driven approach in studying international law. Chapter II challenges the claim that the data-driven approach holds the future of international law scholarship. Using various examples of empirical analysis on regulatory space, it explains why the

[71] Gregory Shaffer & Tom Ginsburg, *The Empirical Turn in International Legal Scholarship*, 106 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 1 (2012).

empirical approach is of limited use for understanding regulatory space under international law. Chapter II proposes to return to the classic doctrinal approach and study the regulatory space through a narrative of interpretation.

Having clarified the method, this dissertation then delineates the scope of research. Chapter III develops a working definition for environmental case under trade law and investment law. Based on the criterion embodied in the definition, it elaborates the method of identifying environmental cases from the universe of WTO cases and investment cases between 1995 and 2016, which yields two lists of nine environmental cases adjudicated by the WTO Appellate Body and seven investor-state environmental disputes arbitrated under the ICSID Arbitration Rules.

Chapter IV first reviews the scholarship on interpretation and international tribunal's legitimacy. It then elaborates on the VCLT's "single combined operation" approach this dissertation uses as the benchmark to assess and compare interpretive arguments of the WTO Appellate Body and the ICSID arbitral tribunals.

Chapter V analyzes interpretive arguments by the WTO Appellate Body in environmental cases against the benchmark of the "single combined operation" approach under the VCLT. The analysis on each case comprises three parts: (1) a detailed description of the case's factual background, (2) a thorough account of the Appellate Body's interpretation, (3) a critical assessment of the Appellate Body's interpretive arguments in terms of its adherence to the VCLT rules and its implications for trade and environment.

Chapter VI analyzes interpretive arguments by investment arbitral tribunals in adjudicating environmental cases under the ICSID Arbitration Rules against the benchmark of the "single combined operation" approach under the VCLT. The analysis is structured slightly different from the preceding chapter by merging the account of the arbitral tribunals' interpretation and the dissertation's critical assessment of the interpretive arguments. The difference in the structure is mainly due to the relative paucity of interpretation in investment arbitral awards.

Chapter VII concludes the dissertation by comparing interpretive arguments by the WTO Appellate Body and the ICSID investment arbitral tribunals in adjudicating environmental disputes. It explains how the different treaty interpretive arguments are associated with recalibrating the balance between economic liberalism and regulatory autonomy in protecting the environment.

II. Bringing the Doctrinal Analysis Back In

International economic law scholarship is increasingly embracing an empirical agenda. In particular, a few analytical tools within the empirical approach are gaining such a strong momentum that they boast of a data-driven future of international economic law. This chapter argues that the empirical approach is of limited use for understanding regulatory space under international economic law. This chapter first clarifies what doctrinal approach and empirical approach means. It then critically reviews the empirical scholarship on international economic law in general and the empirical scholarship on regulatory space in particular. This chapter concludes by explaining why a narrative of interpretation within the doctrinal tradition is a more appropriate method in studying regulatory space.

1. Doctrinal Approach and Empirical Approach in International Law

Until recently, the study and practice of international law had remained a predominantly doctrinal exercise.[1] The term "doctrine" is defined as "[a] synthesis of various rules, principles, norms, interpretive guidelines and values."[2] It closely resembles the religious rhetorical tradition within the monasteries.[3] The doctrinal method is rooted in the common law tradition and involves a conceptual analysis of

[1] Daniel Bodansky, *Legal Realism and its Discontents*, 28 LEIDEN JOURNAL OF INTERNATIONAL LAW 267, 268 (2015).
[2] Terry Hutchinson & Nigel Duncan, *Defining and Describing What We Do: Doctrinal Legal Research*, 17 DEAKIN LAW REVIEW 83, 84(2012).
[3] *Id.*

legislation and case law to reveal the existing legal rules to be applied to the matter under investigation.[4] Doctrinal analysis is a self-referential[5] and introspective analysis into the meaning of legal text that focuses on legal validity and justification.[6] To study international law with a doctrinal approach is primarily concerned with ascertaining the sources of law and understanding the development of jurisprudence.

International law scholarship is currently going through an empirical turn.[7] The past two decades saw the fast rise of empirical scholarship that inductively analyzes law as observations from which broader conclusions can be drawn about the causes and effects of international law.[8] When American Journal of International Law published its *Symposium on Method in International Law* in the year of 1999,[9] it equated method with various theoretical frameworks[10] and methodology with the ways to locate sources of law. But the landscape changes fast. Within fifteen years of the *Symposium*'s publication, the empirical wind of change has pushed international law scholars to adapt to social science methodology and to engage in research that

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[4] Terry Hutchinson, *The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law*, ERASMUS LAW REVIEW 130, 131 (2015).
[5] Ian Dobinson & Francis Johns, *Legal Research as Qualitative Research*, *in* RESEARCH METHODS FOR LAW 18, 21 (Mike McConville & Wing Hong Chui eds., 2017).
[6] Bodansky, *supra* note 1.
[7] Gregory Shaffer & Tom Ginsburg, *The Empirical Turn in International Legal Scholarship*, 106 AM. J. INT. LAW 1 (2012). Beth Ann Simmons & Andrew B. Breidenbach, *The Empirical Turn in International Economic Law*, 20 MINN. J. INT. LAW 198 (2011).
[8] Simmons & Breidenbach, *supra* note 7, at 199-200. *Also* Lee Epstein & Gary King, *The Rules of Inference*, 69 UNIVERSITY OF CHICAGO LAW REVIEW 1 (2002).
[9] Annie-Marie Slaughter & Steven R. Ratner, Symposium on Method in International Law: *Appraising the Methods of International Law: A Prospectus for Readers*, 93 AM. J. INT'L. L. 291 (1999).
[10] *Id.* The "methods" that AJIL Symposium introduced include legal positivism, the policy-oriented jurisprudence, feminism, IR/IL, law and economics, international legal process, critical legal studies.

aims for identifying patterns, making causal inference, and developing generalizable arguments. Leading journals on international law in recent years have devoted increasing space to publishing empirical legal scholarship.

2. Empirical Scholarship on International Economic Law

Empirical work involves the systematical use of both numerical (quantitative) and non-numerical (qualitative) observations.[11] Qualitative empirical scholarship used to be associated with application of the traditional methods of interview and archival research.[12] Increasingly, qualitative empirical scholarship has turned to computer-assisted techniques to study the legal text in a more efficient manner. For example, automated content analysis has been applied to treaty text to investigate the relationship among treaties and the issue of treaty design. One project examines whether preferential trade agreements ("PTAs") undermine the World Trade Organization ("WTO") and fragmentize international trade regime by comparing the text of PTAs with the text of the WTO agreements.[13] PTAs are also compared among themselves to elucidate how the making of the agreements often follows a

[11] Shaffer and Ginsburg, *supra* note 7.
[12] Cosette D Creamer & Zuzanna Godzimirska, *(De)Legitimation at the WTO Dispute Settlement Mechanism*, 49 VANDERBILT JOURNAL OF TRANSNATIONAL LAW 275 (2016). Gus Van Harten & Dayna Nadine Scott, *Investment Treaties and the Internal Vetting of Regulatory Proposals: A Case Study from Canada*, 7 J INT DISP SETTLEMENT 92 (2016). Susan Franck, *The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law Through Inconsistent Decisions*, 73 FORDHAM LAW REVIEW 1521 (2005).
[13] Todd Allee et al., *The Ties between the World Trade Organization and Preferential Trade Agreements: A Textual Analysis*, 20 J. INT'L ECON. L. 333 (2017).

standardized template and tends to cluster geographically.[14] The universe of thousands of international investment agreements is another field that lends itself to automatic content analysis to shed light on the structure and evolution of the investment regime.[15] Beyond the treaty world, the automated content analysis has been applied to study member states' sway over the WTO Dispute Settlement Body's ("DSB") rulings, by measuring influence using the textual similarity between member states' submissions and the DSB decisions.[16]

Another popular new technique in qualitative empirical study is network analysis. Network analysis has been applied to study decisions of the WTO Appellate Body[17] and investment arbitral awards.[18] Using citation as a proxy for international decisions' precedential power, these studies quantify and rank precedential power of international decisions. They also seek to explain why certain cases are cited more often than the others and identify the most important countries and judges behind the development of important precedents. Network analysis has also been applied to

[14] Wolfgang Alschner et al., *Text of Trade Agreements (ToTA)—A Structured Corpus for the Text-as-Data Analysis of Preferential Trade Agreements*, 15 J. EMPIRICAL LEGAL STUD. 648 (2018).
[15] Wolfgang Alschner & Dmitriy Skougarevskiy, *Mapping the Universe of International Investment Agreements*, 19 J. INT'L ECON. L. 561 (2016).
[16] Mark Daku & Krzysztof J. Pelc, *Who Holds Influence over WTO Jurisprudence?*, 20 J. INT'L ECON. L. 233 (2017).
[17] Krzysztof J. Pelc, *The Politics of Precedent in International Law: A Social Network Application*, 108 AMERICAN POLITICAL SCIENCE REVIEW 547 (2014). Joost Pauwelyn, *Minority Rules: Precedent and Participation before the WTO Appellate Body*, in ESTABLISHING JUDICIAL AUTHORITY IN INTERNATIONAL ECONOMIC LAW 141 (Joanna Jemielniak et el. eds., 2016).
[18] Damien Charlotin, *The Place of Investment Awards and WTO Decisions in International Law: A Citation Analysis*, 20 J. INT'L ECON. L. 279 (2017).

examine the social composition of investment arbitration community[19] and the "double-hatting" phenomenon among arbitrators.[20]

Quantitative empirical work on international economic law examines a wide range of topics. This line of work is largely interdisciplinary in that they typically use non-judicial factors to explain judicial outcomes.[21] The wealth of investment disputes makes investor-state arbitration a gold mine for quantitative analysis. For instance, a number of studies evaluate the claim that investor-state dispute settlement discriminates developing countries by examining whether developing countries are more likely than developed countries to lose in investor-state investment arbitration controlling for regime type and other confounding factors.[22] Investigation into the arbitration outcome data also sheds light on the argument that investment arbitration historically served as a neo-colonial instrument.[23] These research in turn prompts researchers to build models and algorithms to predict the outcomes of future investment arbitration[24] and trade disputes under the GATT.[25]

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[19] Sergio Puig, *Social Capital in the Arbitration Market*, 25 EUR. J. INT'L L. 387 (2014).
[20] Malcolm Langford et al., *The Revolving Door in International Investment Arbitration*, 20 J. INT'L ECON. L. 301 (2017).
[21] This practice is likely to grow out of the legal realism understanding that international law is merely instrumental in furthering political agenda. See Jan Klabbers, *The Relative Autonomy of International Law or The Forgotten Politics of Interdisciplinarity*, 1 JOURNAL OF INTERNATIONAL LAW & INTERNATIONAL RELATIONS 35, 41 (2004). Also see Bodansky, *supra* note 1.
[22] Daniel Behn et al., *Poor States or Poor Governance? Explaining Outcomes in Investment Treaty Arbitration*, 38 NW. J. INT'L L. & BUS. 333 (2018). Susan D Franck, *Conflating Politics and Development? Examining Investment Treaty Arbitration Outcomes*, 55 VA. J. INT'L L. 13 (2014).
[23] Thomas Schultz & Cédric Dupont, *Investment Arbitration: Promoting the Rule of Law or Over-empowering Investors? A Quantitative Empirical Study*, 25 EUR. J. INT'L L. 1147 (2014).
[24] Susan D Franck & Lindsey E Wylie, *Predicting Outcomes in Investment Treaty Arbitration*, 65 DUKE LAW JOURNAL 459 (2015).
[25] Giovanni Maggi & Robert W. Staiger, *Trade Disputes and Settlement*, 59 INTERNATIONAL ECONOMIC REVIEW 19 (2018).

3. Pitfalls of Empirical Approach to International Economic Law

A large proportion of the recent empirical research on international economic law is essentially driven by availability of new data and new techniques. They espouse the "data first" approach and view exploration of data in under-theorized areas to hold the future of international economic law scholarship.[26] Data no longer serves the secondary purpose of testing hypothesis in empirical scholarship; it generates theory for the study of international law. The data-driven approach's infatuation with correlation begs the fundamental issue that science is not so much about identifying patterns but explaining those patterns.

Data-driven empirical work on international economic law tends to focus on topics that can be easily quantified as opposed to topics that are difficult to be quantified and involve complex explanation. Instead of focusing on the most important problems or (in)validating the most controversial theories, data-driven empirical research is motivated by data availability and efficient analytical tool. Such a data- and method-driven approach risks focusing exclusively on subjects that are of peripheral significance but susceptible to quantification. In a sense, we could be "learning more and more about less and less."[27]

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[26] Wolfgang Alschner et al., *The Data-Driven Future of International Economic Law*, 20 JOURNAL OF INTERNATIONAL ECONOMIC LAW 217, 221,226 (2017).

[27] Ian Shapiro, Sterling Professor of Political Science and Professor in the Institute for Social and Policy Studies and of Management at Yale University, IAN SHAPIRO DISCUSSES PROBLEM-DRIVEN RESEARCH IN POLITICAL SCIENCE, (2017). (2017) Video and transcript available at http://methods.sagepub.com/video/ian-shapiro-discusses-problem-driven-research-in-political-science.

The automated content analysis on treaty text illustrates how the empirical research agenda motivated by data availability can lose sight of questions that are theoretically significant. Information extraction techniques are capable of carrying out efficient textual similarity analysis into thousands of treaties simultaneously. Contrary to the data-driven approach's promise of identifying surprising patterns, automated content analyses typically generate findings that corroborate common sense of international economic law. The focus on textual similarity rather than the difference is entirely driven by the automated method, as no existing data mining technique can come remotely close to making sense of the nuanced textual difference among treaties. To prioritize similarity also betrays how this empirical approach is not informed by judicial practice. Countries engage in lengthy negotiation over the details of treaties. International litigation has demonstrated that the choice of word, syntax, order of words and even punctuations can become focal points in litigation.[28] Identical terms found in two treaties can be interpreted in drastically different way depending on the immediate and broad context in which the terms are situated. Automated content analysis is no substitute for careful and close reading of the texts,[29] the nuanced differences of which are more relevant for understanding how international law works. Its usefulness is limited when the research is not supported by substantive knowledge of the subject under study.

[28] RICHARD GARDINER, TREATY INTERPRETATION 199-210 (2nd ed. 2015).
[29] Justin Grimmer & Brandon M. Stewart, *Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts*, 21 POLITICAL ANALYSIS 267–297 (2013).

4. Empirical Research on Regulatory Space: A Critical Evaluation

Research on regulatory space is increasingly turning to the quantitative empirical method. A common flaw in this approach involves drawing up broad categories to encompass observations that are conceptually distinct. The heterogeneous observations are quantified to be used in regressions, as if they are merely different in scale but identical in kind. The crudeness in measurement raises doubts about the findings' validity.

The study comparing states' regulatory space in the Trans-Pacific Partnership and bilateral investment agreements clearly exemplifies this problem.[30] State regulatory space in investment agreements is measured by how many times a certain provision includes a regulation-related term.[31] To calculate the regulatory space value for the preambles, each reference to indicators such as "the right to regulate", "sustainable development", "social concerns", and "environmental concerns" counts as 0.25 in the coding scheme. The regulatory space value of the preamble is a cumulative one: a preamble that covers none of the four is coded as 0; a preamble that covers all of the four concepts is coded as 1 in the dataset. Turning to investor-state dispute settlement (ISDS), provisions that do not include any limitations on the ISDS jurisdiction are coded as 0; provisions that restrict ISDS to particular areas are coded as 0.75; provisions that have no ISDS provisions at all are coded as 1. No explanation

[30] Tomer Broude et al., *The Trans-Pacific Partnership and Regulatory Space: A Comparison of Treaty Texts*, 20 J. INT'L ECON. L. 391 (2017)
[31] *Id.*, 397-399.

is offered as to why these each indicator is assigned the same weight.[32] A rudimentary knowledge of treaty interpretation and investment law jurisprudence would caution against treating the preamble and the dispute settlement provision or any other provisions alike with regards to their relevance to regulatory space. The measurement lends itself to quantitative analysis but is devoid of the subject matter knowledge of regulatory space.

Quantitative empirical analysis of regulatory space is often plagued by flawed measurement of key concepts. Quantitative analysis requires aggregating high dimensional data to low dimensional measures, over which process decisions have to be made about which dimension to retain versus which dimension to drop.[33] With few exceptions, it is usually not clear as to what informs the measurement choice in data-driven research on international law. [34] Legitimacy in regulatory space is often measured by the final outcome of dispute settlement. [35] Although such a measurement makes intuitive sense, it fails to differentiate legitimacy arising from the outcome and legitimacy arising from legal reasoning. A telling example is the WTO environmental dispute of *US-Shrimp*. Although defeated in the dispute, the

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[32] The article calculates the dependent variable, i.e., similarity between treaties with respect to regulatory space, by 1- $\frac{sum\ of\ absolute\ values\ of\ differences\ on\ all\ indicators}{sum\ of\ highest\ possible\ values\ of\ differences\ on\ all\ indicators}$. *Id.*, at 402. This formula does not cancel out the different weight that each indicator holds for the purpose of regulatory space.

[33] Jan Klabbers, *Whatever Happened to Gramsci? Some Reflections on New Legal Realism*, 28 LEIDEN J. INT. LAW 469, 475 (2015).

[34] One exception is the article that compares three measures of CJEU decisions' precedential power and find that they produce quite different results. See Mattias Derlén & Johan Lindholm, *Is it Good Law? Network Analysis and the CJEU's Internal Market Jurisprudence*, 20 J INT ECONOMIC LAW 257–277 (2017).

[35] Daniel Behn & Malcolm Langford, *Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration*, 18 J. WORLD INVEST. TRADE 14 (2017).

United States expressed its appreciation for the Appellate Body's environmentally sensitive interpretation of "exhaustible natural resources" in its report statement.[36] Regulatory space is shaped by many factors including the treaty terms, ascertaining the applicable rule through interpretation, fact finding, and applying the rule to the facts. To measure regulatory space by the dispute settlement's final outcome reduces the concept's complexity to a quantifiable win and lose situation. Moreover, quantitative works on regulatory space normally do not differentiate between the various claims raised in a dispute. This crude measurement of regulatory space feeds data into of regression but adds little to improve one's understanding of the jurisprudence of regulatory space. What is worse, these data-driven empirical research can lead to "self-serving construction of problems" and "misuse of data."[37] They typically turn to issues that are most susceptible to quantification and use non-judicial factors to explain judicial outcomes.[38] The crucial part of legal reasoning is practically ignored as the convoluted process of interpretation defies efforts of quantification.

The survey of existing empirical work on international economic law in general and on regulatory space in particular demonstrates that they suffer from serious methodological drawbacks and are divorced from the theoretical underpinnings. It is

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[36] Creamer and Godzimirska, *supra* note 12, at 300.
[37] Ian Shapiro, *Problems, Methods, and Theories in the Study of Politics, or What's Wrong with Political Science and What to Do about It*, 30 POLITICAL THEORY 596, 598(2002).
[38] This practice is likely to grow out of the legal realism understanding that international law is merely instrumental in furthering political agenda. See Jan Klabbers, *The Relative Autonomy of International Law or The Forgotten Politics of Interdisciplinarity*, 1 JOURNAL OF INTERNATIONAL LAW & INTERNATIONAL RELATIONS 35, 41 (2004). Also see Bodansky, *supra* note 1.

high time to bring the doctrinal tradition back in to the study of regulatory space and legitimacy.

5. A Narrative of Interpretation

Traditional doctrinal research on regulatory space primarily engages in analyzing the jurisprudence of legal principles. The interpretive process upon which the jurisprudence is built has not received adequate examination. Compared to national statutes, international treaties are usually more ambiguous. They are also characterized with a much higher level of rigidity, as the legislative correction of international law making has to be effected by nation states based on the rule of consensus. The ambiguity and rigidity of international treaties makes international tribunal's treaty interpretation an essential aspect of the process of international law.[39] To highlight the critical function of interpretation, this dissertation proposes to doctrinally analyze regulatory space and legitimacy through the prism of interpretive arguments.

Classic doctrinal analysis can be refined by applying a rigorous methodological standard. Typical doctrinal works make claims about the status quo of legal rules based on discussion of a few leading cases and string cites to less exemplary ones. Doctrinal research on American law tend to focus on the cases with the highest precedential power such as the ones from the U.S. Supreme Court, even though it

[39] Joost Pauwelyn and Manfred Elsig, *The Politics of Treaty Interpretation*, in INTERDISCIPLINARY PERSPECTIVES ON INTERNATIONAL LAW AND INTERNATIONAL RELATIONS: THE STATE OF THE ART 445 (Jeffrey L. Dunoff & Mark A. Pollack eds., 2013).

may not be appropriate to make generalizations based on a few pathbreaking cases.[40] Although international law is not bound by the principle of stare decisis, doctrinal works on international economic law in a similar vein tend to focus on a few high-profile cases and rarely clarify its selection standard of the cases. From a methodological point of view, the supporting evidence is not systematic and raises questions about the validity of the claims.[41] With these methodological caveats in mind, this dissertation examines all environmental disputes adjudicated by the WTO Appellate Body and arbitral tribunals constituted under the ICSID Arbitration Rules. Chapter III articulates the case selection criteria and method.

This dissertation designs a uniform criterion in evaluating international tribunals' interpretation. Using the mandatory Vienna Convention on Law of Treaties ("VCLT") interpretation rule as the benchmark, this dissertation scrutinizes the extent to which the WTO Appellate Body and the ICSID arbitral tribunals adhere to the VCLT's "single combined operation" approach in adjudicating environmental disputes. Chapter V and VI break down the decisions' legal reasoning process based on the interpretive arguments employed to arrive at a certain construction. The analysis not only examines whether the legal reasoning used the VCLT-mandated interpretive means and non VCLT-mandated interpretive means such as case law, scholarly works, and canon of interpretation. It also examines the "density" of interpretive arguments, i.e. whether the driving analytical force of legal reasoning

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[40] Katerina Linos & Melissa Carlson, *Qualitative Methods for Law Review Writing*, 84 U. CHI. L. REV. 213, 214 (2017).
[41] William Baude et al., *Making Doctrinal Work More Rigorous: Lessons from Systematic Reviews*, 84 U. CHI. L. REV. 37(2017). *Also* Linos & Carlson, *supra* note 40.

lied in the VCLT based interpretive arguments or in the non VCLT interpretive arguments. This approach is grounded in the jurisprudence of international economic law and takes into account each disputes' unique fact pattern and historical background.

III. A Working Definition of Environmental Cases

The term "environmental cases" has been used liberally to refer to a wide range of international disputes with environmental dimensions. The voluminous collection of academic comments dedicated to the environmental cases has paid scant attention to developing a clear definition that delimits the scope of environmental cases. Despite the lack of a shared definition, these comments seem to focus on a small number of high-profile disputes that receive repeated analysis. For the majority of international economic disputes with environmental dimensions, they are either studied on their own in a case comment or appear in the footnotes in passing. In the absence of a unified definition, a small number of prominent cases continue to dominate the discussions, raising the possibility of underestimating the complicated heterogeneity in environmental cases and making skewed arguments about their legal reasoning. While highlighting a selective number of cases makes practical sense, there is no justification for why certain cases are preferred over the others from a methodological point of view. The present chapter proposes a working definition of environmental cases explains why the working definition is conceptually more accurate than the ones proposed by international organizations and academic commentaries for the purpose of studying interpretation.

1. A Unified Definition of Environmental Cases

It is helpful to revisit the definition of environmental law and international environmental law in order to chart the boundaries for environmental disputes under international economic law. Environmental law, in its broader sense, concerns both the impairment of the ecology and the management of natural resources. [1] Domestically, environmental law is a general term applied to the subject of law that deals with a wide range of topics. Disputes largely fall under two categories: (1) violation of environmental statutes and regulations; (2) legality of changes in environmental law and regulation. International environmental law has been defined as the body of international legal rules, institutions, and concepts that apply to or touch upon the protection or use of natural resources as well as the broader global environment. Rather than an autonomous subject, it is most appropriately regarded as applying international legal rules to environmental problems.[2] The broad scope of the concept "environment" warrants the construction of a definition that is capable of reflecting the evolving understanding of environment and changing patterns of investment disputes.

This dissertation defines an environmental case under trade law and investment law as a case where (1) the respondent state defends the contested measure as justified on environmental grounds; and (2) the justification on

[1] OECD defines natural resources as natural assets (raw materials) occurring in nature that can be used for economic production or consumption.
https://stats.oecd.org/glossary/detail.asp?ID=1740
[2] THOMAS SCHOENBAUM, INTERNATIONAL ENVIRONMENTAL LAW AND POLICY: CASES, MATERIALS, AND PROBLEMS (3rd ed. 2017).

environmental grounds is at the center of the respondent state's defense; and (3) the Tribunal elaborates its analysis on the competing claims of international economic obligations and environmental protection. Here, environmental grounds include both the conventional environmental policy goals such as pollution control, natural resource preservation, hazardous waste management, as well as emerging issues such as climate mitigation. Under the working definition, cases where the environmental justification only played a fringe role or no role in the respondent state's claims are not categorized as an environmental case.[3] Investment cases that are confidential in results or settled/discontinued are also not included. Likewise, it does not include cases concluded at the jurisdictional stage,[4] as this dissertation focuses on the interpretation of substantial obligations arising from international economic agreements at the merit stage.

A few other exclusions apply as well. To highlight the institutional difference between trade law and investment law, this dissertation does not investigate into the WTO environmental disputes on which only Panel Reports but no Appellate Body Reports were issued. Foreign investors in initiating arbitration against the host state

[3] In *Lucchetti S.A. v. Republic Peru*, Peru challenged the Tribunal's jurisdiction in hearing the dispute and did not invoke any environmental justification in its arguments. The Tribunal did not engage in any analysis on the relationship between investment protection and environmental protection accordingly. Although the disputed measure in this case concerned the annulment of permits on environmental grounds, the case falls out of the working definition of environmental cases in this dissertation. In *Paushok v. Mongolia*, although Mongolia listed the claimant's violation of environmental obligations as one of its eight counterclaims, the Tribunal argued that Respondent introduced no evidence to the violation claim and found the environmental violation claim had NO "close connection with the primary claim to which (they are) a response." (emphasis added) *Paushok v. Mongolia*, Award, para.696. As the Paushok Tribunal spent no more effort in analyzing the environmental claim, the case therefore falls out of the definition of environmental case.

[4] *Pac Rim Cayman LLC v. Republic of El Salvador*, ICSID Case No. ARB/09/12.

government can choose from a number of arbitration rules. The choice of forum can have significant implications for investors as the arbitration rules differ on various issues such as selection of arbitrators, enforcement of awards, and the review by domestic courts. [5] Investors generally find the ICSID Arbitration Rules most appealing.[6] As the ICSID Arbitration Rules are the most frequently used arbitral rules for ISDS, this dissertation examines exclusively environmental cases administered under the ICSID Arbitration Rules. Environmental cases adjudicated under the UNCITRAL rules, the ICSID Additional Facility rules, the Stockholm Chamber of Commerce rules and other rules are reserved for future analysis. Also excluded are a small number of investment cases the awards of which are only available in languages other than English.[7]

2. Environmental Cases under the WTO Law

The WTO Secretariat defines environmental disputes as environmental cases that involve the examination of environmental measures or human-health related measures under the WTO. The WTO Secretariat lists three environmental cases at its website: *EC-Asbestos*; *Shrimp-Turtle*; *US-Reformulated Gasoline*.[8] Respondents

[5] Stephen Jagusch & Jeffrey Sullivan, *A Comparison of ICSID and UNCITRAL Arbitration*, in THE BACKLASH AGAINST INVESTMENT ARBITRATION 79 (Michael Waibel, Asha Kaushal, Kyo-Hwa Chung &Claire Balchin eds., 2010).
[6] The statistics can be found at UNCTAD's website for investment arbitration. https://investmentpolicyhub.unctad.org/ISDS/FilterByRulesAndInstitution
[7] *Saar Papier v. Poland (I)* (in German only); *Saar Papier v. Poland (II)* (in German only); *Isolux v. Spain* (in Spanish only)
[8] https://www.wto.org/english/tratop_e/envir_e/edis00_e.htm

in all three cases resorted to the General Exceptions for environmental measures under Article XX of the GATT, which provides that:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> . . . (b) necessary to protect human, animal or plant life or health;
>
> . . . (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.

The list provided by the WTO Secretariat is plainly incomplete. If the import ban on a hazardous material in *EC-Asbestos* qualifies the case as an environmental dispute, one has to question why a similar ban on hazardous material in the case of *Brazil-Retreaded Tyres* would not make it an environmental case under the WTO Secretariat's definition. A number of trade-environment disputes in which the same exception provisions are invoked as defense are absent from the list.[9] The listing also

[9] On top of the listed three cases, the following cases addressed the applicability of Article XX(b): *Brazil – Retreaded Tyres*; *China – Raw Materials*; *EC – Seal Products*; *US-Poultry (China)*. Cases that addressed the applicability of Article XX(g) other than the three listed cases include *China – Rare Earths*; *China – Raw Materials*; *US – Tuna II*.

deviates from WTO's understanding of environment as elaborated elsewhere on their website. The WTO, recognizing the complex linkages between trade and the global environmental problem of climate change,[10] treats climate change as a subcategory under environment.[11] Yet disputes involving climate mitigation measures (such as renewable energy subsidies) do not count as environmental cases in the WTO Secretariat's list. The inconsistent categorization makes it necessary to turn to other sources to look for a better definition of environmental disputes.

Other WTO agreements pertaining to environment include the Agreement on Technical Barriers to Trade ("TBT Agreement") that applies to trade-related environmental standards, the Agreement on the Application of Sanitary and Phytosanitary ("SPS Agreement"), and the Agreement on Subsidies and Countervailing Measures ("SCM Agreement").[12] Together with the GATT, these agreements have been invoked in a wide range of trade disputes over environmental measures, including renewable energy subsides, import restrictions in the form of process and production methods ("PPMs"), eco-labelling, raw materials and minerals, wildlife, hazardous substances and wastes.[13]

The trade-environment conflicts under the WTO have evolved over time. The disputed trade measures in earlier cases such as the *Shrimp/Turtle* and *US-Gasoline*,

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[10] Trade and Climate Change, WTO-UNEP Report. https://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf
[11] https://www.wto.org/english/tratop_e/envir_e/envir_e.htm
[12] See Steve Charnovitz, *An Introduction to the Trade and Environment Debate*, *in* HANDBOOK ON TRADE AND ENVIRONMENT (Kevin P. Gallagher ed., 2008)
[13] See MITSUO MATSUSHITA, THE WORLD TRADE ORGANIZATION: LAW, PRACTICE, AND POLICY 734-758 (Third edition. ed. 2015).

predominantly initiated by developed countries against their developing-country trading partners, are characterized as an illustration of North-South divide.[14] In contrast, the disputed measures in recent cases primarily feature green industrial policies such as renewable energy subsidies and export control adopted by developed countries and developing countries alike.[15] The evolution in the trade-environmental disputes over the past two decades echoes the changing understanding of environmental issues in the era of global warming. Climate change has profoundly changed the discourse on environment. Its across-the-board consequences have prompted national governments to adopt a multitude of mitigation measures that increasingly come under the scrutiny of the WTO discipline. The working definition of environmental cases proposed in this dissertation is capable of demonstrating the changing landscape of trade-environmental disputes.

3. Environmental Cases under Investment Law

Unlike trade law, investment law is not administered by a centralized international institution like the WTO but by a number of institutions that apply different arbitration rules. Absent an overarching managing institution, no official statistics has been produced to log the environmental disputes under investment law. So far, two articles have taken up the challenge of documenting the investment-environment disputes.

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[14] Mark Wu & James Salzman, *The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy*, NORTHWESTERN UNIVERSITY LAW REVIEW 401, 405 (2014).
[15] *Ibid.*

In *Foreign Investment and the Environment in International Law: The Current State of Play*, Vinuales defines "investment disputes with environmental components" as disputes (i) in environmental markets; and/or (ii) in activities that have an impact on environment or on minority population; and/or (iii) that arise out of application of domestic or international environmental law. Under Vinuales's definition, 114 cases are identified as environmental disputes, out of which 49 have been either concluded (decided, settled or discontinued) or partially concluded as of 31 December 2015.[16] Vinuales' broad definition correctly recognizes how foreign investment are deeply related to the host state's environment on multiple dimensions. Nevertheless, the broadness comes at the cost of conceptual imprecision as this definition cover cases in which environment claims did not play a central role in the proceedings or where the subject-matter of the dispute was only remotely related to the environment.[17] For example, the illustrative list of the "environmental market" does not help establish which sectors can be perceived as an environmental market, as most industrial activities impact the environment.[18] In addition, investment disputes implicating minority rights are typically categorized as human rights cases rather than environmental cases under international law, notwithstanding the intricate relationship between human rights claims and environmental claims.

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[16] Jorge E. Viñuales, Foreign Investment and the Environment in International Law: The Current State of Play, available at https://repository.graduateinstitute.ch/record/294734?ln=en.
[17] Daniel Behn & Malcolm Langford, *Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration*, 18 THE JOURNAL OF WORLD INVESTMENT & TRADE 14, 17 (2017).
[18] Viñuales, *supra* note 16, at 35.. The open-ended list covers sectors such as land-filling, waste treatment, garbage collection, pesticides/chemicals, energy efficiency, emissions-reduction, biodiversity compensation.

The other list of environmental disputes is provided in *Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration*. In this article, Behn and Langford put forward a definition that is narrower in scope. According to Behn and Langford, environmental cases under investment law arise where (1) a domestic environmental measure is under direct challenge by the foreign investor; or (2) the host state argues that at least one of the measures at issue is justified for environmental reasons.[19] This criterion focuses exclusively on treaty-based arbitration and does not include contract-based or foreign investment law-based arbitration.[20] It also excludes cases in which the claimant challenges the failure of a host state to implement a pro-environmental measure, such as the discontinued tax exemption and subsidies for solar power.[21] Behn and Langford's selection criteria yields a list of 49 concluded environmental cases as of 1 October, 2016.

The same figure 49 in the two lists should not be mistaken for identical conceptualization of environmental cases in the two studies. The cases in the two lists do not completely overlap and only have 35 cases in common. Part of the difference derives from the different scope of the two lists: Vinuales' list stopped by the end of 2015 while Behn and Langford's list stopped by the mid of 2016. More importantly, the two lists conceptualize the relationship between investment and environment differently. Behn and Langfords' definition arguably rests on an irreconcilable

[19] Behn and Langford, *supra* note 17, at 18.
[20] *Ibid.*
[21] *Ibid.*

tension between environmental regulation and investment protection. The definition proposed by Vinuales, on the other hand, does not restrict environmental cases to those where environmental measures allegedly breach investment law obligations. Instead, Vinuales' definition covers disputes arising from sectors that would have significant impact on the environment, such as waste water treatment and power station, regardless the specific claims raised by the investors and Respondent State. The renewable energy disputes brought against a few EU countries illustrate this difference. They are excluded from Behn and Langford's list because the challenged roll-back of solar subsidies are deemed to be against-environment rather than pro-environment. They are nevertheless included in Vinuales' list as the renewable energy sector plays an important role in mitigating climate change.

The confusion over which cases can be properly categorized as environmental cases partly derives from the broad scope of "environment" embraced by international courts and international organizations. As illustrated in the ICJ's opinion in the *Iron Rhine* case:

> …"environment" is broadly referred to as including air, water, land, flora and fauna, natural ecosystems and sites, human health and safety, and climate. The emerging principles, whatever their current status, make reference to conservation, management, notions of prevention and of sustainable development, and protection for future generations…[22]

[22] Arbitration regarding the Iron Rhine ("IJzeren Rijn") Railway (Belgium/Netherlands), (2005) XXVII RIAA 35, P 66 para. 58.

The catch-all approach in defining environment featured in the ICJ opinion conflated environment with sustainable development. Sustainable development, in its most frequently cited definition, means "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."[23] Although sustainable development at its inception was mainly concerned with balancing environmental protection and economic development, the concept has gradually expanded to encompass social objectives such as human rights.[24] In 2002, the International Law Association clarified the meaning of sustainable development as embodied in seven principles: (1) the duty of states to ensure sustainable use of natural resources; (2) the principle of equity and the eradication of poverty; (3) the principle of common but differentiated responsibilities; (4) the principle of the precautionary approach to human health, natural resources and ecosystems; (5) the principle of public participation and access to information and justice; (6) the principle of good governance; (7) principle of integration and interrelationship, in particular in relation to human rights and social, economic and environmental objectives. [25] Environmental protection is indisputably recognized as a core component of sustainable development, and should be conceptually distinguished

[23] GRO H. BRUNDTLAND ET AL., OUR COMMON FUTURE: THE REPORT OF THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT ix (1987).
[24] Markus Gehring & Andrew Newcombe, *An Introduction to Sustainable Development in World Investment Law*, *in* SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 6 (Marie-Claire Cordonier Segger et al. eds., 2010).
[25] International Law Association 2002, New Delhi Declaration on the Principles of International Law Related to Sustainable Development (London: ILA, 2002).

from other major components of sustainable development such as human rights and good governance. With the distinction between environment and sustainable development in mind, the dissertation's working definition of environmental cases only covers cases where environmental dimension is at the center of the dispute claims and cases concerning public health or human rights are excluded.

4. Case Selection Method

The scope of this dissertation was set to span from the year of 1995 to the year of 2016 to make analyses of trade law and investment law comparable: the WTO was established in 1995 and the WTO Appellate Body finished adjudicating its latest environmental case in 2016. During this time, the total number of WTO Appellate Body reports and investment arbitral awards has respectively reached 141[26] and 578.[27] Using the social science methodological parlance, the 141 Appellate Body reports and 578 investment arbitral awards are raw data to be analyzed; The initial step in the analysis is to identify the environmental cases through the process of coding. Coding in a qualitative study is to assign a summative, essence-capturing attribute for the data.[28] At the stage of case selection, to code is to categorize all the cases to the environmental bracket and the non-environmental bracket pursuant to the working definition.

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[26] https://www.wto.org/english/tratop_e/dispu_e/ab_reports_e.htm
[27] http://investmentpolicyhub.unctad.org/ISDS?status=100. The total number of investor-state disputes, both concluded and pending included, amounts to 767 by the end of 2016. See UNCTAD, WORLD INVESTMENT REPORT (2017), xii.
[28] Johnny Saldaña, THE CODING MANUAL FOR QUALITATIVE RESEARCHERS 3 (2012).

Ideally, all of these decisions shall be manually coded. This poses a formidable amount of work of briefing international decisions up to hundreds of thousands of pages, which is practically infeasible for a dissertation project. As a result, this dissertation seeks to employ alternative methods to determine whether a certain case meets the criterion of environment cases proposed in the preceding section. Specifically, this dissertation uses the proxy of key terms as indicators of the cases' environmental dimension. Categorizing qualitative data is not a precise science but primarily an interpretative act.[29] To minimize bias and omissions in the key term approach, this dissertation also engages in manual coding and resorts to official case summaries to confirm the codification.

For the WTO cases, this dissertation uses the official case summary prepared by the WTO Secretariat[30] to derive a preliminary list of environmental disputes. The case summary consists of a brief description of the contested measures and a summary of the key Appellate Body findings for each individual case. A text search is performed with key terms of "environment", "ecolog" and "climate" to all the Appellate Body reports to double check if the preliminary list is incomplete. The key term text search generates two categories of cases: cases with no more than 10 appearances of the key terms; and cases with more than 10 appearances of the key terms. For the former category, a quick contextual examination is carried out to determine if the key term such as environment is used to mean settings or conditions as in the form of "business environment", "regulatory environment" or "tax

[29] *Id*. at 4.
[30] https://www.wto.org/english/res_e/publications_e/dispu_settlement_e.htm

environment." If most of the 10 appearances of the key terms were used to convey meanings that are not related to environmental protection, the case is automatically categorized as non-environmental cases. The rest of the cases in the first category, together with all the cases in the second category with over 10 appearances of key terms, are marked as "potential environmental cases." For any cases that only appear in the preliminary list or the potential list, the cases will be coded manually to see if they fall within the definition of environmental cases. The method yields a list of nine environmental disputes on which the WTO Appellate Body have concluded their Report (See Table 1).

With regards to investment cases, this dissertation first turns to the United Nations Conference on Trade and Development ("UNCTAD") dataset on investor-state dispute settlement[31] for the preliminary screening. The UNCTAD dataset serves as a portal to all the published investor-state arbitral awards by providing the link to download the award, a very brief summary of the dispute, major claims, the overall outcome of the proceeding, and the links to their background information. According to the UNCTAD statistics, 133 out of the 578 concluded cases are settled and 63 are discontinued, both of which are excluded for the purpose of this dissertation. For the remaining 352 cases, reviewing their case summaries provided at the UNCTAD dataset yields a preliminary list of cases that meet the criterion of environmental cases proposed in the preceding section. The cases that are left out of the preliminary list undergo the same key term search that is performed on the pool

[31] http://investmentpolicyhub.unctad.org/ISDS

of WTO cases. Among these cases, those in which the key terms make more than 10 appearances will be coded manually to confirm if they meet the criterion of environmental cases. Cases in which the key terms make few than 10 appearances receive a quick contextual examination to establish their status. The procedure yields a list of five environmental disputes adjudicated under the ICSID rules (See Table 2).

The present list of environment cases under investment law is juxtaposed with the two lists developed by Vinuales, Behn and Langford. All cases identified by this dissertation can be found in the lists developed by Vinuales, Behn and Langford. The present list is significantly shorter mainly because it excludes cases (1) that were discontinued, (2) the awards of which were not public, (3) where the tribunal rejected jurisdiction, and (4) that were adjudicate under non-ICSID Arbitration Rules. Also filtered out are cases where the Tribunal's analysis on the Respondent State's environmental counterclaims played a minor part in its reasoning.[32] To illustrate treaty interpretation in arbitral awards adjudicated pursuant to non-ICSID rules, Chapter 6 also analyzes interpretative practices in two case adjudicated under the ICSID Additional Facility Rules and the UNCITRAL rules (See Table 3).

[32] *Burlington Resources Inc. v. Republic of Ecuador*, ICSID Case No. ARB/08/5

Table 1. List of environmental cases adjudicated by the WTO Appellate Body

No.	Case	Contested Environmental Measures
1	US-Reformulated Gas (1996)	the "Gasoline Rule" under the US Clean Air Act that set out the rules for establishing baseline figures for imported gasoline sold in the US market
2	US-Shrimp/Turtle (1998)	US import ban on shrimp and shrimp products that were caught with methods which led to killing of marine turtles
3	EC-Asbestos (2001)	French regulation that prohibited imports of products that contained asbestos
4	Brazil-Retreaded Tyres (2007)	Brazil's import ban on retreaded tyres
5	US-Tuna/Dolphin II (2012)	dolphin-safe labelling requirement on tuna products
6	China-Raw Material (2012)	China's restrictions on the export of various raw materials
7	Canada-Feed in Tariff (2013)	Canada's renewable energy subsidies
8	China-Rare Earth (2014)	China's restrictions on the export of rare earths, tungsten and molybdenum
9	India-Solar Panels (2016)	India's renewable energy subsidies

Table 2. List of environmental cases adjudicated under the ICSID rules.

No.	Case	Contested Environmental Measures
1	CDSE v. Costa Rica (2000)	expropriation of land to establish a natural preserve
2	MTD v. Chile (2004)	refusal of a permit based on zoning and environmental regulations
3	Marion Unglaube & Reinhard Unglaube v. Costa Rica (2012)	creation of a natural preserve in foreign-owned lands
4	Quiborax v. Bolivia (2015)	revocation of mining concessions based on environmental regulations
5	Al Tamimi v. Oman (2015)	enforcement of environmental law against a limestone quarry project

Table 3. List of selective environmental cases adjudicated under non-ICSID rules

No.	Case	Contested Environmental Measures
1	Metalclad v. Mexico (2000)	denial of permit to a landfill and the subsequent reclassification of the site as an ecological preserve
2	SD Myers v. Canada (2000)	trade measures interfering with the investor's waste treatment activities

IV. The "Single Combined Operation" Approach to Interpretation under the VCLT

This Chapter develops a point of reference that guides the analysis in the two ensuing chapters. This chapter first establishes that interpretive approaches used in international dispute settlements is foundational to the legitimacy of those settlements. To that end, this Chapter explains why the "single combined operation" approach to interpretation mandated by the Vienna Convention on Law of Treaties ("VCLT") plays a critical role in the adjudication of environmental disputes under international economic law. It then elaborates on the "single combined operation" approach this dissertation uses as the benchmark to evaluate and compare interpretive arguments in environmental disputes under trade law and investment law.

In addition to developing the analytical criterion, this chapter also reviews the interpretive style of the World Trade Organization ("WTO") Appellate Body and investment arbitral tribunals in general dispute settlement, which will be used to assess whether interpretive arguments in environmental disputes embody a distinct pattern compared to the interpretive style in general dispute settlement. This chapter is based on extensive review of the most authoritative treatises and journal articles on treaty interpretation.

1. Interpretation and Legitimacy of International Dispute Settlement

Among the many functions international law serves, dispute settlement invites the most attention. Since no legal text drafted by human beings can possibly be perfect in a way that it never gives rise to any doubt as to its scope or actual meaning,[1] interpretation, the process of assigning meaning to the treaty texts with the objective of establishing right and obligation, becomes inevitable. Like their domestic counterparts, international tribunals primarily engage in interpreting legal texts and applying the rules derived from interpretation to the facts. International treaties, compared with national statutes, tend to be even more ambiguous and open-textured. They are also characterized with a higher level of rigidity as legislative correction of international law has to be achieved by nation states based on the rule of consensus. The ambiguity and rigidity of international treaties makes the tribunal's treaty interpretation an essential aspect of international law.[2]

Interpretation is an important medium of change in international law. Formally, international law changes by concluding new treaties and through the development of customary international law and general principles of law. Informally, international law changes through interpretation.[3] Although international law does

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[1] Oliver Dörr & Kirsten Schmalenbach, *Article 31. General rule of interpretation*, *in* VIENNA CONVENTION ON THE LAW OF TREATIES: A COMMENTARY 587, 587-588(Oliver Dörr & Kirsten Schmalenbach eds., 2010).
[2] Joost Pauwelyn and Manfred Elsig, *The Politics of Treaty Interpretation*, in INTERDISCIPLINARY PERSPECTIVES ON INTERNATIONAL LAW AND INTERNATIONAL RELATIONS: THE STATE OF THE ART 445 (Jeffrey L. Dunoff & Mark A. Pollack eds., 2013).
[3] Thomas Kleinlein, *Matters of Interpretation: How to Conceptualize and Evaluate Change of Norms and Values in the International Legal Order*, 8 (2018) https://papers.ssrn.com/abstract=3292051 (last visited Dec 11, 2018).

not have a strict *stare decisis* system, previous decisions and doctrines are persuasive for later cases. International tribunals' legal reasoning and interpretive method not only applies to the dispute at issue, but also builds a body of law that bears on future proceedings. As time goes by, a certain interpretation gets accepted and becomes new reference point for legal discourse.[4] Precedent becomes part of the spoken and unspoken strategies of interpretation.[5]

Treaty interpretation is a rule-bounded practice. The rule of treaty interpretation is codified in the VCLT Article 31-32 and reflects customary international law binding on all states. The VCLT rule of interpretation applies to all types of international treaties regardless of their subject matter. Article 31 provides for three primary means of interpretation: text, context, object and purpose.[6] Article 32 provides for the supplementary means of treaty interpretation. It is generally agreed that the relationship between Art 31 and Art 32 is hierarchical. Art 32 will be applied only if application of Art 31 leaves the meaning of the interpreted treaty "ambiguous or obscure," or to leads to a result "which is manifestly absurd or unreasonable."[7] This seemingly clear rule merely provides the starting point for understanding treaty interpretation. The application of the VCLT rule in interpretation varies from tribunal to tribunal. In some instances, the VCLT rule is paid no more than lip service; in other instances, part of the rule is prioritized to

[4] INGO VENZKE, HOW INTERPRETATION MAKES INTERNATIONAL LAW: ON SEMANTIC CHANGE AND NORMATIVE TWISTS (2012).
[5] Harlan Grant Cohen, *Theorizing Precedent in International Law*, in INTERPRETATION IN INTERNATIONAL LAW 268 (Andrea Bianchi et al. eds., 2015).
[6] Vienna Convention on the Law of Treaties, art. 31.
[7] Vienna Convention on the Law of Treaties, art. 32.

bolster the tribunal's preferred argument while the rest of the rule is disregarded. The inconsistent application of the VCLT rule has prompted commentaries that interpretation under the VCLT Art 31-32 is a matter of art and not science.[8]

Coherence and integrity in the process of interpretation contributes to the legitimacy of international dispute settlement in general. Fairness of adjudication requires principled, reasoned, and consistent interpretation.[9] A well-reasoned judicial decision allows the community directly impacted by the decision to assess whether the decision is a product of impartial legal reasoning, or merely the adjudicators' own personal choice of the values.[10] The VCLT's "single combined operation" approach of interpretation imposes a common discipline for the interpreter with regards to which means of interpretation are admissible[11] and forces the interpreter to make her reasoning visible and transparent.[12] States are more likely to stay committed to an international legal regime if the legal reasoning is built upon high-quality interpretation: states need to understand why they have been defeated in a given claim. To discipline the interpretive process with the VCLT rule further

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[8] Ulf Linderfalk, *Is Treaty Interpretation an Art or a Science? International Law and Rational Decision Making*, 26 EUROPEAN JOURNAL OF INTERNATIONAL LAW 169 (2015). Malgosia Fitzmaurice and Panos Merkouris, *Canons of Treaty Interpretation: Selected Case Studies from The World Trade Organization and the North American Free Trade Agreement*, *in* TREATY INTERPRETATION AND THE VIENNA CONVENTION ON THE LAW OF TREATIES: 30 YEARS ON 153 (Malgosia Fitzmaurice, Olufemi Elias & Panos Merkouris eds., 2010).
[9] Laurence R. Helfer & Anne-Marie Slaughter, *Toward a Theory of Effective Supranational Adjudication*, 107 YALE LAW JOURNAL 273 (1997).
[10] Robert Howse, *Adjudicative Legitimacy and Treaty Interpretation in International Trade Law: The Early Years of WTO Jurisprudence*, *in* THE EU, THE WTO, AND THE NAFTA: TOWARDS A COMMON LAW OF INTERNATIONAL TRADE? 35 (J. H. H. Weiler ed., 2001).
[11] Fuad Zarbiyev, *The 'Cash Value' of the Rules of Treaty Interpretation*, 32 LEIDEN JOURNAL OF INTERNATIONAL LAW 33 (2019).
[12] Kleinlein, *supra* note 3, 14.

enhances the tribunal's legitimacy by promoting a consistent and predictable jurisprudence.[13] Continuity and consistency are an important source of legitimacy. Consistency increases predictability and credibility for the legal regime. It is essential to treat like cases alike, apply the same rules to the same factual issues independent of the parties involved.[14]

The VCLT's "single combined operation" approach of interpretation is particularly important for enhancing the international tribunals' legitimacy in adjudicating environmental disputes. The VCLT rule itself does not favor either economic values or environmental values. Rather, it prescribes a holistic and open-minded approach that is capable of incorporating environmental norms and accommodating changing dynamics in international law such as the emergence of sustainable development.[15] Article 31(3)(c) of the VCLT, which mandates the consideration of relevant rule of international law in interpretation, is crucial in ensuring regulatory space in environmental protection by situating obligations under economic treaties in the broad context of public international law. Interpretive arguments based on Article 31(3)(c) are especially crucial for environmental disputes under investment law as a large percentage of investment agreements do not expressly provide for environmental policy exceptions. Article 31(3)(c) of the VCLT

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[13] Hervé Ascensio, *Article 31 of the Vienna Conventions on the Law of Treaties and International Investment Law*, 31 ICSID REVIEW 366 (2016).
[14] DAVID PALMETER & PETROS MAVROIDIS, DISPUTE SETTLEMENT IN THE WORLD TRADE ORGANIZATION: PRACTICE AND PROCEDURE 41 (1999).
[15] Katharina Berner, *Reconciling Investment Protection and Sustainable Development: A Plea for an Interpretive U-Turn*, *in* SHIFTING PARADIGMS IN INTERNATIONAL INVESTMENT LAW: MORE BALANCED, LESS ISOLATED, INCREASINGLY DIVERSIFIED 177 (Steffen Hindelang & Markus Krajewski eds., 2016).

also enables evolutionary interpretation of the static international economic treaties by importing from other treaties the more progressive notion of sustainable development.[16] Although faithfully following the VCLT rule in interpretation does not guarantee a pro-environment decision, it mandates the adjudicators to examine a wide range of interpretive arguments and provides a safeguard against unchecked discretion of the adjudicators in privileging any pro-economic liberalization purpose where environmental values are at stake.[17]

While other scholars in this field have examined the legitimacy of environmental dispute adjudication by looking at binary factors conducive to empirical research – such as the win-loss rate of environmental claims in international tribunals[18] – this dissertation provides a novel contribution to the field by systematically examining the interpretive arguments to fully evaluate the legitimacy of adjudicating environmental disputes under international economic law. In particular, by using the prism of interpretation, this work captures the complexity of legal reasoning and posits that interpretive arguments used in adjudicating environmental disputes under international economic law are central to understanding international courts' legitimacy.

The voluminous scholarship on treaty interpretation reviewed below helps to develop a clear reference point for the comparative analysis into the interpretive

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[16] Gabrielle Marceau, *Evolutive Interpretation by the WTO Adjudicator*, 21 JOURNAL OF INTERNATIONAL ECONOMIC LAW 791 (2018).
[17] Howse, *supra* note 10. RICHARD K. GARDINER, TREATY INTERPRETATION (2nd. ed. 2017).
[18] Daniel Behn & Malcolm Langford, *Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration*, 18 THE JOURNAL OF WORLD INVESTMENT & TRADE 14 (2017).

arguments under trade law and investment. Treatises on interpretation provide a useful starting point in clarifying the nuts and bolts of interpretation and offers tailored analysis of interpretation in specific fields.[19] These treatises are usually structured as the constituting elements of Article 31-32 of the VCLT: the ordinary meaning of the term, the context, the object and purpose of the treaty, subsequent agreements, subsequent practice, other relevant rules of international treaty or customary law, special meaning, and preparatory work. Some of the constituting elements are further examined on their own to shed light on their jurisprudence and pattern of use.[20] Important doctrinal questions are also addressed, including the standard of review,[21] judicial activism in international arbitration,[22] interpretation

[19] On interpretation by the WTO Appellate Body, see ISABELLE VAN DAMME, TREATY INTERPRETATION BY THE WTO APPELLATE BODY (2009). On interpretation of investment treaties, see TARCISIO GAZZINI, INTERPRETATION OF INTERNATIONAL INVESTMENT TREATIES (2016).J. ROMESH WEERAMANTRY, TREATY INTERPRETATION IN INVESTMENT ARBITRATION (2012); TODD WEILER, THE INTERPRETATION OF INTERNATIONAL INVESTMENT LAW: EQUALITY, DISCRIMINATION, AND MINIMUM STANDARDS OF TREATMENT IN HISTORICAL CONTEXT (2013).
[20] Jan Klabbers, *International Legal Histories: The Declining Importance of Travaux Préparatoires in Treaty Interpretation?*, 50 Netherlands International Law Review 267 (2003). GEORG NOLTE, TREATIES AND SUBSEQUENT PRACTICE (2013). Hervé Ascensio, *Article 31 of the Vienna Conventions on the Law of Treaties and International Investment Law*, 31 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 366 (2016). On the patterns of interpretive method, see O. K. Fauchald, *The Legal Reasoning of ICSID Tribunals - An Empirical Analysis*, 19 EUROPEAN JOURNAL OF INTERNATIONAL LAW 301 (2008).
[21] William Burke-White & Andreas von Staden, *Private Litigation in a Public Law Sphere: The Standard of Review in Investor-State Arbitrations*, 35 YALE JOURNAL OF INTERNATIONAL LAW 283 (2010), arguing the strict standard of review is inappropriate for investor-state arbitration. Also see Stephen Schill, *Deference in Investment Treaty Arbitration: Re-conceptualizing the Standard of Review*, 3 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 577 (2012).
[22] Fuad Zarbiyev, *Judicial Activism in International Law—A Conceptual Framework for Analysis*, 3 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 247 (2012).

of treaty terms which meaning evolves over time,[23] the principle of restrictive interpretation,[24] and various canons of interpretation.[25]

2. Interpretive Means under Article 31 VCLT

Origin of the "Single Combined Operation" Approach to Interpretation

Article 31 is entitled "general rule of interpretation" in its header. The singular form of "rule" indicates a holistic approach to treaty interpretation, which the United Nations International Law Commission's Commentary ("ILC Commentary") articulated explicitly in the process of drawing up the Article:

> The Commission, by heading the article "General rule of interpretation" in the singular and by underlining the connexion between paragraphs 1 and 2 and again between paragraph 3 and the two previous paragraphs, intended to indicate that the application of the means of interpretation in the article would be a single combined operation. All the various elements, as they were present

[23] Gabrielle Marceau, *Evolutive Interpretation by the WTO Adjudicator*, 21 JOURNAL OF INTERNATIONAL ECONOMIC LAW 791 (2018). Epaminontas E. Triantafilou, *Contemporaneity and Evolutive Interpretation under the Vienna Convention on the Law of Treaties*, 32 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 138 (2017). CHRISTIAN DJEFFAL, STATIC AND EVOLUTIVE TREATY INTERPRETATION: A FUNCTIONAL RECONSTRUCTION (2016). EIRIK BJORGE, THE EVOLUTIONARY INTERPRETATION OF TREATIES (2014).

[24] Luigi Crema, *Disappearance and New Sightings of Restrictive Interpretation(s)*, 21 EUR J INT LAW 681 (2010).

[25] Joseph Klingler, Yuri Parkhomenko & Constantinos Salonidis eds., BETWEEN THE LINES OF THE VIENNA CONVENTION? CANONS AND OTHER PRINCIPLES OF INTERPRETATION IN PUBLIC INTERNATIONAL LAW (2018).

in any given case, would be thrown into the crucible, and their interaction would give the legally relevant interpretation.

Under the ILC Commentary's crucible approach, it is Article 31 in its entirety that is entitled the "general rule of interpretation".[26] The ILC Commentary's deliberate choice of the singular term "rule" was meant to address the risk of applying individual interpretive means in isolation from others. In particular, "ordinary meaning" in the first paragraph of Article 31 has too often been accorded a primary role in determining the meaning of a term. Neither the text[27] nor the drafting history of the VCLT indicates such a hierarchy of legal significance among the various elements of Article 31. Interpretation under article 31 is a process of "progressive encirclement" that does not privilege any of the listed interpretive means, a "single combined operation" taking account of all named elements simultaneously.[28] It demands the interpreter to investigate all the elements of article 31 that constitute the general rule, including the text, its context, the object and purpose, subsequent agreement and practice, the relevant rule of international law, which makes treaty interpretation an extensive and laborious process.[29]

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[26] Duncan French, *Treaty Interpretation and The Incorporation of Extraneous Legal Rules*, 55 INTERNATIONAL & COMPARATIVE LAW QUARTERLY 281 (2006).
[27] The opening paragraph of Article 31 includes not only text, but also its context and the treaty's object and purpose, confirming the relative role of "ordinary meaning". LILIANA POPA, PATTERNS OF TREATY INTERPRETATION AS ANTI-FRAGMENTATION TOOLS: A COMPARATIVE ANALYSIS WITH A SPECIAL FOCUS ON THE ECtHR, WTO AND ICJ 124 (2018) .
[28] Dörr and Schmalenbach, *supra* note 1, at 541.
[29] GARDINER, *supra* note 17, at 38.

Article 31(1): Ordinary Meaning, Context, and Object and Purpose

ordinary meaning

It is well accepted that identifying the ordinary meaning of the text of the treaty is the starting point of interpretation, an exercise intended to examine the text as a legal document recording the common intention of the parties completed by investigation into the negotiation history and subsequent acts.[30] An ordinary meaning is the "regular, normal or customary"[31] meaning apparent to a person reasonably informed on the subject matter of the treaty,[32] often established by the use of dictionaries.[33] Compared to the treaty's object and purpose, the ordinary meanings are usually sought independently from dictionaries and believed to be less vulnerable to the subjective views of the interpreters as they choose among or balance different objectives. The ordinary meaning is also readily available, while subsequent practices, subsequent agreements and preparatory works are much more difficult to identify.[34]

Yet ordinary meaning's status as the point of departure in the process of interpretation should not be equated with treating the text's ordinary meaning as the determinative one and relegating the other interpretive means under Article 31 to

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[30] GAZZINI, 64-65. Also see TRINH HAI YEN, THE INTERPRETATION OF INVESTMENT TREATIES 46 (2014). Dörr and Schmalenbach, *supra* note 1, at 542.
[31] GARDINER, *supra* note 17, at 183.
[32] *Id.* 193-194. Thomas Wälde, *Interpreting Investment Treaties: Experiences and Examples*, *in* INTERNATIONAL INVESTMENT LAW FOR THE 21ST CENTURY: ESSAYS IN HONOUR OF CHRISTOPH SCHREUER 753 (Christina Binder et al. eds., 2009). "It is not meanings apparent to the lay-person, but meanings used in the professional discourse."
[33] GARDINER, *supra* note 17, at 186-189.
[34] Wälde, *supra* note 32, at 752-753.

secondary roles. As there are more than one dictionary meanings for almost any contested term, it becomes inevitable that the interpreters make recourse to the context and other interpretive means to select one out of the multiplicity of meanings.[35] The ordinary meaning arrived at through the dictionary approach becomes the governing one only if it is confirmed by other means of interpretation.[36] Contrary to the view that Article 31(1) represents a literal or textual approach to interpretation[37] and places predominant emphasis on the plain meaning of the term,[38] the drafting history of Article 31 expressly stated that "the ordinary meaning of a term is not to be determined in the abstract but in the context of the treaty and in the light of its object and purpose."[39] The linguistic and grammatical analysis of the text of the treaty[40] amounts to nothing more than a "fleeting starting point"[41] of interpretation.

Plain and ordinary meaning is not as value free as supporters of its primacy would claim.[42] To choose one dictionary meaning out of the various ones involves prioritizing certain values over the others. Interpretation is a highly political

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[35] GARDINER, *supra* note 17, at 189. Wälde, *supra* note 32, at 753.
[36] GARDINER, *supra* note 17, at 185.
[37] TRINH HAI YEN, *supra* note 30, at46.
[38] ALEXANDER ORAKHELASHVILI, THE INTERPRETATION OF ACTS AND RULES IN PUBLIC INTERNATIONAL LAW 319 (2008).
[39] ILC Commentary on draft articles, [1966] Yearbook of the ILC, vol II, p221, para 12.
[40] Dorr and Schmalenbach, 542.
[41] GARDINER, *supra* note 17, at 181.
[42] Wälde, *supra* note 32, at 752-753. Wälde argues that the weight of literal meaning in treaty interpretation should be augmented because (1) the object and purpose of a treaty tend to refer to all the politically correct and appealing goals pushed by special interest groups and activists; (2) the interpretive community in international law tends to be heterogeneous and is less likely to share similar values or assess facts similarly.

exercise.[43] Many of instances of alleged breaches of treaties may often be recast as differences in interpretation, which can be largely attributed to the different application of interpretive methods.[44]

The WTO Appellate Body's jurisprudence features excessive attention to the words of the treaty, especially in the early years after its establishment in 1995.[45] The rigid textualism practiced by the WTO Appellate Body in interpreting treaty provisions features an almost obsessive [46] focus on the grammar, syntax, and reference to dictionary definitions.[47] The Appellate Body has explicitly stated in a number of decisions that interpretation must "begin with, and focus upon, the text of the particular provision." [48] The Appellate Body's overreliance on dictionary definitions has also turned the arguments before it to a "battle of dictionaries."[49] The formalistic approach is also manifested in the Appellate Body's tendency to stick the reasoning very closely to the words, which obscured its legal reasoning in a wild word-

[43] Klabbers, *supra* note 20, at 271.
[44] *Id.* at 274.
[45] William Magnuson, *WTO Jurisprudence & Its Critiques: The Appellate Body's Anti-Constitutional Resistance*, 51 (2010). ORAKHELASHVILI, *supra* note 38, at 330-334.
[46] Georges Abi-Saab, *The Appellate Body and Treaty Interpretation*, *in* TREATY INTERPRETATION AND THE VIENNA CONVENTION ON THE LAW OF TREATIES: 30 YEARS ON 97, 106 (2010). Henrik Horn & Joseph H. H. Weiler, *European Communities – Trade Description of Sardines: Textualism and its Discontent*, 4 WORLD TRADE REVIEW 248, 252 (2005).
[47] Magnuson, *supra* note 45, at 126. Horn and Weiler, *supra* note 46, at 252.
[48] US-Shrimp, WT/DS58/AB/R, 12 October 1998, para 114.
[49] Douglas A. Irwin & Joseph Weiler, *Measures Affecting the Cross-Border Supply of Gambling and Betting Services* (DS 285), 7 WORLD TRADE REVIEW 71, 95 (2008).

chase.[50] This dictionary hermeneutics[51] has led to comments that the Appellate Body elevates the ordinary language above its animating purpose.[52]

Nevertheless, this rigorous textualism of the Appellate Body does not come at the cost of downplaying other interpretive means under the VCLT. The rigorous use of textualism is largely driven by legitimacy concerns of the Appellate Body.[53] It is commented that the case law indicates that the Appellate Body is no less teleological, contextual or systematical than other international tribunals.[54] The textualism practiced by the WTO Appellate Body should be properly called "contextualized textualism."[55] The Appellate Body does not read the dictionary definitions or the plain meaning of the text in isolation but immediately contextualize the ordinary meaning in various ways.[56] In several decisions the Appellate Body openly acknowledged that dictionary meanings leave many interpretive questions open[57] and dictionaries alone are not capable of resolving complex questions of interpretation.[58] Recognizing the limited value of dictionary meanings, the Appellate Body contextualizes the dictionary definitions mainly by applying the technique of cross-referencing.[59]

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[50] Abi-Saab, *supra* note 46.
[51] J. H. H. Weiler, *Brazil – Measures Affecting Imports of Retreaded Tyres (DS322): Prepared for the ALI Project on the Case Law of the WTO*, 8 WORLD TRADE REVIEW 137, 138 (2009).
[52] Magnuson, *supra* note 45, at 126.
[53] Horn and Weiler, *supra* note 46, at 252.
[54] *Ibid.*
[55] VAN DAMME, *supra* note 19, at 222-226.
[56] *Id.* at 222.
[57] *EC-Asbestos*, Appellate Body Report, at para 88.
[58] *US-Gambling*, Appellate Body Report, at para 164.
[59] VAN DAMME, *supra* note 19, at 235-253.

Unlike the WTO Appellate Body, investment arbitral tribunals' treatment of ordinary meaning of the treaty text does not feature rigorous investigation into the ordinary meaning. A large number of arbitral awards do not investigate the ordinary meanings of treaty terms at all.[60] Among the awards that discuss the ordinary meaning, a lot simply pick one dictionary definition without explaining the grounds for the selection.[61] Some tribunals look to the synonyms to establish the meaning.[62] Some tribunals rely on the interpretation from other arbitral decisions or scholarly writings to establish the ordinary meaning.[63] Some awards simply present a literal reading of the term without explaining how the literal reading is derived. A few awards merely apply a term to the facts of the dispute assuming that the term bears a single, non-disputed meaning.[64] Investment arbitral awards do not feature a single interpretive style, be it textualism, teleologicalism, contextualized textualism or any term.

Context

Context used under the VCLT rules has a special meaning that should be distinguished from the common understanding of context. Under the VCLT, context refers to the immediate qualifier of the term at issue, the rest of the provision in which the term at issue is situated, the whole text of the treaty including the preamble and any annexes, the agreements and instruments identified in Article

[60] TRINH HAI YEN, *supra* note 30, at 46-47.
[61] *Id.* at 47.
[62] GAZZINI, *supra* note 19, at 93.
[63] TRINH HAI YEN, *supra* note 30, at 48.
[64] *Id.* at 48-49.

31(2), footnotes, interpretive notes, and any other instruments attached to the treaty.[65] The special meaning of context for the purpose of Article 31 VCLT should not be confused with context in its loose use referring to the surrounding circumstances of conclusion of a treaty, which is considered as supplementary means of interpretation under Article 32 VCLT.

International courts and tribunals have referred to a multitude of elements as context for the purpose interpretation under the VCLT rules. They include grammatical construction of the provision or phrase, title, headings, chapeaux, other provisions, preamble, annexes, interpretive notes, punctuation and syntax, and footnotes.[66] They either confirm an ordinary meaning or select an ordinary meaning from a range of candidate meanings arrived at from applying the literal approach.[67]

Object and Purpose

Object and purpose as the final words of Article 3(1) of the VCLT indicate a teleological approach and an embodiment of the principle of effectiveness in the general rule of interpretation. The adjective "its" that immediately precedes "object and purpose," as compared to "their" that precedes "context," suggests that Article 31(1) VCLT envisages the terms are to be interpreted in the light of the object and purpose of the whole treaty, not of individual provisions under interpretation.[68] However, the use of "its" does not preclude the relevance of individual provisions'

[65] GAZZINI, *supra* note 19, at 145.
[66] GARDINER, *supra* note 17, at 199-209.
[67] *Id.* at 198.
[68] VAN DAMME, *supra* note 19, at 214, 258.

object and purpose,[69] which can help inform the objective and purpose of the entire treaty.[70] It is not uncommon for investment arbitrators to only refer to the individual provision to deduce the object and purpose for the whole treaty.[71] The WTO Appellate Body, on the other hand, has ruled that the object and purpose of individual provisions are subsidiary to those of the entire city.[72] A treaty provision should not be interpreted in the light of the object and purpose of other provisions.[73]

The singular form of the term does not mean that there is only one object and purpose. Contemporary treaties have increasingly included more than one object and purpose in their text. This pluralist view is supported by the WTO Appellate Body in the *US - Shrimp* case:

> … most treaties have no single, undiluted object and purpose but rather a variety of different, and possibly conflicting, objects and purposes. This is certainly true of the WTO Agreement. Thus, while the first clause of the preamble to the WTO Agreement calls for the expansion of trade in goods and services, this same clause also recognizes that international trade and economic relations under the WTO Agreement should allow for optimal use of the world's resources in accordance with the objective of sustainable development, and should seek to protect and preserve the environment. The

[69] *Id.* at 214.
[70] *Id*, at 260.
[71] GAZZINI, *supra* note 19, at 162.
[72] VAN DAMME, *supra* note 19, at 260.
[73] GAZZINI, *supra* note 19, at 166.

> Panel in effect took a one-sided view of the object and purpose of the WTO Agreement when it fashioned a new test not found in the text of the Agreement.[74]

In contrast, investment tribunals do not have a single voice on whether there is only one object and purpose. While some arbitral tribunals conclude that the sole object and purpose of investment agreement are to promote and protect investment, others explicitly acknowledge object(s) and purposes(s) other than investment protection.

The object and purpose are usually derived from the preamble of the treaty.[75] International courts have also referred to a wide range of materials to infer the object and purpose, including the title, specific articles of the treaty, overall framework, preparatory work of the treaty, scholarly comments and case law.[76] It is admonished that interpreters can only consider the object and purpose "as expressed *in the treaty* and not the extratextual subjectivities of the parties."[77]

The mandatory requirement of examining the object and purpose in interpretation, as provided by the use of "shall" in Article 31(1) VCLT, is not strictly

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[74] US-Shrimp WT/DS58/AB/R (1998), para 17.
[75] GARDINER, *supra* note 17, at 217-218. TRINH HAI YEN, *supra* note 30, at 62-63. Fauchald cautioned that this statement was true only to the extent that tribunals actually indicated where they derived object and purpose. The majority of investment decisions he reviewed did not explain how they identified the object and purpose. This issue will be further explained later in this section. See Fauchald, *supra* note 20, at 322.
[76] Fauchald, *supra* note 20, at 322. VAN DAMME, *supra* note 19, at 257-258.
[77] Mahnoush H. Arsanjani & W. Michael Reisman, *Interpreting Treaties for the Benefit of Third Parties: The "Salvors" Doctrine" and the Use of Legislative History in Investment Treaties*, 104 AMERICAN JOURNAL OF INTERNATIONAL LAW 597, 599 (2010).

followed in investment arbitration. Investment dispute arbitrators often take object and purpose as self-evident, and do not explain how they have established the object and the purpose.[78] More than half of the investment arbitral awards between 1990 and 2012 do not use this interpretive means at all.[79] This is problematic in that treaties usually embody more than one object and purpose. To choose among often competing objects and purposes is not an issue of technicalities,[80] and inevitably involves subjectivity.[81]

The roles played by the object and purpose of the treaty are manifold. First, it is mandatory under Article 31(1) VCLT to double check the meaning obtained through literal and contextual interpretation against the object and purpose of the treaty.[82] Second, interpreters can use the object and purpose as a "tiebreaker" when literal and contextual interpretation produces more than one plausible meanings.[83] Third, international courts and tribunals have taken different views on the proper role of the object and purpose when they are irreconcilable with the literal and contextual interpretation. That object and purpose is preceded by the flexible term "in the light of" seems to suggest that they are not an independent source of meaning of a term.[84] The WTO Appellate Body has consistently followed this approach and ruled that the use of the object and purpose of the treaty does not exclusively

[78] GARDINER, *supra* note 17, at 213.
[79] TRINH HAI YEN, *supra* note 30, at 64.
[80] VAN DAMME, *supra* note 19, at 259.
[81] *Id*. at 258.
[82] GAZZINI, *supra* note 19, at 175-177.
[83] GAZZINI, *supra* note 19, at 178-179.
[84] TRINH HAI YEN, *supra* note 30, at 64.

determine the meaning of the treaty.[85] The teleological approach is not only reflected in the seemingly flexible recourse to the object and purpose but also mandated under the "good faith" in Article 31(1).[86] The tension between the literal meaning of text and the object and purpose of the treaty features prominently in the issue of interpretation of Article 47 of the ICSID which concerns whether the tribunal has the power to impose provisional measures.[87]

Article 31(2): Context

Article 31(2) provides that treaty terms must be interpreted in their context, which consists of any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty, and any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty, and the whole text of the treaty including the preamble and the annexes. The two contextual interpretive elements on top of the whole text of the treaty are to be distinguished from subsequent agreements and subsequent practices under Article 31(3), as indicated by the expression "together with the context" at the beginning of Article 31(3).[88] The temporal watershed between these two subdivisions is the time of the conclusion of the treaty, i.e. the date of adoption and opening for signature.[89] The

[85] VAN DAMME, *supra* note 19, at 263.
[86] GAZZINI, *supra* note 19, at 180.
[87] The issue of provisional measures was also addressed in ICJ in *LaGrand* which discharged a literal meaning that would be contrary to the object and purpose of the treaty. *Id.* at 180-185.
[88] *Id.* at 142
[89] GARDINER, *supra* note 17, at 234.

instruments covered by Article 31(2)(b) include documents of ratification, acceptance, approval or accession.[90]

Article 31(3): Subsequent Agreement, Subsequent Practice, and Relevant International Law

Under Article 31, the interpreter is directed to take into account subsequent agreement, subsequent practice and relevant international law. The term "shall" in the chapeau of Article 31(3) makes it mandatory to consider all three interpretive elements if they are available. Another phrase in the chapeau of Article 31(3), "together with the context," places all three elements "on the same plane" with contextual interpretation under Article 31(1) and (2).[91]

All three elements under Article 31(3) are closely related to the "evolutionary" or "dynamic" interpretation of intertemporal law.[92] Subsequent agreement and subsequent practice is a characteristic feature of international law in that it ensures ambiguity of treaty language and the evolving circumstances and understanding of the treaty are taken into account.[93] The ILC over the years has consistently upheld the importance of subsequent agreement and practice as "authentic means of interpretation" in that "it constitutes objective evidence of the understanding of the

[90] *Id.* at 239.
[91] GAZZINI, *supra* note 19, at 210.
[92] Nolte, ILC First Report, Reprinted, 172.
[93] Nolte, ILC First Report, Reprinted, 169-170.

parties as to the meaning of the treaty."[94] The recourse to relevant rules of international law is meant to enhance the coherence of international legal order.

Subsequent Agreement

According to the ILC's definition, a "subsequent agreement" within the meaning of VCLT Article 31(3)(a) is an agreement between the parties, reached after the conclusion of a treaty, regarding the interpretation of the treaty or the application of its provisions.[95] The wording "between the parties" indicates that the agreement has to be expressed by all disputing parties, unless otherwise provided.[96] Subsequent agreement can take a variety of forms including but not limited to a treaty.[97] Examples of subsequent agreements other than formally concluded treaties include exchange of letters, diplomatic notes, notes verbales, joint statements, joint decisions, agreed minutes, and any instruments.[98] Informal instruments, which are concluded with less formal requirement than treaties, would also constitute subsequent agreements for the purpose of Article 31(3)(a) if they can establish the parties' agreement on the interpretation of the treaty.[99] Some treaties entrust the responsibility of adopting binding interpretation to a joint committee such as the NAFTA Free Trade Commission (FTC) under NAFTA Article 1131(2).[100] The

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[94] Nolte, ILC Fifth Report (2018), Annex. ILC Commentary on the Draft Articles on the VCLT, Yearbook… 1966, vol. II, p.219, para.8.
[95] Nolte, ILC Fifth Report, Annex, at 45-46.
[96] A few investment treaties, most notably the NAFTA through Article 1128, also provide for non-disputing party submission to be considered as subsequent agreement for the purpose of Article 31(3)(a). GAZZINI, *supra* note 19, at 194.
[97] GARDINER, *supra* note 17, at 247.
[98] GAZZINI, *supra* note 19, at 192.
[99] GARDINER, *supra* note 17, at 247-250. VAN DAMME, *supra* note 19, at 347. GAZZINI, *supra* note 19, at 192.
[100] GAZZINI, *supra* note 19, at 191.

emphasis on the substance of an agreement, not its form, blurs the distinction between subsequent agreement and subsequent practice.[101]

Subsequent agreement is part of the "crucible" of elements that constitute the general rule of interpretation. In spite of the vague expression "take into account," it is an authentic means of interpretation that discloses the parties' intention.[102] The ILC is of the opinion that subsequent agreement on the interpretation of the treaty is to be taken into account as if it were part of the treaty and to be considered on the same level as the context.[103] The International Court of Justice ("ICJ") and some investment tribunals have adopted this position.[104]

Subsequent agreements are relatively rare in practice. For multilateral treaties, it is difficult for all member states to reach consensus on an interpretive issue. For bilateral treaties, it may be politically more desirable to formally amend a treaty than to conclude an interpretive agreement.[105] The limited availability of

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[101] Anthea Roberts, *Power and Persuasion in Investment Treaty Interpretation: The Dual Role Of States*, 104 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 179 (2010). "A subsequent agreement turns on the fact of an agreement between the treaty parties, not its form. The agreement need not be in binding or treaty form but must demonstrate that the parties intended their understanding to constitute an agreed basis for interpretation. Such agreements may be more or less formal, ranging from a jointly signed document to a series of acts or communications from which an agreement can be inferred. The more informal the basis, the greater the overlap with subsequent practice." VAN DAMME, *supra* note 19, at 347.

[102] GAZZINI, *supra* note 19, at 188.

[103] *Ibid.*

[104] *Ibid.*

[105] Sean D. Murphy, *The Relevance of Subsequent Agreement and Subsequent Practice for the Interpretation of Treaties*, *in* TREATIES AND SUBSEQUENT PRACTICE 84 (Georg Nolte ed., 2013), explaining that "concluding an 'interpretive' agreement may domestically antagonize those actors normally involved in the treaty-making process if they are excluded from the interpretive process."

subsequent agreements partly explains why only 13 out of 229 investment arbitral decisions considered subsequent agreements between 1990 and 2012.[106]

Subsequent Practice

Subsequent practice is not explicitly defined in the VCLT, other than the qualifications that the practice "is in the application of the treaty" and "establishes the agreement of the parties regarding its interpretation." The ILC expressly clarifies that conduct by non-State actors including international courts and tribunals does not constitute subsequent practice under Article 31 and 32, though they may be relevant when assessing the subsequent practice of parties to a treaty.[107] One source to search for the meaning of practice in international law is the Article 38 of the ICJ Statute which provides that one source of international law is "international custom, as evidence of a *general practice* accepted as law."[108] According to Crawford, international custom can be found in:

> … diplomatic correspondence, policy statements, press releases, the opinions of government legal advisers, official manuals on legal questions, executive decisions and practices, orders to military forces, comments by governments on drafts and accompanying commentary, state legislation, international and national judicial decisions, recitals in treaties and other international instruments, a pattern of treaties in the same terms, the practice of

[106] TRINH HAI YEN, *supra* note 30, at 55.
[107] Nolte, ILC Fifth Report, Annex.
[108] Statute of the International Court of Justice, article 38 (*emphasis added*).

international organs, and resolutions relating to legal questions in UN organs, notably the General Assembly.[109]

Not everything listed above counts towards subsequent practice within the meaning of Article 31(3)(b) VCLT. What subsequent practice consists of depends on the subject matter of the treaty in issue.[110] International courts and tribunals have ruled differently on what subsequent practice comprises. The WTO Appellate Body ruled in a number of cases where an isolated act is not sufficient to establish subsequent practice,[111] and that the defining test for what consists of subsequent practice is:

> …a "concordant, common and consistent" sequence of acts or pronouncements which is sufficient to establish a discernible pattern implying the agreement of the parties [to a treaty] regarding its interpretation. An isolated act is generally not sufficient to establish subsequent practice.[112]

International economic tribunals have not extensively relied on subsequent agreement and practice in interpreting an ambiguous treaty provision. The WTO Appellate Body has adopted "a rather restrictive" attitude to using subsequent

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[109] JAMES CRAWFORD, BROWNLIE'S PRINCIPLES OF PUBLIC INTERNATIONAL LAW 24 (8th ed. 2012).
[110] GARDINER, *supra* note 17, at 254.
[111] *Japan — Alcoholic Beverages II*, WT/DS8/AB/R, page 13.
[112] *Japan — Alcoholic Beverages II*, WT/DS8/AB/R, page 13. Also see, *Chile — Price Band System*, paras. 213–214. *US — Gambling*, paras. 192–193. For a full list of the rulings on this issue, refer to https://www.wto.org/english/tratop_e/dispu_e/repertory_e/i3_e.htm#I.3.9

agreement and subsequent practice as interpretive means, an approach described as more restrictive than the ICJ and what the ILC had contemplated when drafting the VCLT.[113] The Appellate Body also has not found subsequent practice to play a decisive role in treaty interpretation.[114] The use of subsequent practice as a means of interpretation is also "rather limited and somewhat disparate"[115] in investment arbitration.[116] Only 10 out of the 229 arbitral decisions and awards surveyed between 1990 and 2012 have considered subsequent practice, a frequency lower than recourse to subsequent agreement (13 out of 229).[117] The economic tribunals' limited recourse to and the light interpretive weight afforded to subsequent practice stands in contrast with the approach adopted by the European Court of Human Rights ("ECtHR"),[118] the International Criminal Court, the International Criminal Tribunal for the former Yugoslavia, and the International Criminal Tribunal for Rwanda.[119]

Relevant Rules of International Law

Article 31(3)(c) VCLT obligates interpreters to take into account any relevant rules of international law applicable to the relations between the parties. The obligatory character of Article 31(3)(c) is clearly indicated by "shall" in the chapeau of Article 31(3). But the wording of Article 31(3)(c) is rather ambiguous itself and gives rise to a number of interpretive issues.

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[113] Nolte, Second Report, 224.
[114] *Id.* at 225.
[115] *Id.* at 234.
[116] *Id.* at 243.
[117] TRINH HAI YEN, *supra* note 30, at 55.
[118] Nolte, Second Report, 268.
[119] *Id.* at 295. Nolte observes that it is "somewhat paradoxical(ly)" for the ICC and two UN criminal tribunals to have a more dynamic approach to subsequent interpretation.

The first qualifier "relevant" is inherently vague and leaves the interpreter much room in selecting the external rules to be taken into account. "Relevant rules of international law," in its ordinary meaning, refers to rules relating to the same subject matter as the treaty provision or provisions being interpreted[120] or rules created to solve the same or similar factual, legal or technical problems.[121] The term "taking into account" in the chapeau of Article 31(3) is intended to leave the interpreter a good amount of discretion in examining the relevance of external rules on a case-by-case basis.[122]

The meaning of "rules of international law" under Article 31(3)(c) is not settled. The starting point for clarifying international law is Article 38 of the ICJ Statute, which provides that the primary sources of international law consist of treaties, international customary rules and general principles of law.[123] Thus, the terms of a treaty can be interpreted in the light of (1) those of another treaty which deals with a similar subject or addresses the same legal situation;[124] (2) customary international law that sets the background of a treaty provision and contains important guidance to its interpretation;[125] (3) general principles of law. Judicial decisions and scholarly writings are characterized as "subsidiary means for the determination of rules of law," not rules under Article 38 of the ICJ Statute. International courts and tribunals in

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[120] GARDINER, *supra* note 17, at 299. Dörr and Schmalenbach, *supra* note 1, at 565.
[121] Dörr and Schmalenbach, *supra* note 1, at 565.
[122] GAZZINI, *supra* note 19. The ILC chose "take account of" over "be subject to" or similar wording to avoid a mechanical application of the rule.
[123] ICJ Statute Article 38.
[124] Dörr and Schmalenbach, *supra* note 1, at 562.
[125] *Ibid.*

practice sometimes go beyond this common ground. The ECtHR controversially takes an expansive view to this issue and has considered the binding resolutions of the UN Security Council[126] and non-binding documents such as the UN General Assembly's Universal Declaration on Human Rights[127] as relevant for interpretation.[128] It has been suggested that the notion of international law should not be a narrow one. Instruments of international commercial law should be included as relevant rules of international law, as non-State actors participate as law-creating and law-enforcing players in the modern global economy.[129]

The qualification "applicable in the relations between the parties" is disputed. Textual and contextual analysis has not yielded a clear answer to this question.[130] "Parties" can be constructed in two ways.[131] The first one is a highly restrictive one: all parties to the treaty under interpretation must also be parties to any other treaties relied upon. The second approach is much more flexible, only requiring the parties to the dispute to be parties to any other treaties relied upon.

International courts and tribunals have made recourse to treaties other than the treaty being applied from time to time, though not always accompanied by explicit invocation of Article 31(3)(c).[132] They have made reference to external international

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[126] *Ibid.*
[127] *Id.* at 564.
[128] GARDINER, *supra* note 17, at 308-310.
[129] Walde, *supra* note 32, at 775.
[130] GARDINER, *supra* note 17, at 302-304.
[131] McLachlan suggested two more constructions of "parties": a rule being invoked from any other treaty must be shown to be a customary rule; a rule being invoked in another treaty must have been implicitly accepted or tolerated by all parties to the treaty under interpretation. Campbell Mclachlan, *The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention*, 54 INTERNATIONAL & COMPARATIVE LAW QUARTERLY 279 (2005).
[132] GARDINER, *supra* note 17, at 323.

law stated in common form and treaties that constitute a group and resemble one another in form and content to shed light on the interpretation of the treaty to be applied.[133] Reference has also been made to the identical or similar words as used in other treaties or terms used in treaties on the same subject to assist the interpreters finding the ordinary meaning.[134] Courts and tribunals have relied on Article 31(3)(c) to address parallel and conflicting obligations,[135] informed by notions such as proportionality and margin of appreciation.[136]

Article 31(3)(c) performs two related functions in the interpretive process. First, it contributes to defining the meaning of any given term or provision through (1) clarifying the meaning of a vague term or provision; (2) informing a choice between two or more possible interpretation; (3) filling the gap in the treaty to be interpreted.[137] It has been emphasized by a number of commentators that international rules to be taken into account for the purpose of Article 31(3)(c) can only contribute to clarifying the meaning of a term but not displacing it.[138] Second, it promotes unity of international law by requiring that "the interpretation of any given provision is consistent with the international rights and obligations of the parties stemming from other sources."[139] Article 31(3)(c) embodies the principle of systemic

[133] *Id.* at 324.
[134] *Id.* at 325-326.
[135] *Id.* at 331-332.
[136] *Id.* at 332.
[137] GAZZINI, *supra* note 19, at 211.
[138] GAZZINI, *supra* note 19. Alexander Orakhelashvili, *Restrictive Interpretation of Human Rights Treaties in the Recent Jurisprudence of the European Court of Human Rights*, 14 EUROPEAN JOURNAL OF INTERNATIONAL LAW 529, 537(2003).
[139] GAZZINI, *supra* note 19, at 212.

integration to interpretation.[140] The principle of systemic integration, according to the ILC, is "a guideline according to which treaties should be interpreted against the background of all the rules and principles of international law - in other words, international law understood as a system."[141]

The use of Article 31(3)(c) has increased a lot and attracted greater academic attention in recent years. Writing in 1999, Philippe Sands observed that Article 31(3)(c) had been expressly relied on only occasionally and had attracted little academic comments.[142] When he took up the same subject again in 2010, he noticed that the provision has received a lot more attention from practitioners and scholars.[143] The ILC has specifically tackled this provision in the context of the fragmentation of international law.[144] Article 31(3)(c) has been proposed as a partial solution to the problem of fragmentation of international law, [145] although it is suggested that its appeal is larger in theory than in practice.[146] Going hand in hand

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[140] The principle of systemic integration is coined as the principle of harmonization by Van Damme, which means that means that a treaty should be interpreted in harmony with the broader international legal framework and in a way that avoids violation of existing international legal commitment. VAN DAMME, *supra* note 19, at 357,363.
[141] ILC Study Group on Fragmentation, FRAGMENTATION OF INTERNATIONAL LAW: DIFFICULTIES ARISING FROM THE DIVERSIFICATION AND EXPANSION OF INTERNATIONAL LAW (29 July 2005) (A/CN.4/L.676), at 11, para. 27.
[142] Sands, *supra* note 138.
[143] Panagiotis Merkouris, *Article 31(3)(c) of the VCLT and the Principle of Systemic Integration,* PhD Dissertation.
[144] Philippe Sands & Jeffery Commission, *Treaty, Custom And Time: Interpretation/Application?*, *in* TREATY INTERPRETATION AND THE VIENNA CONVENTION ON THE LAW OF TREATIES: 30 YEARS ON 39, 40 (Oliver Dörr & Kirsten Schmalenbach eds., 2010).
[145] For a defense for fragmentation of international law, see Wälde, *supra* note 32, at 773. Wälde suggested that cross-fertilization enabled by the use of Article 31(3)(c) can risk cross-blockage and upsetting the investment agreement regime.
[146] VAN DAMME, *supra* note 19, at 362.

with its rising importance is a divergent and hotly-contested jurisprudence on this provision.[147]

The WTO Appellate Body has not developed an explicit answer to the meaning of "parties" in Article 31(3)(c). Very few multilateral treaties achieve the same level of universality as the WTO Agreements; bilateral treaties are automatically excluded under the restrictive first construction of "parties."[148] The WTO Appellate Body recognized this difficulty in practice while acknowledging the necessity to enhance systemic integration.[149] It stated in the *EC-Large Civil Aircraft* that:

> In a multilateral context such as the WTO, when recourse is had to a non-WTO rule for the purposes of interpreting provisions of the WTO agreement, a delicate balance must be struck between, on the one hand, taking due account of an individual WTO Member's international obligations and, on the other hand, ensuring a consistent and harmonious approach to the interpretation of WTO law among all WTO Members.[150]

The WTO Appellate Body's use of Article 31(3)(c) is rare. The limited use is partly explained by interpretive difficulties arising from the ambiguity[151] in the text

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[147] This is illustrated by the ICJ's eleven separate opinions, declarations and dissents concerning the use of Article 31(3)(c) VCLT in Oil Platforms case. See Sands and Commission, *supra* note 144, at 40, 42-47.
[148] GARDINER, *supra* note 17, at 312.
[149] *Id*. at 313.
[150] EC-Large Civil Aircraft at paras. 363, 845.
[151] It is argued that the ambiguity is the cost of the compromise needed to include this provision as part of the general rule of interpretation under Article 31. VAN DAMME, *supra* note 19, at 360-362.

of Article 31(3)(c). However, this limited recourse to Article 31(3)(c) by no means suggests that the WTO law is self-contained and is in "clinical isolation from public international law."[152] The WTO Appellate Body has used external international law to interpret the WTO agreements and relied on interpretive means other than Article 31(3)(c) to justify its discussion of the other rules of international law.[153] In *US-Shrimp*, the Appellate Body justified its reference to a number of international legal instruments in interpreting the generic term "natural resources" in Article XX(g) GATT on the basis of the principle of effectiveness, not Article 31(3)(c) VCLT.[154] In *EC-Chicken Cuts*, the Appellate Body ruled that the International Convention on the Harmonized Description and Coding System was part of the context under Article 31(2)(a) VCLT and refrained from deciding whether it also constituted a relevant rule of international law under Article 31(3)(c).[155] So far, the Appellate Body preferred not to take a position on Article 31(3)(c).

Investment tribunal's recourse to Article 31(3)(c) is problematic in many aspects. Some investment tribunals mistakenly considered customary international law as it stood at the time of the conclusion of the treaty. Instead, the correct way is to consider customary international law as prevailing at the time of interpretation.[156]

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[152] *US-Gasoline*, at para. 16.
[153] A list of interpretive means relied on in referring to other rules of international law includes context, special meaning, a circumstance of the conclusion of the treaty, subsequent practice, principle of effectiveness, etc. VAN DAMME, *supra* note 19, at 375.
[154] *Id*. at 370.
[155] *Ibid.* The issue of the relationship between context and Article 31(3)(c) VCLT also came up in EC-Biotech Products. The Panel concluded that other rules of international law can also constitute context to inform the ordinary meaning under Article 31(1), indicating that the different interpretive elements under Article 31 and 32 VCLT are not mutually exclusive to each other. *Id.* at 372-373.
[156] GAZZINI, *supra* note 19, at 215.

In relying on customary international law to inform the interpretation, some tribunals did not look for direct evidence of *opinion juris* and state practice but erroneously relied on precedents and scholarly comments in establishing customary international law.[157]

One notable deviation from the VCLT rule pertaining to Article 31(3)(c) is the active use[158] of *a contrario* arguments[159] that is characteristic of many investment arbitral decisions. *A contrario* arguments are based on the comparison with other treaties concluded between the disputant parties and third state. A contrario arguments are not permitted under Article 31(3)(c), because treaties concluded with third States do not qualify as "applicable in the relations between the parties." The explicit requirement "applicable between the parties" under the VCLT rules does not stop a number of arbitral tribunals from considering relevant under Article 31(3)(c) investment treaties the disputant parties concluded with third States.[160] By doing so, a few arbitral tribunals wrongfully skipped the first step of determining the ordinary meaning but jumped to relying on treaties concluded with a third State before considering the ordinary meaning.[161] As to reference to non-investment treaties,

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[157] TRINH HAI YEN, *supra* note 30, at 58-60.
[158] Fauchald, *supra* note 20, at 327, noting that a contrario arguments played an essential role in 11 out of 98 decisions and non-essential role in 10 out of 98 decisions.
[159] *A Contrario* arguments are closely related to *expressio unius est exclusion alterius*, which means "when one or more things of a class are expressly mentioned others of the same class are excluded." Merriam-Webster's Dictionary of Law.
[160] GAZZINI, *supra* note 19, at 228-231.
[161] *Id.* at 230-231, describing how the *Toto Costruzioni General Spa v. Lebanon* Tribunal referred to a previous award base on a treaty in which the relevant provision was significantly different from the one before the Tribunal, before engaging in the interpretation process under Article 31(1).

investment tribunals in general are reluctant to refer the WTO agreements, especially the public policy exception provisions under GATT Article XX.

Article 31(4): Special Meaning

Article 31(4) VCLT provides that a term shall be given special meaning if it is established that both or all parties so intended. "Special meaning" may be invoked in two situations: (1) the terms of a treaty have a technical or special meaning due to the particular field the treaty covers; (2) the meaning of terms of a treaty is "special" because the parties are using it in a way different from the more common meaning.[162] Parties to a treaty can provide a special meaning by including a definition article in the treaty. Article 31(4) works as an exception to Article 31(1) and Article 32.[163] It is generally agreed that the burden of proof lies on the party invoking the special meaning.[164] International tribunals, including both the WTO Appellate Body[165] and investment tribunals,[166] are generally reluctant to apply Article 31(4).[167]

3. Interpretive Means under Article 32 VCLT

Unlike the general rule in Article 31, supplementary means of interpretation in Article 32 are not mandatory, as indicated by the wording "may be had." The

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[162] Dörr and Schmalenbach, *supra* note 1, at 568-569.
[163] VAN DAMME, *supra* note 19, at 350. GAZZINI, *supra* note 19, at 240-241.
[164] Dörr and Schmalenbach, *supra* note 1, at 569. GAZZINI, *supra* note 19, at 241. GARDINER, *supra* note 17, at 338.
[165] VAN DAMME, *supra* note 19, at 351.
[166] GAZZINI, *supra* note 19, at 241.
[167] *Ibid.*

application of supplementary means must fall into one of the two modes: to confirm or to determine. For the second mode of determining the meaning, Article 32 specifies the qualifying conditions: ambiguity or obscurity of meaning, or manifestly absurd or unreasonable interpretation from applying Article 31. There is no such qualifying condition for the confirmatory mode. Recourse to supplementary means of interpretation under Article 32 is always permissible for confirming the meaning reached by application of Article 31. The difference between the two modes in practice is not substantial.[168]

Preparatory Work

What can be considered preparatory work under Article 32 is left unspecified by the ILC and has been described as *omnibus*[169], amorphous[170], and elusive[171]. The multitude of documents that have been categorized as preparatory work include drafts prepared for the treaty, the notes and the diplomatic letters related to the negotiations, negotiation minuets, explanatory statements and interpretive statements, etc. In determining materials' admissibility as preparatory work, international courts and tribunals apply the principle that they should illuminate a common understanding.[172] Additionally, preparatory work must be in written form[173]

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[168] GAZZINI, *supra* note 19. at 354. Dörr and Schmalenbach, *supra* note 1, at 582, quoting the WTO AB's ruling in China-Audiovisual.
[169] GAZZINI, *supra* note 19, at 253.
[170] ANTHONY AUST, MODERN TREATY LAW AND PRACTICE 218 (3rd ed. 2013).
[171] Klabbers, *supra* note 20, at 279.
[172] GARDINER, *supra* note 17, at 113.
[173] GAZZINI, *supra* note 19, at 254. AUST, *supra* note 170, at 218. ORAKHELASHVILI, *supra* note 38 , at 383.

and accessible to the known parties[174]. The ILC's refusal to define preparatory work or to specify examples of preparatory work seems to be related to its conceptualization of preparatory work as the evidence to finding the common understanding of the parties.[175] A definition of and an illustrative list of evidence would inevitably run into the issue of being "both overinclusive and underinclusive." [176]

It has been repeatedly admonished that preparatory work must be approached with care.[177] It is often not clear how far back in the history of a treaty its preparatory work extends to.[178] The documents that could be categorized as preparatory work are too multifarious and often contradictory. Especially for multilateral treaties, the negotiating history that usually stretched over years yields numerous pieces of preparatory work that often contradict each other.[179] States' positions evolve over the course of negotiation, making the examination of the changes throughout the negotiation course a time-consuming and difficult task. To add to the complexity, the most important parts of treaty drafting often takes place informally without agreed records. [180] It is therefore very difficult to establish whether the submitted preparatory works are complete and to ascertain the relevance of individual pieces of preparatory work.

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[174] GAZZINI, *supra* note 19, at 254.
[175] WALDOCK, THIRD REPORT ON THE LAW OF TREATIES, 1964 YBILC. See Klabbers, *supra* note 20, at 276-278.
[176] Klabbers, *supra* note 20, at 278.
[177] Wälde, *supra* note 32, at 777. AUST, *supra* note 170, at 219. GAZZINI, *supra* note 19, at 255.
[178] GARDINER, *supra* note 17, at 112-117.
[179] Wälde, *supra* note 32, at 778. Gazzini gave the example in which a state party to a NAFTA investment dispute submitted 1,500 pages of documents reflecting over 40 different drafts. GAZZINI, *supra* note 19, at 255.
[180] AUST, *supra* note 170, at 218-219.

The availability of preparatory work also differs from treaty to treaty. Preparatory works are sparse or unavailable for many bilateral investment treaties.[181] Investment tribunals used to have difficulty in accessing the NAFTA preparatory work. The problem was partially alleviated by the release of the negotiating history by the NAFTA Free Trade Commission.[182] Preparatory works for treaties concluded under the aegis of an international organization are more likely to be well-recorded and disseminated.[183] The ILC, for example, maintained a comprehensive record of the drafting history of the VCLT. The negotiating histories of the GATT and other WTO agreements can be found in a number of books compiled by the WTO and commercial publishers.[184] The drafting history of the ICSID Convention is also easily accessible and has been frequently referred to by arbitral tribunals.[185]

Recourse to the preparatory works is not common for investment arbitrations. Only 12 out of 229 investment awards between 1990 to 2012 applied this means of interpretation. The WTO Appellate Body has often referred to the preparatory work of the WTO agreements without specifying a source.[186]

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[181] GAZZINI, *supra* note 19, at 256. RUDOLF DOLZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW 31 (2nd ed. 2012).
[182] DOLZER AND SCHREUER, *supra* note 181, at 31.The documents are available at http://www.naftaclaims.com/commission.html.
[183] GARDINER, *supra* note 17, at 114.
[184] For a list of the publications on WTO's negotiating histories, see http://guides.ll.georgetown.edu/c.php?g=363556&p=4074597
[185] DOLZER AND SCHREUER, *supra* note 181, at 31.The negotiating history of the ICSID Convention is readily available at the World Bank website at https://icsid.worldbank.org/en/Pages/resources/The-History-of-the-ICSID-Convention.aspx.
[186] VAN DAMME, *supra* note 19, at 319.

Circumstances of the Conclusion of the Treaty

In addition to the preparatory work, Article 32 lists circumstances of the conclusion of the treaty as a supplementary means to treaty interpretation. As with preparatory work, the ILC provides no definition for circumstances of the conclusion of the treaty. According to Sir Waldock, circumstances surrounding the conclusion of the treaty covers both the contemporary circumstances and the historical context in which the treaty was concluded.[187] The expression "circumstances of the conclusion of the treaty" has been used loosely to refer to "a large and heterogeneous class of elements" that are capable of illuminating the common intention of the parties.[188] It has also been suggested that the economic, political and social conditions of the parties, and domestic legislative and judicial decision can all be categorized as circumstances of the treaty. [189] The WTO Appellate Body in *EC - Chicken Cuts* decided that circumstances of conclusion could include "documents published, events occurring, or practice followed subsequent to the conclusion of the treaty."[190] No formal distinction has been made between preparatory work and circumstances of the conclusion of the treaty. An interpretive argument can be considered under either category.[191] A case-by-case approach should be followed in determining how much legal value will be

[187] Dörr and Schmalenbach, *supra* note 1, at 578.
[188] GAZZINI, *supra* note 19, at 261, quoting the WTO AB's reasoning in the EC-Chicken case: an "event, act or instrument" may be relevant as supplementary means of interpretation not only if it has actually influenced a specific aspect of the treaty text…; it may also qualify as a "circumstance of the conclusion" when it helps to discern what the common intentions of the parties were…
[189] Dörr and Schmalenbach, *supra* note 1, at 579-580.
[190] VAN DAMME, *supra* note 19, at 323.
[191] GARDINER, *supra* note 17, at 398. VAN DAMME, *supra* note 19, at 321.

accorded to a certain event, act or instrument. Factors that need to be considered include the authorship, the involvement, the relationship with the treaty.[192] 22 out of 229 investment awards decided between 1990 and 2012 applied this means of interpretation.[193]

Other Supplementary Means

Article 32 indicates by the wording "including" that supplementary means of interpretation are not limited to preparatory work and circumstances of conclusion. The open-ended wording, however, is not to meant to put anything under the rubric of supplementary means. It has been suggested that only materials that help illuminate the common intention of the parties should be included as supplementary means.[194] In practice, a number of interpretive arguments have been used as supplementary means against this caution, including uncodified canons of interpretation in their Latin form, judicial precedents, scholarly writings, and treaties entered into with third states. This broad approach led to criticism that Article 32 has become a "dumping ground"[195] of interpretive arguments.

The WTO Appellate Body shows more restraint than investment tribunals in referring to supplementary means other than the preparatory work of the treaty and the circumstances of its conclusion. The WTO Appellate Body recognized that Article 32 does not prescribe an exhaustive list of supplementary means of interpretation. It

[192] GAZZINI, *supra* note 19, at 263.
[193] TRINH HAI YEN, *supra* note 30, at 67.
[194] GAZZINI, *supra* note 19, at 264, 266.
[195] VAN DAMME, *supra* note 19, at 323.

ruled that to be included as supplementary means the materials need to throw light on the common intention of the parties and presenting a "temporal proximity" with the conclusion of the treaty.[196] Investment arbitral tribunals tend to interpret the scope of the non-exhaustive list more expansively and have qualified as supplementary means maxims of construction, precedents, scholarly writings, and treaties entered with third countries.

Judicial Decisions

International tribunals and courts have relied on Article 38 of the ICJ Statute to justify their recourse to previous judicial decisions supplementary means of interpretation. For example, *The Canadian Cattlemen v. United States* Tribunal reasoned that:

> Article 38 [paragraph 1.d] of the Statute of the International Court of Justice provides that judicial decisions are applicable for the interpretation of public international law as "subsidiary means". Therefore, they must be understood to be also *supplementary means of interpretation* in the sense of Article 32 VCLT.[197]

While it is a widely shared value to ensure a greater level of consistency and predictability by referring to precedents, the legal reasoning of referring to Article 38(1)(d) for justification is open to questions. Subsidiary is not to be equated with

[196] GAZZINI, *supra* note 19, at 264.
[197] *Canadian Cattlemen v. United States,* Jurisdiction, para 50.

supplementary: the dictionary meaning of the former indicates subordination while the latter does not.[198] The two terms are also used in different contexts.[199] These two provisions also serve different purposes. Article 38(1)(d) of the ICJ Statute is primarily used to determine the existence and content of the rules of treaties, customary law and general principles of law. Article 32 of the VCLT provides the means to confirm or determine the meaning of a given term or provision arrived at through applying Article 31 of the VCLT.[200] If one takes the primary goal of the VCLT rules as ascertaining the common intention of the parties, judicial decisions made on a different dispute and often between different disputants seem to be irrelevant in drawing lights on the common intention. Although the conceptual confusion does not prohibit the adjudicators from taking into consideration judicial decisions in the process of interpretation, it could have been justified on doctrinal grounds other than reference to Article 38(1)(d) of the ICJ Statute.

Both the WTO Appellate Body and investment arbitral tribunals frequently refer to judicial decisions in interpretation. The WTO Appellate Body predominantly cites its own case law. Investment arbitral tribunals often refer to arbitral awards adjudicated under a different treaty. Since judicial precedents under investment law

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[198] Malgosia Fitzmaurice & Panos Merkouris, *Canons Of Treaty Interpretation: Selected Case Studies From The World Trade Organization And The North American Free Trade Agreement*, *in* TREATY INTERPRETATION AND THE VIENNA CONVENTION ON THE LAW OF TREATIES: 30 YEARS ON 153, 229 (M. Fitzmaurice, Olufemi Elias, & Panagiotis Merkouris eds., 2010). The two dictionary meanings of "supplementary" are (1) enhancement; and (2) to make good a deficiency. GARDINER, *supra* note 17, at 357.

[199] Fitzmaurice and Merkouris, *supra* note 198, at 229.

[200] GAZZINI, *supra* note 19, at 299-300.

often contradict each other, arbitral tribunals' recourse to selective precedents seems ex-post and cherry-picking.[201]

Scholarly Writings

Like judicial decisions, scholarly writings are provided for under Article 38(1)(d) of the ICJ Statute as a subsidiary means to determine the rules of international law but not expressly listed under the VCLT Article 32 as a supplementary means of interpretation. Investment tribunals have relied on scholarly writings to interpret treaty provisions much more heavily and frequently than other international tribunals.[202] Between 1998 and 2006, 73 out of 98 investment arbitral awards referred to scholarly writing for the purpose of interpreting treaty provisions.[203] As of 2012, 101 out of the 229 publicly available investment arbitral awards referred to scholarly writings to interpret terms of investment treaties.[204] The scholarly writings that have been referred to by investment tribunals also go beyond scholarly papers and include research carried out by the ILC, UNCTAD, the OECD, Institute de Droit International and the International Law Association.[205] In general, arbitral tribunals do not explain the authority and selection criterion of particular scholarly writings.[206]

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[201] TRINH HAI YEN, *supra* note 30, at 69.
[202] GAZZINI, *supra* note 19, at 318.
[203] Fauchald, *supra* note 20, at 351-353.
[204] TRINH HAI YEN, *supra* note 30, at 71.
[205] GAZZINI, *supra* note 19, at 322-323. Gazzini points out that the works of the ILC deserve special attention because (1) they are authored by the most respected scholar in international law; (2) the Commission incorporates Member States' comments on the draft articles to build the final report; and (3) the works of the ILC have served as a reference for international conferences or be considered as reflecting customary international law.
[206] *Planet Mining v. Indonesia* Jurisdiction Award, paras 173, 175. The tribunal expressly referred to scholarly writings as supplementary means of interpretation under the VCLT.

In contrast, WTO Appellate Body rarely refers to academic writings in interpreting the WTO agreements.[207]

The conceptual confusion clouding judicial precedents under the VCLT rule and the ICJ Statute Article 38(1)(d) also affects courts' and tribunals' recourse to scholarly writings. Reference to academic writings is certainly permissive under Article 32 VCLT, which authority may be derived from sources other than the ICJ Statute. On the one hand, scholarly writings can assist the interpreters with clarifying the meaning of a given treaty provision by serving as a "reservoir of legal reasoning," [208] and a "possible source of guidance".[209] On the other hand, scholarly writings seldom feature singular argument; on the contrary, they tend to compete with each other to become the orthodox view on literally everything. Recourse made to one school of academic writings in exclusion of the vying schools for the purpose of interpretation makes it a suspect of *ex post* reasoning. Adjudicators in referring to scholarly works must stay self-restraint and strive for transparency in selection.[210] Article 38 of the ICJ Statute provides that only the teachings of the most highly qualified publicists qualify as subsidiary means of determining the law. It has been suggested that the interpreter must carefully assess the scholarly writings' relevance for the provision to be interpreted, their persuasive force, and the reaction they have triggered.[211]

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[207] VAN DAMME, *supra* note 19, at 268.
[208] GAZZINI, *supra* note 19, at 321.
[209] GARDINER, *supra* note 17, at 403.
[210] GAZZINI, *supra* note 19, at 327.
[211] *Id.* at 321.

Canons of Construction

Although canons of construction in their Latin form are not explicitly provided for under the VCLT as supplementary means of interpretation, they are frequently invoked by international courts and tribunals. Most of these canons of construction can be traced back to principles of interpretation found in Roman law, natural law, common law and civil law.[212] They have been frequently cited by interpreters without justifications for their use.[213] Listed below are the frequently used canons of treaty construction and their English translation.

- *effet utile* (*Ut res magis valeat quam pereat*): principle of effectiveness (words are to be given value rather than ignored). This canon is generally considered to be implicit in Article 31(1) as part of good faith and forms customary international law,[214] even though the ILC in its Commentary refused to include this canon as part of the general rules of interpretation.[215]

- *in dubio mutius* (restrictive interpretation): If the meaning of a term is ambiguous, the treaty is to be interpreted in favor of the sovereign. This rule tends to be invoked in determining the jurisdiction of investment tribunals.[216] This canon has been described as a value-oriented rule the application of which changes with

[212] Michael Waibel, The Origins of Interpretive Canons in Domestic Legal Systems 2-3 (2018), https://papers.ssrn.com/abstract=3166198 (last visited Mar 22, 2019).
[213] *Id.* at 18.
[214] *Id.* at 6.
[215] *Id.* at 5.
[216] DOLZER AND SCHREUER, *supra* note 181, at 30.

historical context.[217] It has largely fallen out of favor with contemporary scholars and interpreters and is generally not considered as part of the customary international law.

- *Contra proferentem*: in ambiguity the law should be constructed most strongly against the grantor.

- *ejusdem generis*: general words that follow specific words in a list must be construed as referring only to the types of things identified by the specific words.[218] This canon has been used by investment tribunals in interpreting the scope of MFN clauses.

- *expressio unius est exclusio alterius*: when one or more things of a class are expressly mentioned others of the same class are excluded.[219]

- *generalia specialibus non derogant*: in case of conflict, a specific provision prevails over a general provision.

The use of the Latin maxims is supposed to be objective and disinterested, but is often biased and often value-oriented.[220] Although many of the canons have been described as neutral as "principles of common sense, syntax and logic,"[221] their invocation is often associated with the interpreter's own preference.[222] The rise and

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[217] Crema, *supra* note 24.
[218] Merriam-Webster's Dictionary of Law. https://dictionary.findlaw.com/definition/ejusdem-generis-rule.html
[219] https://www.merriam-webster.com/legal/expressio%20unius%20est%20exclusio%20alterius
[220] Crema, *supra* note 24, at 698.
[221] WAIBEL, *supra* note 212, at 18.
[222] Sean Murphy, *The Utility and Limits of Canons of Construction in Public International Law*, GW LAW FACULTY PUBLICATIONS & OTHER WORKS 10 (2018), available at https://scholarship.law.gwu.edu/faculty_publications/1336.

fall in the use of *in dubio mutius* exemplifies how canons of construction can be applied to achieve normative goals. The rule at its origin was not associated with a pro-sovereignty interpretive choice. It was during the last two centuries that the rule became synonymous with restrictive interpretation in favor of the sovereignty. The rule today largely disappeared from practice. Instead, an opposite doctrine seems to be emerging: in case of doubt, the interpretation more favorable to the private party and international jurisdiction must be preferred.[223] This interpretive doctrine has been used to foster new political consensus against old status quo as historical context changed.[224]

Canons of construction are inherently indeterminate. In examining maxims of statute construction at America's domestic courts, Llewellyn concluded that there are two opposing canons on almost every issue.[225] Canons of interpretation at international tribunals can also be found in pairs.[226] The same critique American legal realists raised against the neutral façade of domestic adjudication may well be said about international adjudication: the invocation of a canon is just an attempt to mask the adjudicators' own preference with legal jargons.[227] Application of interpretation canons is certainly not obligatory and should not be approached as providing a decisive means for resolving disputes.

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[223] Crema, *supra* note 24.
[224] *Ibid.*
[225] Murphy, *supra* note 222, at 3.
[226] *Id.* at 4.
[227] *Id.* at 10.

4. Relationship between Article 31 and Article 32

The primary distinction between the general rule of interpretation under Article 31 and the supplementary means of interpretation under Article 32 is that the former is mandatory while the latter seems to be optional. Wordings of Article 31 such as "a treaty *shall* be interpreted in good faith" and "there *shall* be taken into account" denote mandatory application. In contrast, wordings of Article 32 such as "Recourse may be had" indicates discretionary application. A further distinction can be found in the chapeau of the two articles, with Article 31 titled the "general rule" and Article 32 "supplementary means." Article 32 sets qualifying conditions to be met (ambiguous, obscure, manifestly absurd or unreasonable results from applying Article 31) for invoking the determinative mode of supplementary means, while Article 31 has no such hurdles to cross for any of its elements. These differences have given rise to the impression that Article 32 is subordinate to Article 31.

It is a common misunderstanding to relegate Article 32 to a less important role than Article 31. The dictionary definition of "supplementary" denotes completing and enhancing, rather than subordination.[228] The drafting history of Article 31 and 32 also reveals that the VCLT rules were not intended to be purely textual. The provision on preparatory work reportedly gave rise to "the most significant" difference among the member of the ILC.[229] On the one hand is the literal approach that upholds the primacy of the text of a treaty; on the other hand is the approach that investigates

[228] The two dictionary meanings are (1) enhancement; and (2) to make good a deficiency. GARDINER, *supra* note 17, at 357.
[229] *Id.* at 348.

the intentions of the parties to ascertain the meaning of the treaty term advocated by the U.S. delegation headed by McDougal.[230] The ILC envisioned a balance between the primacy of the text and frequent recourse to preparatory work.[231] Recourse to preparatory work is also highly frequent in state practice and before international adjudication.[232]

Different courts and tribunals approach the relationship between Article 31 and 32 differently. ICJ resorts to the supplementary means under Article 32 not only when the interpretation from applying Article 31 is ambiguous, obscure, manifestly absurd or unreasonable but also when application of Article 31 produces a sufficiently clear interpretation. The WTO Appellate Body puts a strong emphasis on deconstructing the text of the agreements but does not stop at the textual interpretation. Similar to the ICJ, the WTO Appellate Body adopts a holistic approach and makes recourse to the supplementary means even when interpretation according to rules under Article 31 yields clear and unambiguous meaning.[233] No comparable "holistic" approach can be identified in investment tribunals. A number of investment arbitral tribunals assumes a hierarchy between Article 31 and Article 32 and explicitly assign a residual role for Article 32. Since Article 32 is not drafted in mandatory terms, tribunals do not find themselves obligated to resort to supplementary means. One tribunal announced that "it is perfectly acceptable to

[230] *Id.* at 349-351.
[231] *Id.* at 352.
[232] *Id.* at 353.
[233] POPA, *supra* note 27, at 350.

arrive at an appropriate interpretation under Article 31 and stop there."[234] Another tribunal took an even more restrictive understanding of Article 32 and held that "recourse may be had to supplementary means of interpretation *only* in the limited circumstances there specified."[235] The refusal to resort to supplementary means under Article 32 (preparatory work of the ICSID Convention) has led one arbitral awards to be annulled.[236] Admittedly, the limited availability of preparatory work of bilateral investment treaties is partly responsible for the limited recourse to preparatory works. It nevertheless does not justify downplaying the relevance of preparatory work and other supplementary means of interpretation under Article 32. As application of the Article 31 rules is likely to produce more than one plausible interpretation, it is essential to examine all interpretive means under the Vienna rules to prevent unchecked discretion of arbitrators.

5. The "Single Combined Approach" as a Benchmark of Evaluation

To summarize, the "single combined operation" approach to treaty interpretation mandated by Article 31 of the VCLT requires the adjudicators to exhaust all interpretive means under Article 31. Interpretation under article 31 usually starts with establishing the ordinary meaning from the dictionary. The adjudicator needs to justify her choice of dictionary definition. Contextual interpretive arguments look into a wide range of elements including grammatical construction of the provision or

[234] GAZZINI, *supra* note 19, at 245.
[235] *Methanex v US*, Award, Part II, Chapter B, para 22.
[236] *Malaysian Salvors v. Malaysia*, Annulment, para 57.

phrase, title, headings, chapeaux, other provisions, preamble, annexes, interpretive notes, punctuation and syntax, and footnotes. It is mandatory to examine the objects and purposes of the treaty as expressed in the treaty. As treaties usually have more than one object and purpose, it is important to examine all of them. Recourse to the means of subsequent agreement and practice is mandatory if they are available. The adjudicator is also obligated to make recourse to relevant rule of international law. Not all international agreements are relevant. The parties to the dispute must also be parties to the external treaties relied upon. *A contrario* arguments based on the comparison with other treaties concluded between one of the disputant parties and the third state are not permitted under Article 31(3)(c). This criterion is to be applied to evaluate the interpretive arguments employed by the WTO Appellate Body and the arbitral tribunals constituted under the ICSID Arbitration Rules in adjudicating environmental disputes.

Interpretive arguments based on means outside the "single combined operation" approach will also be analyzed. Recourse to interpretive means under Article 32 such as preparatory works is optional and has been used to augment the interpretation arrived through the application of mandatory interpretive means under Article 31. Interpretive means not expressly provided in the VCLT such as case law and academic works should be used with caution as they usually feature competing arguments.

V. Interpretive Arguments and Regulatory Space at the WTO Appellate Body

1. Trade and Environment at the WTO: An Overview

A Brief History of the WTO

Nations have been trying to manage trade among them since time immemorial.[1] The most recent effort to regulate trade on a global scale is the World Trade Organization and its predecessor the General Agreement on Tariffs and Trade (GATT). The idea of founding an international organization to manage international trade was born in the aftermath of the World War II at the Bretton Woods Conference. While the Bretton Woods system successfully established the World Bank and the International Monetary Fund, it failed to bring into existence its third pillar, i.e. the International Trade Organization. Instead, the countries at the negotiation agreed on an interim agreement on tariff reduction known as the GATT 1947. Codified in the GATT 1947 were prohibitions on quantitative restrictions and nondiscrimination obligations such as national treatment and most-favoured-nations. The GATT gradually filled the void left by the aborted International Trade Organization. Despite its interim nature, the GATT 1947 served as the basis for eight rounds of multilateral trade negotiations to reduce tariffs and other trade barriers that spanned over 40 years.

At the end of the eighth round of negotiations, the contracting states to the GATT 1947 agreed to transform the GATT to the fully-fledged international

[1] PETROS C. MAVROIDIS, THE REGULATION OF INTERNATIONAL TRADE: GATT 2 (2016).

organization called the WTO.[2] The WTO came into being in 1995 on the basis of the Marrakesh Agreement Establishing the World Trade Organization ("Marrakesh Agreement") and its annexes that include agreements addressing non-tariff barriers in different fields. The Marrakesh Agreement and the agreements annexed to it are treated as a "single undertaking" and bind all member states as a single treaty. The single undertaking has significant implications for interpreting the WTO agreements when more than one agreement apply to a dispute.[3] Among the agreements annexed to the Marrakesh Agreement was the GATT 1994, which replaced the GATT 1947 but retained its main obligations. The WTO also established a dispute settlement mechanism that is widely recognized as a highly legalized international tribunal. Under the WTO rules, a decision of the dispute settlement body is adopted automatically unless WTO members decide to reject it by consensus. This "negative consensus" mechanism replaced the diplomatic model of dispute settlement under the GATT with "a far more legalized and fundamentally adjudicative" one.[4] By the time of the writing, 164 states have joined the WTO,[5] making it one of the most universal international organizations. The WTO has become the institutional foundation of international trade with its broad coverage of issue areas, effective dispute settlement mechanism, and almost universal membership.

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[2] MITSUO MATSUSHITA, THE WORLD TRADE ORGANIZATION: LAW, PRACTICE, AND POLICY 9 (Third edition. ed. 2015).
[3] Gabrielle Marceau & Joel P. Trachtman, *A Map of the World Trade Organization Law of Domestic Regulation of Goods: The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade*, 48 JOURNAL OF WORLD TRADE 351, 356-357 (2014).
[4] Richard H. Steinberg, *Judicial Lawmaking at the WTO: Discursive, Constitutional, and Political Constraints*, 98 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 247–275 (2004).
[5] https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm

The WTO Rules on Environment

National treatment is a fundamental principle of the WTO and occupies a key position in the jurisprudence on environmental disputes at the WTO. Most environmental disputes at the WTO have arisen from product regulation,[6] addressed under Article III:4 of the GATT which obliges the member states to accord to imported products "treatment no less favourable than that accorded to like products of national origin."[7] To establish a violation of Article III:4 national treatment obligation, the complaint must prove that the imported and domestic products at issue are "like products" and that the imported products are accorded "less favourable" treatment than that accorded to like domestic products. Likeness has been interpreted to be a determination about the competitive relationship between imports and domestic goods. National treatment obligation embodied in WTO agreements other than the GATT generally uses the same wording of "like products" and "less favourable treatment."

Environmental regulations that violate the national treatment obligation can be exempted under certain circumstances within the WTO framework. Although the WTO's primary purpose lies in promoting free trade and eliminating protectionism, it also recognizes member states' right to enact environmental regulations that may restrict market access of imported goods. The preamble of the Marrakesh Agreement that recognizes the need to "protect and preserve the environment"[8] provides a

[6] Joel P Trachtman, *WTO Trade and Environment Jurisprudence: Avoiding Environmental Catastrophe*, 58 HARVARD INTERNATIONAL LAW JOURNAL 273 (2017).
[7] Article III, General Agreement on Tariffs and Trade.
[8] Marrakesh Agreement Preamble.

critical context for interpreting the WTO agreements.[9] Many of the annexed agreement provide for exceptions that excuse legitimate environmental regulations from national treatment obligations. Some of the environmental exceptions are modelled after Article XX of the GATT, which stands at the core of many trade-environment conflicts under the WTO framework. Article XX of the GATT states as follows:

> Article XX: General Exceptions
>
> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> …
>
> (b) necessary to protect human, animal or plant life or health;
>
> …
>
> (d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection

[9] Trachtman, *supra* note 6, at 274.

> of patents, trade marks and copyrights, and the prevention of deceptive practices;
>
> …
>
> (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;[10]

Article XX of the GATT outlines exceptions to member states' trade obligations for public policy purposes and holds crucial normative value for the function of the GATT.[11] It consists of a chapeau and a list of exceptions that are qualified by the chapeau. Two exceptions are especially relevant to environmental protection. Article XX(b) of the GATT provides an exception for trade restrictions "necessary to protect human, animal or plant life or health." Article XX(g) provides an exception for measures "relating to the conservation of exhaustible natural resources." Article XX(d) has also been invoked to justify environmental measures in breach of the GATT obligations but plays a less salient role in the WTO's trade-environment jurisprudence.

The chapeau provides that measures that can be excused under Article XX shall not be "arbitrary or unjustifiable discrimination," or "a disguised restriction on international trade." It serves the function of preventing member states from abusing

[10] General Agreement on Tariffs and Trade art. XX, Oct. 30, 1947.
[11] Luca Rubini, *Ain't Wastin' Time No More: Subsidies for Renewable Energy, The SCM Agreement, Policy Space, and Law Reform*, 15 J INT ECONOMIC LAW 525–579 (2012).

the exceptions. The Appellate Body views the chapeau as protecting "both substantive and procedural requirements."[12] The balancing approach the Appellate Body uses has been commented as transforming Article XX into "an adequate tool for a balanced approach to the trade and environment controversy." [13] However, the high threshold set in the chapeau analysis is criticized as a "tightly guarded gateway" through which environmental measures will be rejected as trade restrictive.[14]

It is not always a straightforward exercise to distinguish a bona fide, non-protectionist environmental measure from a discriminatory, protectionist environmental measure. The WTO legal texts do not provide adequate guidance for settling the environmental disputes. It is the WTO Appellate Body's interpretation that clarifies the meaning of the abstract terms of the WTO agreements and shape the jurisprudence on trade and environment. Where applicable, this chapter investigate how the WTO Appellate Body's interpretive exercise on the GATT Article XX exceptions has evolved in environmental cases. The rest of the chapter looks into how the Appellate Body interpreted WTO agreements other than the GATT to adjudicate environmental disputes.

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[12] Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R (1998) [hereinafter *Shrimp/Turtle*], ¶ 160.
[13] MATSUSHITA, *supra* note 2, at 803.
[14] Sanford E. Gaines, The WTO's reading of the GATT Article XX chapeau: a disguised restriction on environmental measures, 22 *U. Pa. J. Int'l Econ. L.* 22 743 (2001).

2. US-Reformulated Gasoline (1996)

The *US-Reformulated Gasoline* (*Gasoline*) is the seminal case on trade and environment under the WTO. Handed down soon after the WTO came into being,[15] the Appellate Body Report in *Gasoline* was the first WTO Appellate Body decision addressing the tension between trade and environment. The Appellate Body for the first time clarified a number of significant issues that laid the foundation for the WTO Appellate Body's jurisprudence on trade and environment, including the rules to be applied in interpreting the Article XX public policy exceptions and the two-tiered analytical scheme for Article XX.

A. Facts and Proceedings

The challenged environmental regulations concerned the United States Environmental Protection Agency ("EPA") rules regarding standards for gasoline ("Gasoline Rule") adopted under the Clean Air Act. The 1990 Amendments to the Clean Air Act required that (1) cleaner "reformulated gasoline" be sold in the U.S. metropolitan areas; and (2) conventional gasoline may be sold in the other areas if their cleanliness exceeded the 1990 baseline. The EPA was directed by Congress to establish individualized baseline for different refiners. Under the Gasoline Rule, foreign refiners had to use a different method for determining the baseline than domestic refiners. Foreign refiners were assigned a statutory baseline based on the industry's average, which effectively set a more rigorous standard for imported

[15] The WTO came into being on January 1, 1995. The Appellate Body Report in Gasoline was published on February 16, 1996.

gasoline produced by foreign refiners. This differentiated baseline establishment rules were challenged by Venezuela and Brazil on claims that they breached the most-favorable-nations and national treatment obligations under the GATT.[16] The U.S. argued that the differentiated method was permissible under public policy exceptions contained in GATT Article XX(b), Article XX(d) and Article XX(g). The Panel rejected all of the GATT Article XX exceptions claims, holding that the challenged measures did not fall within the terms of the GATT Article XX exceptions.

Appealed to the Appellate Body was the Panel's finding that the baseline establishment methods in the Gasoline Rule could not be justified under Article XX(g). The Appellate Body concluded that the baseline establishment rules fell within the terms of Article XX(g) but were nevertheless not justifiable restrictions on trade under Article XX(g) because they failed to meet the requirement of the chapeau of Article XX of the GATT.[17]

B. The Appellate Body's Interpretation

The Appellate Body first explicitly affirmed that it was going to apply the interpretive rules codified in Article 31(1) of the VCLT. Article 3(2) of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU) directs the Appellate Body to apply "customary rules of interpretation of public international law" in interpreting the provisions of the GATT and other covered agreements of the Marrakesh Agreement.[18] In the *Gasoline* decision, the Appellate Body for the first

[16] The Complaints also raised the claim that the Gasoline Rule violated obligations under the TBT.
[17] Appellate Body Report, page 29.
[18] DSU Article 3.2.

time stated that the VCLT rules had attained the status of customary or general international law and thus governed the Appellate Body's interpretation. The Appellate Body also proclaimed that the GATT "is not to be read in clinical isolation from public international law,"[19] a statement that has become a much-recited quote in future Appellate Body's jurisprudence.[20]

Having affirmed that Article 31(1) of the VCLT was to govern its interpretation, the Appellate Body turned to examine the Panel Report's analysis on the meaning of the term "relating to" as used in Article XX(g). The Panel Report concluded that the baseline establishments methods were not "primarily aimed at the conservation"[21] of clean air and thus fell outside the scope of Article XX(g). Appellate Body drew on the element of "ordinary meaning" under Article 31(1) of the VCLT and found that the Panel Report failed to take account of the different wording used in Article XX.[22] In particular, the Appellate Body noted that Article XX(b) used "necessary" while Article XX(g) used "relating to",[23] the difference of which indicated that the WTO members intended to require different kind or degree of connection between the measure under appraisal and the public policy sought to be realized.[24] The Appellate Body reasoned that the phrase "primarily aimed at" was not included in Article XX(g) and thus should not be used as the "litmus test"[25] for delimiting the scope of Article XX(g).

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[19] Appellate Body Report, WT/DS2/AB/R, page 17.
[20] Anja Lindroos & Michael Mehling, *Dispelling the Chimera of 'Self-Contained Regimes' International Law and the WTO*, 16 EUR J INT LAW 857, 875 (2005).
[21] Panel Report, para. 6.40.
[22] Appellate Body Report, WT/DS2/AB/R, page 17.
[23] *Id.* page 17.
[24] *Id.* page 18.
[25] *Id.* page 19.

There was a "substantial relationship" between the challenged baseline establishment rules and the goal of conservation of clean air for the purpose of Article XX(g), held the Appellate Body, which ensured that the baseline establishment rules fell within the terms of Article XX(g).[26]

Having concluded that the challenged measure fell within the terms of Article XX(g), the Appellate Body turned to the two-tiered analysis of Article XX.[27] In examining the chapeau, the Appellate Body looked at the ordinary mean ("its express terms")[28] and the object and purpose of the chapeau ("prevention of abuse of the exceptions")[29] derived from the preparatory work of Article XX.[30] The Appellate Body concluded that the chapeau of Article XX is mainly concerned with the manner in which the disputed measure is applied rather than the substance of the measure. The Appellate Body then invoked the principle of effectiveness in concluding that Article XX and Article III:4 applied different standards. It reasoned that were Article III:4 and the general exception Article XX to apply the same standards in determining breach, it would "empty the chapeau of its contents and to deprive the exceptions in paragraphs (a) to (j) of meaning."[31]

C. Assessing the Interpretive Arguments

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[26] *Ibid.*
[27] "The analysis is…two-tiered: first, provisional justification by reason of characterization of the measure under XX(g); second, further appraisal of the same measure under the introductory clauses of Article XX." See Appellate Body Report, WT/DS2/AB/R, Page 22.
[28] *Id.* Page 22.
[29] *Ibid.*
[30] *Ibid.*
[31] Appellate Body Report, WT/DS2/AB/R, Page 23.

In its debut adjudication on environmental disputes, the Appellate Body showed deference to member states' environmental regulation by adopting a less restrictive interpretation of the term "relating to" under Article XX(g) of the GATT. The Appellate Body arrived at this deferential interpretation by focusing on the textual differentiation between the subparagraphs of Article XX. The Appellate Body's emphasis on the different wording anticipated its textualist style in adjudicating future cases. For the Appellate Body, different wording implies different intent. This assumption, however, overlooks the treaty negotiation reality that the final version of the treaty text may be "a last-minute 'cut and paste' without the time or political will that is typically available at the domestic level for attention to internal linguistic consistency."[32] Differences in wording do not necessarily imply differences in intent but imperfect drafting techniques.

Overall, the Appellate Body followed the "single combined operation" approach in interpreting the public exception clause of Article XX(g) in its first environmental case. Compared to its interpretive arguments in future environmental cases, the application of the VCLT rule in *Gasoline* was rudimentary. For instance, in its contextual analysis of Article XX(g), the Appellate Body correctly held that the context of Article XX(g) includes provisions of the rest of the GATT,[33] but made no mention to any immediate contexts. Under the VCLT rule, context refers to not only other provisions of the treaty, but also immediate qualifier of the ordinary meaning

[32] Jeffrey Waincymer, *Reformulated Gasoline Under Reformulated WTO Dispute Settlement Procedures: Pulling Pandora Out of a Chapeau?*, 18 MICH. J. INT'L L. 141, 168 (1996).
[33] Appellate Body Report, WT/DS2/AB/R, Page 18.

of terms, the rest of the provision in which the term at issue is situated, the whole text of the treaty including the preamble and any annexes, the agreements and instruments identified in Article 31(2), footnotes, interpretive notes, and any other instruments attached to the treaty. The absence of discussion of the immediate context stood in stark contrast with its frequent usage of *a contrario* argument in future cases which compares the terms at issue in their immediate context. The Appellate Body's analysis of the broader context was minimal but forceful: it took note of the tension between Article XX(g) and Article III:4 and concluded that neither was to trump the other one. The Appellate Body did not elaborate on the "object and purpose" of the Article XX(g) or the GATT in its entirety.

The Appellate Body in *Gasoline* made frequent reference to decisions by other international courts and scholarly writings to help determine the rules of interpretation[34] and to interpret the GATT Article XX.[35] Judicial decisions and scholarly writings are not expressly provided in the VCLT as "supplementary means of interpretation." Notably, the reference was quite unusual for the Appellate Body rarely referred to academic writings in interpreting the WTO agreements in future cases.[36]

The much-recited passage which stated that "the General Agreement is not to be read in clinical isolation from public international law" has been widely used in future cases to emphasize that interpretation of the WTO agreements should not be

[34] *Id.* Page 17.
[35] *Id.* Page 23.
[36] ISABELLE VAN DAMME, TREATY INTERPRETATION BY THE WTO APPELLATE BODY 268 (2009).

divorced from general international law. While this holistic approach is required under the VCLT, reference to this passage to bolster pro-environment argument is a misrepresentation of the Appellate Body's original meaning. The statement should be read in its textual context that the GATT was to be interpreted according to the "customary rules of interpretation of public international law."[37] Here, public international law referred to the rules on interpretation, not rules embodied in non-WTO agreements under the VCLT Article 31(3)(c). As future WTO decisions illustrated, the Appellate Body has yet become highly receptive to considering international environmental agreements' relevance to interpreting the WTO agreements.

3. US-Shrimp/Turtle (1998)

Shrimp/Turtle is a landmark case in the WTO's history on trade and environment. The decision was issued at a time when the WTO Committee on Trade and Environment was stuck in deadlock, and was immediately applauded as a victory for the environment.[38] Similar measures were previously challenged in the infamous *Tuna-Dolphin* cases, in which the pre-WTO GATT Panel in the *Tuna-Dolphin* struck down the import ban as a breach of the GATT obligations. In contrast, the newly founded Appellate Body's ruling in *Shrimp/Turtle* was a lot more sympathetic to the

[37] Appellate Body Report, WT/DS2/AB/R, Page 17.
[38] The Appellate Body's decision in US-Shrimp/Turtle has been described to bring about a "sea change" in the jurisprudence on trade and environment. See Aaron Cosbey & Petros C. Mavroidis, *Heavy Fuel: Trade and Environment in the GATT/WTO Case Law*, 23 REVIEW OF EUROPEAN, COMPARATIVE & INTERNATIONAL ENVIRONMENTAL LAW 288, 294 (2014).

environmental values. The Appellate Body's legal analysis in *Shrimp/Turtle* and its implications for the WTO jurisprudence on trade and environment have received extensive analysis, the review of which is beyond the scope of the present analysis. This section instead chooses to focus on the Appellate Body's interpretive arguments to shed lights on how the Appellate Body arrived at this groundbreaking pro-environment ruling.

A. Facts and Proceedings

Essentially, the *Shrimp/Turtle* case was about the legality of extending the U.S. domestic environmental regulation to foreign jurisdictions through import bans. Under the Endangered Species Act, U.S. domestic shrimp trawlers are required to install turtle excluder devices (TEDs) when fishing in waters where there is a significant likelihood of encountering endangered sea turtles.[39] Under the pressure of domestic shrimp trawlers and environmental groups, Congress in 1989 passed legislation (section 609) which instructed the executive branch to initiate negotiations with foreign governments to (1) develop international agreements for the protection of the endangered sea turtles, and to (2) ban the import of shrimp and shrimp products harvested without TEDs.[40] The import ban was initially applied to the Greater Caribbean area only. The limited applicability was successfully challenged

[39] Four turtle species are concerned: the leatherback, the green, the hawksbill and the olive ridley. They are listed as "endangered" under the Convention on International Trade of Endangered Species of Wild Flora and Fauna ("CITES"), to which the United States is a member state. The US Fish and Wildlife Service is in charge of implementing the CITES in the U.S.

[40] Gregory Shaffer, *Case Report: United States—Import Prohibition of Certain Shrimp and Shrimp Products*, 93 AMERICAN JOURNAL OF INTERNATIONAL LAW 507 (1999).

by environmental groups at the U.S. Court of International Trade (CIT), which ruled that the ban was to be expanded to all countries. On the day the CIT decision was rendered,[41] India, Malaysia, Pakistan and Thailand filed complaints to the Dispute Settlement Body of WTO, arguing that the import ban (1) violated the prohibition of quantitative restrictions under Article XI of GATT (1994), and (2) were not permitted under the exceptions set forth in Article XX of GATT (1994). The United States did not contest whether its ban violated GATT Article XI. Rather, the United States maintained that the ban could be excused under the exceptions set forth in paragraphs (b) and (g) of GATT Article XX.[42]

B. The Appellate Body's Interpretation

In appraising the legality of the import ban under Article XX of the GATT, the Appellate Body reaffirmed the sequence of the two-tiered Article XX analysis set out in the *Gasoline* Report. Investigation into whether the measures could be provisionally justified under the subparagraphs of Article XX (the design) should precede investigation under the chapeau (the application).[43] The sequence of interpreting Article XX is not a trivial technical issue that makes no substantial difference.[44] A reversed sequence in interpretation, as adopted by the Panel, could risk constructing "an *a priori* test that purports to define a category of measures

[41] Robert Howse, *The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate Symposium: Trade, Sustainability and Global Governance*, 27 COLUM. J. ENVTL. L. 491, 497 (2002).
[42] The U.S. invoked Article XX(b) only if and to the extent that the challenged measure was found to fall outside the scope of Article XX(g). This litigation tactic will be analyzed further.
[43] Appellate Body Reports, WT/DS58/AB/R, para. 149.
[44] Panel Report, para 7.28.

which, *ratione materiae*, fall outside the justifying protection of Article XX's chapeau."[45]

The Appellate Body relied on a number of interpretive arguments to endorse the sequence set out in *Gasoline*. First, it reiterated that interpretation should be guided by the "customary rules of interpretation of public international law" that "[a] treaty interpreter must begin with, and focus upon, the text of the particular provision to be interpreted."[46] As the chapeau of Article XX expressly speaks of the "manner" in which the disputed measures are "applied," the Appellate Body reasoned, the analysis under the chapeau should not address the design of the measure.[47] The Appellate Body then turned to the object and purpose of the chapeau of Article XX, which was determined to be the prevention of "abuse of the exceptions of [Article XX]."[48] The Appellate Body also invoked the principle of effectiveness, reasoning that the reversed sequence may render a measure *a priori* incapable of justification under Article XX, thus making the exceptions of Article XX inutile.[49]

Having decided on the sequence of analysis, the Appellate Body clarified how to interpret the constitutive elements of Article XX(g). Article XX(g) was to be interpreted in terms of three elements: (1) whether the measure concerns exhaustible natural resources; (2) whether the measure relates to the conservation of those exhaustible natural resources; and (3) whether the measure is made in conjunction

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[45] Appellate Body Reports, WT/DS58/AB/R, para. 121.
[46] *Id.* para. 114.
[47] *Id.* WT/DS58/AB/R, para. 115.
[48] *Id.*, para. 116, quoting the AB's Report in Gasoline at Appellate Body Reports, WT/DS2/AB/R, page 22.
[49] *Id.* para. 121.

with the restrictions on domestic production or the consumption of the exhaustible natural resources. "Exhaustible natural resources" within the meaning of Article XX(g) was constructed broadly to include both living and non-living resources, as there was textual basis for doing so under Article XX(g).[50] Taking note of the terms "sustainable development" and "to protect and preserve the environment" in the Preamble of the WTO Agreement, the Appellate Body then argued that the term "natural resources" under Article XX(g) was not "static"[51] notion but had evolved over time to include both living and non-living resources as reflected in other international treaties.[52] The Appellate Body cited ICJ decisions and leading scholarly works to endorse this evolutionary approach to interpretation. On the "relating to" element, the Appellate Body held that the focus should be on the general structure and design[53] of the measure, a more flexible test than the "necessary" test used by the Tuna-Dolphin panels. The Appellate Body found the design of the import ban on shrimp to be provisionally justifiable under Article XX(g).

The Appellate Body's chapeau interpretation faithfully follows the "single combined operation" approach under the VCLT. The Appellate Body first reiterated that the interpretation started with the examination of the ordinary meaning of the terms,[54] and held that analysis under the chapeau used different standards than

[50] *Id.* para. 128. "Textually, Article XX(g) is *not* limited to the conservation of 'mineral' or 'non-living' natural resources." (emphasis originally added by the AB)
[51] *Id.* para. 130.
[52] *Id.* para. 130.
[53] *Id.* para. 137.
[54] *Id.* para. 150.

those used under GATT Article XX(g).[55] It then turned to the object and purpose of the introductory clause and followed the *Gasoline* interpretation that the object and purpose was to prevent abuse of the exceptions.[56] In examining the preamble of the entire treaty of GATT, the Appellate Body found no reference of environment. It then turned to the object and purpose of the Marrakesh Agreement Establishing the WTO to which the GATT 1994 is annexed to and found express reference to sustainable development in its Preamble.[57] The Appellate Body reasoned that:

> As this preambular language reflects the intentions of negotiators of the WTO Agreement, we believe it must add colour, texture and shading to our interpretation of the agreement annexed to the WTO Agreement, in this case, the GATT 1994.[58]

This contextual analysis was followed by analysis on the WTO Committee on Trade and Environment after the GATT negotiation.[59] The Appellate Body did not categorize this analysis under the VCLT rules. It may be properly listed under the "subsequent practice" category under Article 31(3) of the VCLT.

Based on the above analysis, the Appellate Body interpreted the two-tiered analysis under Article XX to be a balance between the right to invoke a public policy

[55] *Id.* para. 150.
[56] *Id.* para. 150.
[57] *Id.* para. 153.
[58] *Id.* para. 153.
[59] *Id.* paras. 153-155.

exception under Article XX and the obligation to respect the substantive rights of the other Members under the GATT.[60] This balance, according to the Appellate Body, tilts towards the free trade obligation. In reaching this conclusion, the Appellate Body first made recourse to the negotiating history of Article XX to confirm this construction.[61] It then invoked the principle of good faith as an interpretive rule under the VCLT Article 31(3)(c) to show that exceptions under Article XX are limited and conditional.[62] In conclusion, the Appellate Body found that the analysis under the chapeau include both substantive and procedural requirements for the application of the dispute measure.[63] In applying these requirements, the Appellate Body found that the U.S. measures treated the Asian complaints differently than its trading partners in the western hemisphere. It therefore held that the import ban constituted "unjustifiable discrimination"[64] and "arbitrary discrimination"[65] within the meaning of the chapeau of Article XX. The U.S. measure was therefore not justified under Article XX of the GATT 1994.

C. Assessing the Interpretive Arguments

Even though the Appellate Body struck down the application of the import ban under the chapeau analysis, its legal reasoning in *Shrimp/Turtle* was commended to "open new vistas of interpretation of the GATT rules" and marked a fundamental departure

[60] *Id.* para. 156.
[61] *Id.* para. 157. The preparatory work of Article XX showed that the chapeau was initially drafted as unqualified and unconditional but later revised to the current wording.
[62] *Id.* para. 158. Footnote 157.
[63] *Id.* para. 160.
[64] *Id.* para. 176.
[65] *Id.* para. 184.

from how environmental disputes were adjudicated in the pre-WTO time as exemplified in the *Tuna-Dolphin* case.[66] It completed the reformed interpretation of GATT Article XX(g) that the Appellate Body began in the *Gasoline* case. Compared with its interpretive work in *Gasoline*, the interpretive process in *Turtle/Shrimp* was carried out at a much higher level of sophistication and employed a much broader scope of interpretive means codified under the VCLT. To recap, the Appellate Body in interpreting Article XX(g) and its chapeau examined the ordinary meaning of the treaty text, its immediate context, the broad context including the GATT's Preamble and the Marrakesh Agreement's Preamble, the object and purpose of specific provision, the object and purpose of the whole treaty, subsequent practice and preparatory works.

The Appellate Body's interpretive approach in *Shrimp/Turtle* had been lauded as environmentally responsible. The Appellate Body skillfully employed a multitude of interpretive means under the VCLT to arrive at an environmentally-conscious decision. This tactic was first illustrated in its reasoning on the sequence of interpreting Article XX, where the Appellate Body turned to the chapeau's text, object and purpose (under the VCLT Art 31(1)) and the principle of effectiveness (under the VCLT Art 31(3)). The reverse sequence, as proposed in the Panel's decision, could have created a *per se* exclusion for unilateral environmental measures and procedurally denied the legitimacy of any trade-related environmental regulation. Another telling example was how the Appellate Body differentiated analysis under

[66] Howse, *supra* note 41, at 494.

the GATT Article XX(g) and its chapeau. Here, the Appellate Body focused on the textual difference (under the VCLT Art 31(1)) between the subparagraph and the chapeau, holding that the former concerned the design and the latter concerned the application. The "separation-of-responsibility" approach made it possible to uphold the legitimacy of the design of a trade related environmental regulation and disapprove its application simultaneously. Such an approach essentially confirmed that WTO Member States enjoyed an inherent right to impose trade-restrictive environmental regulation.[67]

The highlight in the Appellate Body's decision was how the Appellate Body interpreted the "exhaustible natural resources" under GATT Article XX(g). Recalling that Article XX(b) provides exceptions for trade-restrictive measures "*necessary* to protect human, animal or plant life or health,"[68] while Article XX(g) provides exceptions for trade-restrictive measures "*relating to* the conservation of exhaustible natural resources."[69] Since the "necessary test" under Article XX(b) uses a stricter standard than the "relating to" test under Article XX(g), it was not surprising for the U.S. to invoke the less onerous Article XX(g) exception as the primary defense. The Appellate Body relied on a number of interpretive means to arrive at a broad construction of the term "exhaustible natural resources" so that endangered wildlife could be covered under Article XX(g). The Appellate Body first zoomed in on the text of Article XX(g), holding that the text itself was not limited to the conservation of

[67] Howard F. Chang, *Environmental Trade Measures, the Shrimp-Turtle Rulings, and the Ordinary Meaning of the Text of the GATT*, 8 CHAP. L. REV. 25, 50 (2005).
[68] GATT Article XX(b), emphasis added.
[69] GATT Article XX(g), emphasis added.

"mineral" or "non-living" natural resources.[70] It then reasoned that Article XX(g) was to be interpreted "in the light of contemporary concerns of the community of nations about the protection and conservation of the environment."[71] Under this evolutionary interpretive approach, the Appellate Body set aside the absence of "sustainable development" or any mentioning of environmental protection in the Preamble of the GATT Agreement, but anchored its pro-environment interpretation to the broader context of the Marrakesh Agreement which Preamble explicitly referred to "sustainable development." It also invoked a number of international environmental agreements that used a broad scope of "natural resources" to inform its interpretation of "exhaustible natural resources." All these interpretive means could be validated under the VCLT.[72]

In summary, the Appellate Body employed a number of interpretive arguments to arrive at an interpretation that afforded elevated regulatory space to trade-related environmental regulations. This approach defied any efforts to categorize it as predominantly textualist, intentionalist, or evolutionary. It was a concerted effort among these schools of interpretation which reinforced each other under the mandate of the VCLT. Through the joint interpretive arguments, the Appellate Body made its first landmark decision on the dispute of trade and environment.

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[70] Appellate Body Reports, WT/DS58/AB/R, para. 128.
[71] *Id.* para. 129.
[72] The Appellate Body's exclusive focus on Article XX(g) lied within its discretion and inevitably invited criticism. It has been suggested that the Appellate Body should have also investigated into the Article XX(b) claim because its exclusive focus on Article XX(g) rendered Article XX(b) virtually insignificant and was inconsistent with the principle of effectiveness in interpretation. This issue was raised by the Joint Appellees at the Oral Hearing but did not receive due attention from the Appellate Body. See A. E. Appleton, *Shrimp/Turtle: Untangling the Nets*, 2 J INT ECONOMIC LAW 477, 482-483(1999).

4. EC-Asbestos (2001)

Before the catastrophic health effects of asbestos became known in the late 20th century, asbestos had been extensively used in industrial applications, in particular in mining and construction materials such as roofing, thermal insulation, cement pipes, etc.[73] It is now an undisputed scientific consensus that exposure to asbestos causes lung cancer, mesothelioma, cancer of the larynx and ovary, and fibrosis of the lungs.[74] The general public are also well informed of asbestos' carcinogenicity. Faced with fierce public opposition to asbestos, governments in Western Europe and the US decided to stop producing or importing asbestos.[75]

A. Facts and Proceedings

In 1996, the French Government issued a decree[76] banning the production, sale, and import of asbestos and products containing asbestos on the grounds of serious health risks associated with asbestos. Article 2 of the Decree set out a temporary exception to the import ban for certain products containing asbestos fibers if no less harmful substitutes were available.

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[73] The World Health Organization International Association of Research on Cancer, 2012 Monograph on Chrysotile, Amosite, Crocidolite, Tremolite, Actimolite and Anthophyllite, 219-294, page 221. http://monographs.iarc.fr/ENG/Monographs/vol100C/mono100C-11.pdf

[74] See WHO International Programme on Chemical Safety http://www.who.int/ipcs/assessment/public_health/asbestos/en/ The WHO

[75] Mary Footer & Saman Zia-Zarifi, *European Communities-measures Affecting Asbestos and Asbestos-containing Products: The World Trade Organization on Trial for Its Handling of Occupational Health and Safety Issues*, 3 MELBOURNE JOURNAL OF INTERNATIONAL LAW 120 (2002).

[76] décret no. 96-1133 relatif à l'interdiction de l'amiante, pris en application du code de travail et du code de la consummation, WTO Appellate Body Report, WT/DS135/AB/R, para 1.

Canada, a long-time exporter of asbestos, brought the French import ban on asbestos before the WTO Dispute Settlement Body. In its complaint, Canada did not contest the overall toxicity of asbestos, but focused on the exemptions under Article 2 of the Decree. In particular, Canada argued that the substitute for the banned chrysotile asbestos, the polyvinyl alcohol ("PVA"), cellulose and glass fibers (PVA, cellulose and glass fibers collectively referred to as "PCG fibers"), were not necessarily less risky than the banned asbestos fibers.[77] The ban also overlooked that "controlled use" of chrysotile asbestos fibers could have achieved the French government's goal of protecting human health with less restrictive impacts on trade.[78] Canada contended that the import ban was protectionist in intent and would not pass the necessity test of the GATT Article XX(b) since a less trade-restrictive alternative could have been used. Canada raised a number of claims against the import ban including infringement of the technical regulation provisions under the Agreement on Technical Barriers to Trade ("TBT Agreement") and inconsistency with EC's trade obligations under GATT Article XI and Article XXIII:1 (b). At the center of Canada's arguments were the claims that (1) the import ban was protectionist in intent and violated the principle of non-discrimination under Article III:4 of the GATT; and (2) the ban failed the "necessity" test under the GATT Article XX(b).

In its appeal to the Appellate Body, the European Community (EC), on behalf of the French government, requested the Appellate Body to reverse the Panel's findings that chrysotile asbestos fibers and their substitute PCG fibers were "like

[77] Appellate Body Report, WT/DS135/AB/R, para.21.
[78] *Id.* para.17.

products" for the purpose of Article III:4.[79] The Panel reasoned that regulatory purposes such as safety and health were *only* relevant to analysis under the GATT Article XX but irrelevant to analysis under Article III:4.[80] The EC argued that the Panel's likeness analysis "entails a serious curtailment of national regulatory autonomy"[81] in that it was exclusively based on commercial competitiveness and ignored health and safety concerns.[82] If chrysotile asbestos fibers were not "like" PVA, cellulose and glass fibers, there was no violation of Article III:4 to begin with.

The Appellate Body's decision was issued shortly after the adoption of the Declaration on the TRIPS Agreement and Public Health at the Doha WTO Ministerial Conference. The Declaration upheld member states' regulatory space in public health issues by affirming the right of WTO member states to ensure access to essential medicines in the interests of public health protection.

B. The Appellate Body's Interpretation

The Appellate Body's ruling in *EC-Asbestos* hinges on the "likeness" analysis[83] under GATT Article III:4,[84] which reads, in relevant part:

> The products of the territory of any Member imported into the territory of any other Member shall be accorded treatment <u>*no less favourable*</u> than that

[79] *Id.* para.30.
[80] *Id.* para.34. (emphasis original).
[81] *Id.* para.34.
[82] *Id.* para.34.
[83] Henrik Horn & Joseph H. H. Weiler, *EC–Asbestos European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, 3 WORLD TRADE REVIEW 129–151 (2004).
[84] Another important aspect of the Appellate Body's ruling concerned admissibility of unsolicited amicus curiae briefs other than WTO members, which is not discussed in the present paper due to limited space.

accorded to *like products* of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. ... (emphasis added)

The term "like products" is a key concept in a number of articles under the GATT and other WTO agreements such as the Agreement on Subsidies and Countervailing Measures ("SCM Agreement") and the Anti-dumping Agreement.[85] Particularly relevant to the Appellate Body's interpretation of "like products" under Article III:4 is the interpretation of the same term under the neighbor provision Article III:2, which reads:

The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to *like domestic products*. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1. (emphasis added)

Here, "the principles set forth in paragraph 1" refers to Article III:1, which reads:

[85] Appellate Body Report, WT/DS135/AB/R, para.88.

> The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products *so as to afford protection* to domestic production. (emphasis added)

The Appellate Body first turned to the dictionary to establish the ordinary meaning of the word "like" in Article III:4,[86] which the Appellate Body determined to suggest that "like" products were products that share a number of identical or similar characteristics or qualities. This dictionary meaning, nevertheless, still left many interpretive questions unresolved.[87] For instance, it was not provided in the definition as to which characteristics or qualities should be included in assessing the likeness.[88] Nor was it indicated in the dictionary definition that from whose perspective should the likeness be judged.[89] Taking note of the undetermined meaning of "likeness" under the dictionary approach, the Appellate Body turned to Article III:1 and Article III:2 as the relevant context of Article III:4.

[86] *Id.* para.90.
[87] *Id.* para.92.
[88] *Id.* para.92.
[89] *Id.*, para.92.

The Appellate Body's contextual analysis on Article III:2 was grounded in the textual difference between the two provisions. The Appellate Body followed its decision in *Japan-Alcoholic Beverages*[90] and interpreted Article III:2 to contain two distinct obligations: the first concerned obligations with respect to "like products"; the second concerned obligations with respect to "directly competitive or substitutable" products.[91] Products may not be like products but are still directly competitive or substitutable with each other. In contrast, Article III:4 applies to "like products" only.[92] The textual difference led the Appellate Body to conclude that the scope of "like" under Article III:4 was broader than the scope of "like" under Article III:2.

The Appellate Body then reasoned that how obligations under Article III:4 were to be interpreted should be informed by the "general principle" of Article III set forth in Article III:1.[93] In determining the content of the "general principle", the Appellate Body referred to the precedence in *Japan-Alcoholic Beverages* which held that the fundamental purpose of Article III was to "ensure that internal measures not to be applied to imported and domestic products so as to afford protection to domestic production." [94] This anti-protectionism objective must inform the interpretation of "like products" under Article III:4, the Appellate Body reasoned. To

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[90] *Id.* para.95. The Appellate Body's reading of Article III:2 was derived from the Interpretive Note to Article III:2 GATT, which reads that:

> A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, *a directly competitive or substitutable product* which was not similarly taxed. (emphasis added)

[91] *Id.* para.94.
[92] *Id.* at para.94.
[93] *Id.* at para.92.
[94] *Id.* at para.97.

establish inconsistency with Article III:4, the challenged measure must address imported and domestic products that are in a competitive relationship. [95] The Appellate Body's interpretation of "like products" under Article III:4 thus added a layer of requirement of making inquiries into the competitive relationship between groups of products, even though the text of Article III:4 does not provide so.

It was through this subtle roundabout interpretation that the Appellate Body made the critical finding that the chrysotile asbestos and PCG fibers were not "like products" within the meaning of Article III:4 and no inconsistency with Article III:4 could be established.[96] The Appellate Body again referred to its prior decision in *Japan-Alcoholic Beverages,* citing the GATT Working Party Report on Border Tax Adjustments for the criteria:[97] the physical properties, the end-uses of the product, the consumers' perceptions, and tariff classification. The Appellate Body determined that health risks and toxicity constituted the defining aspect of the physical properties of chrysotile asbestos fibers [98] and played an essential role in the consumers' perceptions.[99] Based on this distinguishing feature, the Appellate Body reasoned that the chrysotile asbestos and PCG fibers were not "like products."

Since no violation was established under Article III:4, the Appellate Body could have applied the principle of judicial economy and concluded the case. However, it proceeded to elaborate on analysis under Article XX(b). It confirmed its jurisprudence

[95] *Id.* at para.99.
[96] *Id.* at para.126.
[97] *Id.* at para.101.
[98] *Id.* at para.114.
[99] *Id.* at para.122.

that Article XX(b) does not require quantification of health risks.[100] It further declared that WTO members "have the right to determine the level of protection of health that they consider appropriate in a given situation."[101] Except for the reference to case law under the WTO which categorization as supplementary means is still questionable, Appellate Body's legal analysis of Article XX(b) did not invoke any codified interpretive means under the VCLT.

C. Assessing the Interpretive Arguments

The Appellate Body's decision in *EC-Asbestos* was an important juncture in the development of the WTO's jurisprudence on trade and environment. Few would question the material outcome of the case, partly due to the widely-known toxicity of asbestos.[102] What was at stake was the interpretation on the ambit of national treatment as it applied to regulation.[103] Appellate Body showed considerable deference to member states' regulatory space in its interpretation. Not only did it break new grounds in distinguishing "like products" on the basis of their carcinogenicity,[104] it also upheld member states' right to determine the level of risk and their choice of the appropriate regulation in addressing such risks.[105] The ruling arrived at a time when the WTO was facing fierce criticism on its pro-trade stance

[100] *Id.* at para.167.
[101] *Id.* at para.168.
[102] It was suggested that Canada could not have believed that the WTO DSB would overturn the asbestos ban but still decided to bring the case to the WTO for domestic politics reasons. Horn and Weiler, *supra* note 83.
[103] *Id.* 131.
[104] David A. Wirth, *European Communities—Measures Affecting Asbestos and Asbestos-Containing Products*, 96 AMERICAN JOURNAL OF INTERNATIONAL LAW 435, 438 (2002).
[105] Footer and Zia-Zarifi, *supra* note 75.

and could well be seen as an effort to redress the imbalance between trade and environment.[106]

In arriving at this environmentally responsible decision, the Appellate Body engaged in a convoluted process of legal analysis that featured limited use of interpretive rules. Its textual analysis of the term "like" under Article III:4 started with a basic inquiry into its dictionary meaning, which was immediately determined to be of little use to the clarification of the term's meaning. This was followed by a lengthy contextual analysis of Article III:1 and Article III:2 that was built on the textual differences among provisions. The interpretation was heavily reliant on the Appellate Body's past rulings on "like product" and did not attempt to look into the object and purpose of the Marrakesh Agreement or consulted any relevant international environmental agreements as it did in *Shrimp/Turtle*. Paradoxically, the fixation on market competitiveness broadened the scope of likeness and introduced health risks into the evaluation formula. This roundabout approach did not explicitly include regulatory purpose into its analysis of Article III:4.[107] Instead, it used the agent of health risks as perceived in the marketplace to draw its pro-environment conclusion.[108] This reasoning was not without problems. Due to the unusually grave health risks of asbestos and consequential wide-spread adverse public opinion, the competitiveness approach in *EC-Asbestos* almost guaranteed a pro-regulation ruling. If the challenged regulatory measure had been concerned with

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[106] Ibid.
[107] Donald H Regan, *Regulatory Purpose and "Like Products" in Article III:4 of the GATT (With Additional Remarks on Article II:2)*, JOURNAL OF WORLD TRADE 37 (2007).
[108] Horn and Weiler, *supra* note 83, at 148.

environmental or health risks that were of a less grave nature of which the consumers were not well-informed, it could have been a lot more difficult to find no "like products". Unless regulatory purpose is explicitly included in the likeness analysis, this non-definitive[109] approach leaves too much uncertainties for the scope of state's regulatory autonomy.

5. Brazil - Measures Affecting Imports of Retreaded Tyres (2007)

At the end of their life cycle, tyres become hazardous waste. Used tyres are highly resistant to biodegradation and photochemical decomposition. Recycling of used tyres are also exceedingly difficult due to their complex structure and diverse composition.[110] Inappropriately stockpiled waste tyres pose grave environmental and public health risks such as toxic emissions from tyre fires and the transmission of dengue, yellow fever and malaria through mosquitos which use tyre dumps as breeding grounds.[111] Governments around the world grapple with the challenge of managing used tyres and have come up with a multitude of measures. For example, some of the EU countries passed restrictive laws and regulations such as extended user responsibility that legally obligates producers and importers of tyres to collect and ensure recovery and recycling of the tyres.[112] However, due to differences in the

[109] *Id.* at 130.
[110] Maciej Sienkiewicz et al., *Progress in used tyres management in the European Union: A review*, 32 WASTE MANAGEMENT 1742–1751 (2012).
[111] Appellate Body Report on Retreaded Tyres, para. 119.
[112] id.

economy, regulatory structure and state capability, gaps inevitably remain among countries with regards to how effectively used tyres are managed.[113]

A. Facts and Proceedings

At issue in the present dispute was Brazil's import ban on retreaded tires. Retreaded tyres are used tyres that have been reconditioned for further use and usually have a shorter lifespan, which leads to a faster accumulation of waste tyres.[114] Initially, Brazil also introduced an import ban on used tyres, which was suspended after Brazilian retread manufactures obtained a domestic court injunction order against it.[115] In short, Brazil allowed the import of used tyres from any country but banned the import of retreaded tyres other than those from the MERCOSUR (Southern Common Market) countries.[116]

The European Communities, a net exporter of used tyres, suffered major decline in the exports of retreaded tyres after Brazil imposed the ban [117] and challenged the ban at the WTO Dispute Settlement Body. Before the Panel, the European Communities claimed that the Import Ban on retreaded tyres violated the GATT Article XI:1 prohibition on quantitative restrictions of imports. The European Communities also claimed that the ban was not intended to protect the environment

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[113] For example, Italy and Romania differ from each other in the treatment and disposal of used tyres. See Vincenzo Torretta et al., *Treatment and Disposal of Tyres: Two EU Approaches. A review*, 45 WASTE MANAGEMENT 152–160 (2015).
[114] AB Report on Retreded Tyres, para. 121.
[115] It was cheaper for the Brazilian retread producers to import used tyres than to collect them domestically. Julia Qin, https://www.asil.org/insights/volume/11/issue/23/wto-panel-decision-brazil-tyres-supports-safeguarding-environmental
[116] MERCOSUR is a trade bloc comprising Argentina, Brazil, Paraguay, and Uruguay.
[117] Julia Qin, https://www.asil.org/insights/volume/11/issue/23/wto-panel-decision-brazil-tyres-supports-safeguarding-environmental

and public health but to protect Brazil's retread industry from foreign competition. Brazil did not dispute that the import ban was inconsistent with Article XI:1. Instead, Brazil cited greater environmental and public health risks of the retreaded tyres compared to new tyres, contending that the import ban was justified under Articles XX(b) the GATT 1994. As to the exception, Brazil cited a MERCOSUR arbitral tribunal's ruling that the import ban violated the MERCOSUR Agreement and claimed that the exception was justified under Article XX(d) of the GATT.

The Panel held that although the import ban on retreaded tyres violated the prohibition on quantitative restrictions under GATT Article XI:1, it was *provisionally* justified under GATT Article XX(b) as being "necessary to protect human, animal or plant life or health."[118] Turning to the MERCOSUR exception, the Panel looked at both the *intent* and the *effect* of the exception. It held that the MERCOSUR exception was inspired by Brazil's obligation to comply with the MERCOSUR Agreement and had insignificant effects on trade.[119] Therefore, the MERCOSUR exception did not amount to "arbitrary" [120] or "unjustifiable" discrimination [121] or "a disguised restriction on international trade" [122] under the chapeau of Article XX(b). With regards to the Brazilian court injunction that suspended import ban on used tyres, the Panel applied the *effect* test, holding that the injunction allowed such a large volume of imported used tyres into Brazil that it defeated the declared purpose of the

[118] Panel Report, paras. 7.215.
[119] Panel Report, paras. 7.288.
[120] Panel Report, paras. 7.281.
[121] Panel Report, paras. 7.289.
[122] Panel Report, paras. 7.355.

import ban on retreaded tyres of reducing the accumulation of waste tyres.[123] Based on this *effec*t reasoning, the Panel found the ban was applied in a manner that constituted "unjustifiable discrimination" [124] and "a disguised restriction on international trade."[125] The EC appealed the Panel's necessity analysis and the *effect* oriented reasoning under the Article XX chapeau.

B. The Appellate Body's Interpretation

(1) The Appellate Body's Necessity Analysis under Article XX(b)

The European Communities claimed that the Panel erred in finding that the import ban on retreaded tyres was necessary to achieve the stated objective of reducing accumulation of waste tyres and protecting human life and health. The European Communities maintained that assessing the contribution of the import ban to the declared goals can only be done through a quantitative analysis.[126] Furthermore, the European Communities contended that the Panel erred in holding that there were no reasonably available alternatives to the Import Ban that would have ensured the same level of protection of human life and health.[127] Two alternatives were proposed: to end the import ban on used tyres;[128] and to improve collection and disposal scheme of waste tyres under domestic environmental regulations.[129]

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[123] Panel Report, para. 7.295.
[124] Panel Report, para. 7.306.
[125] Panel Report, para. 7.355.
[126] AB Report, para. 11. "The European Communities does not see how this could have been done in any way *other than* through quantification, and stresses that this is *not* a case involving scientific uncertainty about the existence of risks." (emphasis in the original text)
[127] *Id*. at para. 15.
[128] *Id*. at para. 16.
[129] *Id*. at paras. 17-19.

The Appellate Body started its analysis by reaffirming the principle that the WTO agreements respect the policy space within which its Members can set their own environmental objectives, the level of protection, and regulate accordingly.[130] In interpreting the term "necessary" in Article XX(b), the Appellate Body first looked at both the immediate and the broad textual context, noting that the term was also included in the rest sub-provisions of Article XX of the GATT 1994, as well as in a few articles of the GATS.[131] It then reviewed the case law on the meaning of "necessary" in Article XX(d) of the GATT[132] and Article XIV of the GATS.[133] Necessity, according to the case law, was to be understood as a fluid standard[134] the determination of which involved weighing and balancing the relative importance of the measure's contribution, the stated value and its trade restrictiveness.[135] Noticeably missing in the Appellate Body's interpretation of the term "necessary" was an investigation into its ordinary meaning found in a dictionary, the means of which the Appellate Body frequently resorted to in other cases.

Having decided that "necessary" was a relative standard, the Appellate Body proceeded to elucidate its necessity test. Recognizing the latitude the Panel enjoyed in choosing the appropriate methodology for the analysis of the contribution, the Appellate Body cited its previous decision in *EC - Asbestos* and held that there is no

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[130] *Id*. at para. 140. Also see Isabella Van Damme, *III. Appellate Body Report, Brazil—Measures Affecting Imports of Retreaded Tyres, Adopted on 17 December 2007*, 57 INTERNATIONAL & COMPARATIVE LAW QUARTERLY 710–723 (2008).
[131] *Id*. at para. 141.
[132] *Id*. at paras. 141-142.
[133] *Id*. at para.143.
[134] *Id*. at para. 141, quoting the AB Report *on Korea - Various Measures on Beef*: "As used in Article XX(d), the term "necessary" refers, in our view, to a range of degrees of necessity."
[135] AB Report, paras. 142-143.

requirement under Article XX(b) to quantify the contribution.[136] To be characterized as necessary, a measure did not have to be an "indispensable."[137] Rather, its contribution to the achievement of the objective must be material, which was defined negatively as "not merely marginal or insignificant."[138] In addition, the Appellate Body also emphasized that the measure must be viewed as an element in a comprehensive regulatory scheme and did not have to induce "immediately observable" contribution on its own to be characterized as necessary.[139] Under this expansive necessity test, even the most trade-restrictive measures, such as an import ban in this case, could be justified as necessary under Article XX(b).

Turning to the European Communities' proposed alternatives to the Import Ban, the Appellate Body upheld the Panel's finding that the proposed measures to reduce waste tyres were already in place. It also upheld that the proposed landfilling, stockpiling, and waste tyre incineration carried their own risks and were not reasonably available alternatives.[140]

The Appellate Body then summarized the two-prong necessity test under Article XX(b). First, a preliminary decision is to be made taking into consideration the pursued objective, the contribution to the achievement of the objective, and the measure's trade restrictiveness. Second, the disputed measure is to be compared with possible alternatives.[141] The Appellate Body ruled that the Panel properly followed

[136] AB Report, WT/DS332/AB/R, para. 146.
[137] *Id.* paras. 150, 210.
[138] *Id.* para. 210.
[139] *Id.* para. 151.
[140] *Id.* para. 174.
[141] *Id.* para. 178.

this procedure of weighing and balancing and therefore upheld the Panel's finding that the Import Ban was provisionally justified as "necessary to protect human, animal or plant life or health" under Article XX(b). [142]

(2) The Appellate Body's Chapeau Analysis

The European Communities also appealed the Panel's interpretation and application of the chapeau of Article XX, claiming that the MERCOSUR exception was inconsistent with the chapeau. The Appellate Body started its chapeau analysis by reviewing its decisions in *US - Gasoline* and *US - Shrimp* that the determination of arbitrary and unjustifiable discrimination should focus on the cause of the discrimination. [143] Under this test, complying with the ruling issued by the MERCOSUR arbitral tribunal, although rational on its own, did not bear any relationship to the objective of the Import Ban provisionally justified under Article XX.[144] The Appellate Body further clarified that "the chapeau of Article XX deals with the manner of application of the measure at issue" [145] by referring to the chapeau's express terms[146] and its previous decisions.[147] The Appellate Body found that the Panel erred in finding that the discrimination would be characterized as unjustifiable or a disguised restriction on international trade only to the extent that

[142] *Id.* paras. 182-183, 212.
[143] *Id.* paras. 226-227.
[144] *Id.* para. 232.
[145] *Id.* para. 230.
[146] *Id.* para. 215.
[147] *Id.* para. 230.

its effect was significant.[148] The new *cause* test led the Appellate Body to uphold some of the Panel's findings, albeit for different reasons.

C. Assessing the Interpretive Arguments

The legal reasoning on "necessary" in *Brazil - Retreaded Tyres* was precedent-based[149] and featured limited recourse to the VCLT rule. Notably, the Appellate Body's interpretation on "necessary" deviated from its signature dictionary hermeneutics by skipping the dictionary inquiry. The contextual investigation was brief and served the sole purpose of incorporating the more expansive interpretation of "necessary" from case law on the same term found in other provisions. Reliance on previous decisions took center stage in the Appellate Body's legal reasoning. It was through referring to case law that the Appellate Body arrived at its standard of judicial review that mandates a weighing and balancing approach in determining whether a trade-restrictive measure is necessary within the meaning of Article XX(b). The Appellate Body's weighing and balancing formulation was not well-received among trade scholars: the formulation had been described as "extraordinarily loose" and "vague",[150] leaving member states "unsure as to what types of measures may withstand scrutiny."[151] The Appellate Body was also faulted for not engaging in careful balancing analysis as the weighing and balancing approach required.[152]

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[148] *Id.* para. 247.
[149] Chad P. Bown & Joel P. Trachtman, *Brazil – Measures Affecting Imports of Retreaded Tyres: A Balancing Act*, 8 WORLD TRADE REVIEW 85, 89 (2009).
[150] J. H. H. Weiler, *Brazil – Measures Affecting Imports of Retreaded Tyres (DS322): Prepared for the ALI Project on the Case Law of the WTO*, 8 WORLD TRADE REVIEW 137–144 (2009).
[151] Bown and Trachtman, *supra* note 149, at 89-90.
[152] *Id.* 88.

The ambiguous weighting and balancing approach in *Brazil - Retreaded Tyres* could be explained by the Appellate Body's deference to national sovereignty. Having an international court scrutinizing domestic regulations often raises eyebrows in domestic politics. Although a balancing test seems to accord too much power to the international court and intervenes too greatly in national regulatory autonomy,[153] the Appellate Body left the balancing approach sufficiently ambiguous so as to allow for regulatory flexibility for member states. Greater regulatory autonomy was achieved at the cost of legal precision and predictability. From a textualist perspective, balancing is not authorized by the text of Article XX(b) of the GATT.[154] The Appellate Body has also consistently confirmed that the WTO member states are entitled to choose for itself the level of protection. It was through establishing a nebulous balancing test that the Appellate Body upheld environmental values and deferred to the member states' regulatory autonomy.

The *Brazil - Retreaded Tyres* decision also marked a milestone in the WTO's jurisprudence on trade and environment from a developmental perspective. It was the first WTO dispute addressing a trade-restrictive environmental measure introduced by a developing country. Previous environmental disputes were either between WTO developed country members or were brought by developing country members against developed country members.[155] The Appellate Body in previous

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[153] *Id.* 119.
[154] Donald H. Regan, *The meaning of 'necessary' in GATT Article XX and GATS Article XIV: the myth of cost–benefit balancing*, 6 WORLD TRADE REVIEW 347, 366 (2007).
[155] Kevin R. Gray, *Brazil: Measures Affecting Imports of Retreaded Tyres*, 102 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 610–616 (2008).

cases such as *US - Shrimp/Turtle* ruled that countries with a higher standard of environmental protection should avoid imposing their own environmental standards on countries with limited capability to implement those standards. *Brazil - Retreaded* Tyres raised a "mirror image" of the above question.[156] The Appellate Body in *Brazil - Retreaded Tyres* highlighted Brazil's "incapacity"[157] to implement alternative environmental policies that economically and administratively more advanced countries found reasonably available. The recognition of the disparities in Members' state capacity in making and implementing environmental policies contributed to a more realistic understanding of regulatory autonomy under international law.

6. US-Tuna II (2012)

As tariffs have been substantially reduced since the signing of the GATT in 1947 and over the subsequent negotiating rounds, standards and other behind-the-border barriers to trade have moved up the agenda for the WTO Members.[158] The elevated concern over the trade effects of domestic regulatory measures culminated in the conclusion of the Agreement on Technical Barriers to Trade ("TBT Agreement") and the Agreement on the Application of Sanitary and Phytosanitary Measures ("SPS Agreement") and their inclusion in the WTO agreement package. The TBT Agreement lays out legal rules on technical regulations, standards, and conformity

[156] *Id.* at 612
[157] *Ibid.*
[158] MATSUSHITA, *supra* note 2, at 434.

assessment procedures.[159] Compared to the crowded docket on the GATT, no case had been brought to the Appellate Body under the TBT's core substantive provisions of Art 2.1 and 2.2 until 2012.[160] In 2012, the Appellate Body clarified its interpretation on these core provisions in three disputes[161] one of which, the *US - Tuna II* (Mexico), concerned the dolphin-safe labelling requirement for tuna products.

A. Facts and Proceedings

In the tropical waters of the Pacific Ocean west of Mexico and Central America (the Eastern Tropical Pacific Ocean, or "ETP"), yellowfin tuna often swim together with dolphins. This association of tuna and dolphins in the ETP has led to large number in dolphin kill as the controversial purse seine technique used to harvest tuna also traps dolphin.[162] The 1972 US Marine Mammal Protection Act prohibits taking of dolphins and effectively reduced the bycatch of dolphins by US fishermen. As the size of the US tuna fleet shrank and foreign tuna fleet increased, dolphin kill was on the rise again. The US started to require that the imported tuna to be harvested with fishing techniques of comparable dolphin mortality rates to the US and banned import of tuna caught by methods causing high dolphin mortality. As a major exporter of tuna, Mexico challenged the US embargo on yellowfin tuna harvested with methods that also killed dolphins at the pre-WTO GATT.

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[159] TBT Article 1.6.
[160] Gabrielle Marceau, *The New TBT Jurisprudence in US - Clove Cigarettes, WTO US - Tuna II, and US - Cool*, 8 ASIAN J. WTO & INT'L HEALTH L & POL'Y 1–40 (2013).
[161] The other two are *US - Clove Cigarettes* and *US - COOL*.
[162] For a general explanation of the tuna-dolphin association and purse seine technique, see https://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=228&id=1408

During the same time, the concept of dolphin-safe tuna became increasingly popular among US consumers and tuna product manufactures responded by placing dolphin-safe labels on their products. Studies show that the dolphin-safe label on tuna products alters consumer behavior and boosts their sale.[163] It has been theorized that ecolabels can raise environmental standards by helping the consumers become informed of the product characteristics or the process and production methods ("PPMs") and stimulate the consumption of environmentally friendly products.

The US passed the Dolphin Protection Consumer Information Act ("DPCIA")[164] and its implementing regulations[165] to set the conditions under which tuna products sold in the United States can qualify to use the private, voluntary dolphin-safe label. Under the DPCIA and its implementing regulations, tuna products are required to get certifications on their fishing method to qualify for dolphin-safe labels. Such certifications are subject to a finding by the US Secretary of Commerce on whether the fishing method at issue has significant adverse impact on the dolphins.[166] The US Secretary of Commerce determined that Mexico's purse seine fishery "was not having a significant adverse effect" on the dolphin stock in the ETP. This finding was overturned by the federal 9th Circuit Court in *Earth Island Institute v. Hogarth*.[167] In *US - Tuna II*, Mexico challenged the DPCIA, its implementing regulations, and

[163]Mario F. Teisl, Brian Roe & Robert L. Hicks, *Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling*, 43 JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT 339–359 (2002).
[164] United States Code, Title 16, Section 1385.
[165] United States Code of Federal Regulations, Title 50, Section 216.91 and Section 216.92
[166] DPCIA, subsection 1385(h).
[167] United States Court of Appeals for the Ninth Circuit, Earth Island Institute v. Hogarth, 494 F.3D 757 (9th Cir. 2007).

the court ruling (collectively as the "dolphin-safe labelling provision") that monitored and enforced the dolphin-safe label, contending that they were inconsistent with Article 2.1 and 2.2 of the TBT Agreement.

The Panel first held that the TBT obligation applied to the dolphin-safe labelling provisions as they were "technical regulation" within the meaning of Annex 1.1 to the TBT Agreement. It then held that the dolphin-safe labelling provisions did not violate Article 2.1 of the TBT Agreement but was inconsistent with Article 2.2 of the TBT Agreement. Appealed to the Appellate Body were the Panel's interpretation of "technical regulation" contained in Annex 1.1 to the TBT Agreement, the interpretation and application of the phrase "treatment no less favourable" in Article 2.1 of the TBT Agreement, and "legitimate objectives", "fulfill", and "necessary" in Article 2.2 of the TBT Agreement.

B. The Appellate Body's Interpretation

(1) Threshold Issue

The Appellate Body's first interpretive task was to examine whether the measure at issue was a voluntary standard or a mandatory technical regulation, as only the latter was subject to obligations under Article 2.1 and 2.2 of the TBT Agreement. The Annex 1.1 to the TBT Agreement defines the term "technical regulation" as follows:

> Document which lays down product characteristics or their related process and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with

terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. (emphasis added)

In comparison, "standard" is defined in the Annex 1.2 to the TBT Agreement as:

> Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. (emphasis added)

The Appellate Body first turned to the ordinary meaning of the major elements constituting "technical regulation" by referring to their definition found in the Shorter Oxford English Dictionary[168] and Merriam Webster's Dictionary of Law.[169] The Appellate Body then turned to the textual context of Annex 1.2 that defines "standard" for the purpose of the TBT Agreement. As labelling requirements can be categorized as both technical regulation under Annex 1.1 and as standard under Annex 1.2, the Appellate Body referred to its previous decision on the issue and reasoned that the determination "must be made in the light of the characteristics of

[168] AB Report, WT/DS135/AB/R, paras 185-186.
[169] *Id.* para.185, footnote 396.

the measure at issue and the circumstances of the case."[170] As the measure at issue did not merely stipulate the conditions for using the label but also prohibited any alternative label, the Appellate Body upheld the Panel's finding that the dolphin-safe provisions were "technical regulation" within the meaning of Annex 1.1 to the TBT Agreement.

(2) "Treatment No Less Favourable" under Article 2.1 of the TBT Agreement

After finding that the dolphin-safe provisions were "technical regulations" subject to the TBT obligations, the Appellate Body went on to examine if the measures at issue were inconsistent with Article 2.1 of the TBT Agreement, which provides that technical regulations must accord:

> "treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country."

The Appellate Body carried out a thorough investigation into the meaning of "treatment no less favourable" by employing multiple means of interpretation. To arrive at the reading that technical regulations *per se* would not constitute "less favorable treatment", the Appellate Body first turned to the text of the Article ("as such")[171] and then its decision in *US - Clove Cigarettes.*[172] The reading was also buttressed by the context of Article 2.2[173] and the sixth recital of the preamble of the

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[170] *Id.* para. 188, referring to EC - Asbestos and EC - Sardines.
[171] *Id.* para. 211, "as such".
[172] *Id.* para. 211, referring to US - Clove Cigarettes in footnote 451.
[173] *Id.* at para. 212.

TBT Agreement,[174] both of which recognize Members' right to regulate. The analysis then argued that the broader context provided by Article III:4 of the GATT 1994 that also contains the term "treatment no less favourable" could inform the term's meaning under the TBT Agreement.[175] Neither the GATT 1994 jurisprudence on this term[176] nor the Appellate Body's decision in *US - Clove Cigarettes*[177] , the Appellate Body decided, supported the claim that the detrimental impact on imports *per se* was sufficient to demonstrate "less favourable treatment". Instead, a second step of analysis was required to determine whether the detrimental impact on imports stemmed exclusively from a legitimate regulation or reflected discrimination.[178] The Appellate Body also decided that the correct order of interpretation should start with Article 2.1 of the TBT Agreement and then the Preamble of the Agreement.[179]

Having clarified the two-step test for the term "treatment no less favorable", the Appellate Body examined the Panel's factual findings and concluded that the dolphin-safe labelling provisions had detrimental effects on Mexican tuna products and were not applied in an even-handed way.[180] It found that the dolphin-safe

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[174] *Id.* at para. 212. The sixth recital of the preamble to the TBT Agreement reads that
> "Recognizing that no country should be prevented from taking measures necessary to ensure the quality of its exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate, subject to the requirement that they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade, and are otherwise in accordance with the provisions of this Agreement;"

[175] *Id.* at para. 214.
[176] *Id.* at para. 214.
[177] *Id.* at para. 215.
[178] *Id.* at para. 215.
[179] *Id.* at para. 219.
[180] *Id.* at para. 298.

labelling provisions provided less favourable treatment to Mexican tuna products and were inconsistent with Article 2.1 of the TBT Agreement.[181]

(3) Interpretation of TBT Art. 2.2

Article 2.2 further provides that:

> "technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Such legitimate objectives are, inter alia: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment." (emphasis added)

The Appellate Body first interpreted "legitimate objectives" according to their dictionary definitions.[182] It was also noted that the use of the words "inter alia" in Article 2.2 suggested that the list of legitimate objectives in Article 2.2 was not a closed one.[183] It then examined the context of the preamble of the TBT Agreement the sixth and seventh recitals of which listed several overlapping regulatory objectives.[184] It then turned to the broad context of other covered agreements among the WTO Members (warranted under the VCLT Art 31.2(a)) which objectives may inform the

[181] *Id.* at para. 299.
[182] *Id.* at para. 313.
[183] *Id.* at para. 313.
[184] *Id.* at para. 313.

analysis of what could be considered as a legitimate objective under Article 2.2 of the TBT Agreement.[185]

For the word "fulfill", the Appellate Body first acknowledged that its dictionary definition, when read in isolation, would be understood to require "complete achievement".[186] It went on to examine the immediate context of "to fulfill a legitimate objective" and reasoned that the notion of "objective" implied that "fulfill" concerned the degrees of contribution.[187] This reading found further support from the sixth recital of the preamble of the TBT Agreement which states that a Member shall not be prevented from taking legitimate regulatory measures "at the levels it considers appropriate".[188] Based on this reading, the Appellate Body struck down Mexico's appeal that the US measure could not satisfy the requirements under Article 2.2 because it was incapable of fully reducing dolphin mortality.

The Appellate Body established a three-pronged balancing test for determining whether a technical regulation is more trade restrictive than necessary:

> "(i) the degree of contribution made by the measure to the legitimate objective at issue; (ii) the trade-restrictiveness of the measure; and (iii) the nature of the risks at issue and the gravity of consequences that would arise from non-fulfilment of the objective(s) pursued by the Member through the measure."[189]

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[185] *Id.* at para. 313.
[186] *Id.* at para. 315.
[187] *Id.* at para. 315.
[188] *Id.* at para. 316.
[189] *Id.* at para. 322.

The Appellate Body did not require a "material" contribution as it did in *Retreated Tyres*. In interpreting the meaning of the term "necessary" under the TBT Article 2.2, the Appellate Body looked at the immediate context of syntax[190] and case law on "necessity" under the GATT.[191] The Appellate Body held that the Panel erred in its balancing analysis that the proposed alternative measure would have achieved the objectives to the same extent as the measure at issue.[192] Therefore, the dolphin-safe labelling provisions were found to be consistent with Article 2.2 of the TBT Agreement.

C. Assessing the Interpretive Arguments

The text of the TBT Agreement poses unique interpretive challenges for the Appellate Body in adjudicating environmental cases. On the one hand, unlike the GATT 1994 under which the WTO Appellate Body has built its jurisprudential foundation on trade and environment, the TBT Agreement does not have a separate "general exceptions" provision comparable to Article XX of the GATT. Article 2.2 of the TBT Agreement, while listing a few permissible public policy objectives, adds an obligation to Article 2.1 by prohibiting technical regulations that are "more trade-restrictive than necessary to fulfill a legitimate objective." On the other hand, the TBT Agreement also imposes national treatment and most favored nation obligation like the GATT does by including terms such as "like products" and "no less favoruable

[190] *Id.* at para. 318.
[191] *Id.* at para. 319.
[192] *Id.* at para. 330.

treatment".[193] Both the TBT Agreement and the GATT instruct the Appellate Body to examine the necessity of the measure at issue.

Despite the absence of an equivalent "general exception" provision, the Appellate Body read regulatory space into the TBT Agreement by undertaking holistic interpretation that featured "dogmatically tenable contextual and teleological interpretation."[194] The analysis started with the Appellate Body's signature recourse to the terms' dictionary definitions to be followed by inquiry into the term's immediate context and the broader context. The Appellate Body examined a multitude of elements that constitute the context of the term to be interpreted: the immediate qualifier of the ordinary meaning of terms ("legitimate" as in "legitimate objective"), the rest of the provision ("inter alia", Article 2.2 of the TBT Agreement), other agreements among the Members relating to the treaty at issue as required by the VCLT Article 31(2). Also frequently resorted to was the object and purpose of the TBT Agreement as recorded in the Preamble's sixth recital that affirms Member's right to regulate. The Appellate Body also frequently referred to its previous ruling to support its broad interpretation. The meticulous attention to contextual and teleological interpretation helped the Appellate Body to overcome the interpretive challenge of upholding regulating flexibility without the textual support of a "general exception" clause.

Not all dictionary definitions supported an interpretation that would uphold regulatory flexibility, as in the case of "fulfill." The Appellate Body rightly read

[193] For the various interpretive issues on the TBT, see Marceau, *supra* note 160, at 4.
[194] MATSUSHITA, *supra* note 2, at 451.

"fulfillment" as being concerned with the degree of contribution. If the literal understanding of fulfillment as requiring complete achievement were to be picked, it would result in an untenable result that only successful political choice could pass muster under the balancing provision of the TBT Article 2.2. As no public policy can guarantee complete achievement, member states' regulatory space would be drastically reduced under this restrictive interpretation.[195] The Appellate Body could have invoked the VCLT Art 32(b) to strike down the restrictive interpretation as unreasonable or absurd. Instead, it opted for the "inherent" notion of "objective" that suggested different degrees of contribution without articulating why that is the case. The Appellate Body's broad reading of the TBT Agreement Article 2.1 has been commented to be inspired by jurisprudence on US interstate commerce clause and the European Court of Justice jurisprudence on free movement of goods.[196]

7. China-Raw Materials (2012)

Export restrictions have been predominantly applied to primary commodities of natural resources, such as metals and minerals, logs and timbers and agricultural goods. They can take the form of export duties, export quotas or administrative measures such as export licensing scheme.[197] Export restrictions are usually applied as a temporary measure during price spikes of commodities in order to protect

[195] Meredith A. Crowley & Robert Howse, *Tuna–Dolphin II: A Legal and Economic Analysis of the Appellate Body Report*, 13 WORLD TRADE REVIEW 321, 338 (2014).
[196] MATSUSHITA, *supra* note 2, at 450.
[197] Ilaria Espa, Export Restriction, in ELGAR ENCYCLOPEDIA OF INTERNATIONAL ECONOMIC LAW 368 (2017).

domestic consumers from price volatility.[198] They have also been used for long-term, structural purposes. Export duties exert profound impacts over the supply of critical raw materials in the global market. Like import tariffs, export duties can be trade-distorting in that they may provide a competitive advantage to domestic industries that use the export-taxed input at a lower price than the foreign competitors. Export duties are also employed to preserve exhaustible natural resources and reduce environmental externalities.[199]

The WTO legal disciplines on export restrains are not evenly applied to all member states. Overall, the WTO rules have been primarily concerned with reducing barriers to imports and have largely left export restrains unbound.[200] Export duty was not a major concern in the negotiating rounds that led to the conclusion of the GATT in 1994.[201] Consequently, the initial 128 GATT signatories in 1994 are free to tax their exports, unless the export duties amount to a quota.[202] This stands in stark contrast with the comprehensive and stringent disciplines on import duties. However, the broad latitude enjoyed by early members to the WTO are not extended to

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[198] Marco Bronckers & Keith E. Maskus, *China–Raw Materials: a controversial step towards evenhanded exploitation of natural resources*, 13 WORLD TRADE REVIEW 393–408 (2014).
[199] *Id.* at 395.
[200] MATSUSHITA, *supra* note 2, at 220.
[201] *Ibid.*
[202] GATT Article XI.1 provides that:

> No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

GATT Article X1.2 lists exceptions that can be made to the prohibition on export quotas if they are temporary and aimed at preventing shortages of products essential to the exporting country's economy.

latecomers. Recently acceded WTO members have to accept limits on or forfeit their rights to impose export duties in their accession negotiations at the request of existing member states.[203] The WTO-plus export-duty commitments vary widely in scope and content, with some countries abiding by general elimination obligations and others committing to phase down the export duties on a specific list of products.[204] China is said to have assumed the most rigorous WTO-plus obligations in export duties[205] by agreeing to "eliminate all taxes and charges applied to exports" except for 84 listed products in its China's Accession Protocol.[206]

To better understand the significance of the *China-Raw Material* case and the ensuring China-Rare Earth dispute, it is important to place the dispute in its broader political economy context. The surge in global demand for raw materials is closely related to China's staggering growth and its soaring commodity demand since the early 2000s. While attention has been largely focused on China's dominant role in the global commodity market as the biggest importer,[207] it is less noticed that China also wields enormous influence in the commodity market as an exporter. The global commodity boom has triggered a sharp increase in the use of export restrictions on

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[203] 12 countries have assumed GATT-Plus export duty obligations in negotiating to accede to the WTO: Mongolia, Latvia, Croatia, China, Saudi Arabia, Vietnam, Ukraine, Montenegro, Lao People's Democratic Republic, Tajikistan, Kazakhstan and Afghanistan. Espa, *supra* note 197.
[204] *Ibid.* Also see Julia Ya Qin, *The Predicament of China's "WTO-Plus" Obligation to Eliminate Export Duties: A Commentary on the China-Raw Materials Case*, 11 CHINESE JOURNAL OF INTERNATIONAL LAW 237–246 (2012).
[205] Qin, *supra* note 204, at 239.
[206] China's Accession Protocol Article 11.3.
[207] Pratish Narayanan, China Sets New Records for Gobbling Up the World's Commodities, https://www.bloomberg.com/news/articles/2018-01-12/world-s-commodity-engine-roars-to-another-record-with-xi-at-helm

various primary commodities.[208] It is reported that all major exporting countries of 21 metals and minerals commonly used in industrial applications used export restraints between 1999 and 2009.[209] As the major supplier of various key natural resources to the global market, China joined other countries and resorted to export restrictions on raw materials. By imposing restrictions on the export of various raw materials, the Chinese government hoped that they would conserve exhaustible natural resources to domestic consumption. The export restrictions also aimed for addressing the environmental externalities associated with exploitation of these raw materials.

A. Facts and Proceedings

In 2009, the U.S., EU and Mexico filed complaints about China's export barriers on bauxite, coke, fluorspar, magnesium, manganese, silicon carbide, silicon metal, yellow phosphorous, and zinc (collectively known as "the raw materials").[210] The challenged export barriers included export duties, export quotas, export licensing, and minimum export price requirements.[211] The complainants alleged that these export restraints were inconsistent with China's WTO-plus obligations[212] under Article 11.3 of China's WTO Accession Protocol to eliminate export duties.

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[208] Espa, *supra* note 197, 368.
[209] Bronckers and Maskus, *supra* note 198, 394.
[210] China-Raw Materials, WT/DS394/AB/4, WT/DS395/AB/4, WT/DS396/AB/4, para 1.
[211] *Id.* para 2.
[212] Complaints also argued that China's export restraints violated GATT Article XI which prohibits export quotas unless they are "temporarily applied" with a view to "prevent or relieve critical shortages" of essential products. As this claim does not directly touch on trade and environment, the paper leaves out the analysis on this issue by the Panel or the Appellate Body.

China's Accession Protocol does not have any general exceptions of its own. In defense, China argued that the export duties on the raw materials, though in breach of its commitments under China's Accession Protocol, were justified under Article XX(b) and Article XX(g) of the GATT.[213] The Panel Report found that China could not invoke exceptions under Article XX to justify its export quotas that were inconsistent with Paragraph 11.3 of China's Accession Protocol, because Paragraph 11.3 "does not include any express reference to Article XX of the GATT 1994, or to provisions of the GATT 1994 more generally."[214] For the Panel, the omission of general references to the WTO Agreement or to the GATT 1994 suggested that China did not intend to incorporate the defenses available under Article XX into Paragraph 11.3 in its accession negotiation.[215] The Panel Report also analyzed the merits of China's claim under GATT Article XX on an *arguendo* basis. It was found that China failed to satisfy the requirements of those exception provisions.

B. The Appellate Body's Analysis

The core issue in *China-Raw Materials* concerns whether the GATT Article XX exceptions are applicable to other WTO agreements such as China's Accession Protocol. As reviewed previously, the GATT Article XX exceptions play the central role of preventing and remedying negative effects of trade liberalization in goods.[216] The same public policy exceptions, however, were not incorporated in all the other

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[213] *Id.* para 5.
[214] Panel Reports, para. 7.124.
[215] Panel Reports, para. 7.126-7.129.
[216] Bin Gu, *Applicability of GATT Article XX in China – Raw Materials: A Clash within the WTO Agreement*, 15 J INT ECONOMIC LAW 1007, 1011 (2012).

agreements in the WTO family. Equivalent public policy exceptions can be found in the GATS[217] and made available in the TRIMs through cross-reference[218], but are absent in the SCM Agreement, the TBT Agreement and the TRIPs Agreement. The WTO Appellate Body has developed a case-by-case approach to examine applicability of the GATT Article XX to other WTO agreements. In *US-Clove Cigarettes*, the Appellate Body found that Article XX of the GATT 1994 is not available to justify a breach of the TBT Agreement,[219] due to the absence of an express textual linkage between the two WTO agreements. In *China-Publications and Audiovisual Products*, the Appellate Body held that China may invoke Article XX exceptions to defend its violation of Paragraph 5.1 in China's Accession Protocol. The Appellate Body

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[217] GATS Article XIV (titled "General Exceptions") provides that:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures:
>
> (a) necessary to protect public morals or to maintain public order;
>
> (b) necessary to protect human, animal or plant life or health;
>
> (c) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement including those relating to:
>
> (i) the prevention of deceptive and fraudulent practices or to deal with the effects of a default on services contracts;
>
> (ii) the protection of the privacy of individuals in relation to the processing and dissemination of personal data and the protection of confidentiality of individual records and accounts;
>
> (iii) safety;
>
> (d) inconsistent with Article XVII, provided that the difference in treatment is aimed at ensuring the equitable or effective imposition or collection of direct taxes in respect of services or service suppliers of other Members;
>
> (e) inconsistent with Article II, provided that the difference in treatment is the result of an agreement on the avoidance of double taxation or provisions on the avoidance of double taxation in any other international agreement or arrangement by which the Member is bound.

[218] Article 3 of the TRIMs Agreement provides that "[a]ll exceptions under GATT 1994 shall apply, as appropriate, to the provisions of this Agreement."

[219] See Appellate Body Report, *US-Clove Cigarettes*, paras. 96 and 101.

reasoned that Paragraph 5.1 incorporates a textual link between the Accession Protocol and the GATT 1994 by specifically recalling in the opening phrase that the commitments are "without prejudice to China's right to regulate trade in a manner consistent with the WTO Agreement."[220] Following this line of reasoning, were a similar textual link to be found between Paragraph 11.3 and the GATT 1994, China may invoke Article XX of GATT to defend its export restrictions prohibited in its Accession Protocol.

The Appellate Body recognized that China's Accession Protocol is an "integral part" [221] of the WTO Agreement and stated that it was going to apply the interpretive rules codified in Articles 31 and 32 of the VCLT in interpreting Paragraph 1.2 of China's Accession Protocol. [222] The Appellate Body expressly recalled Article 31(1) of the VCLT and began its analysis with the text of Paragraph 11.3 of the Protocol, which provides that:

> China shall eliminate all taxes and charges applied to exports unless specifically provided for in Annex 6 of this Protocol or applied in conformity with the provisions of Article VIII of the GATT 1994.[223]

[220] WT/DS363/AB/R (21 December 2009), paras. 229-233.
[221] *Id.* para. 278.
[222] *Id.* para. 278.
[223] China's Accession Protocol Article 11.3.

The Appellate Body first examined the absence in Paragraph 11.3 of China's Accession Protocol of (1) textual indications of reference to GATT Article XX,[224] or (2) textual connection like the introductory clause similar to that of Paragraph 5.1 of China's Accession Protocol.[225]

The Appellate Body then rejected China's claim that the reference to Article VIII of the GATT in Paragraph 11.3 constituted a textual link that established the applicability of the GATT Article XX to Paragraph 11.3 in the Accession Protocol. It reasoned that as Article VIII of the GATT expressly excludes export duties "the question of conformity or consistency with this Article does not arise."[226] Therefore, Article XX of the GATT cannot be invoked to justify export duties, which are not regulated under Article VIII.

Finding no textual indication of or textual link with GATT Article XX, the Appellate Body turned to the immediate context of Paragraph 11.3, i.e. Paragraph 11.1 and 11.2. Both of these preceding provisions contain the wording of "in conformity with the GATT 1994," a phrase that is missing in Paragraph 11.3. The Appellate Body interpreted the silence in Paragraph 11.3 as a waiver, an indication that "had there been a common intention to provide access to Article XX of the GATT 1994 in this respect, language to that effect would have been included in Paragraph 11.3."[227]

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[224] *Id.* para. 285, 303.
[225] *Id.* para. 291.
[226] *Id.* para. 290.
[227] *Id.* para. 293.

The Appellate Body then examined the broader context of Paragraph 11.3. China relies on, i.e., Paragraph 170 of China's Accession Working Party Report to support its position of qualified commitment to eliminate export duties. The paragraph, which is incorporated into China's Accession Protocol through Paragraph 1.2 of China's Accession Protocol, provides that:

> The representative of China confirmed that upon accession, China would ensure that its laws and regulations relating to all fees, charges or taxes levied on imports and exports would be in full conformity with its *WTO obligations*, including Articles I, III:2 and 4, and XI:1 of the *GATT 1994*, and that it would also implement such laws and regulations in full conformity with these obligations.[228]

The expression of "in full conformity with its WTO obligations" in Paragraph 170 is similar to the introductory clause of Paragraph 5.1 of China's Accession Protocol as of "in full conformity with its WTO obligations." This explicit reference to the WTO Agreement would constitute a textual link under the jurisprudence of *China-Publications and Audiovisual Products*. In addition, Paragraph 170 of China's Accession Working Party Report and Paragraph 11.3 of China's Accession Protocol share the same subtitle "Taxes and Charges Levied on Imports and Exports." However, the Appellate Body held that Appellate Body held that Paragraph 170 of

[228] China's Accession Working Party Report, para. 170. italics added by the author.

China's Accession Working Party Report is "of limited relevance in interpreting Paragraph 11.3 of China's Accession Protocol."[229] Instead, the Appellate Body held that the relevant context should be Paragraph 155 and 156 of China's Accession Working Party Report to the exclusion of Paragraph 170.[230] As both of these two paragraphs make no reference to Article XX of the GATT as in the case of Paragraph 11.3,[231] the Appellate Body concluded again that the absence of reference to Article XX in these two paragraphs does not support the interpretation that China may have recourse to Article XX of the GATT to justify export duties.[232]

Finally, the Appellate Body acknowledged that the Preamble of the WTO Agreement upholds non-trade objectives including environmental protection and sustainable development,[233] but summarily dismissed the non-trade objectives' relevance as none of them provides "specific guidance on the question of whether Article XX of the GATT 1994 is applicable to Paragraph 11.3 of China's Accession Protocol."[234] The Appellate Body did not resort to any supplementary means of interpretation under Article 32 of the VCLT.

To summarize, the core issue confronting the Appellate Body was how to interpret the silence in China's Accession Protocol Article 11.3 as to whether the general exceptions of GATT Article XX are available to China's GATT-plus obligations. In its legal analysis, the Appellate Body focused on the wording of

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[229] Appellate Body Report, para. 299.
[230] *Id.* para. 299.
[231] *Id.* para. 299.
[232] *Id.* para. 299.
[233] *Id.* para. 306
[234] *Id.* para. 306.

Paragraph 11.3 and selected provisions in the Working Party Report. It concluded that China may not have recourse to the provision of Article XX of the GATT to justify export duties found to be inconsistent with Paragraph 11.3 of China's Accession Protocol.[235]

C. Assessing the Interpretive Arguments

The Appellate Body's interpretation in *China-Raw Materials* boiled down to a textual comparison between Paragraph 11.3 and other provisions of the Protocol and China's Accession Working Party Report.[236] The Appellate Body's interpretation could hardly be characterized as applying the VCLT rules in a "holistic" way as it claimed to be, [237] but exemplified a narrow textualist approach that deviates from what the VCLT prescribes.[238]

The Appellate Body did not provide sound legal reasoning in choosing what constituted the appropriate textual context of the disputed provision. In examining the broader context of Paragraph 11.3, the Appellate Body chose Paragraphs 155 and 156 of China's Accession Working Party Report to the exclusion of Paragraph 170, because Paragraphs 155 and 156 have similar language with Paragraph 11.3.[239] However, the tossed-out Paragraph 170 of the Working Party Report and Paragraph 11.3 of the Protocol also share the same subtitle and address the same subject matter. [240] Paragraphs 155, 156 and 170 all constitute the broader context of

[235] *Id.* para. 307.
[236] Gu, *supra* note 216, at 1021.
[237] Appellate Body Report, para. 307.
[238] Qin, *supra* note 204, at 240. Gu, *supra* note 216, at 1021.
[239] Appellate Body Report, para. 299.
[240] Gu, *supra* note 216, at 1018.

Paragraph 11.3 of the Protocol. The Appellate Body tried to justify its decision of excluding Paragraph 170 by invoking Paragraph 169 to delimit a restricted scope of Paragraph 170 instead of examining the wording in Paragraph 170. This is apparently against the VCLT interpretive rule that the treaty term shall be interpreted in accordance with the ordinary meaning. Moreover, unlike Paragraph 170, Paragraph 155 and 156 as a matter of fact are not referenced in China's Accession Working Party Report, acknowledged the Appellate Body in the footnote.[241] The Appellate Body's decision to include Paragraphs 155 and 156 and to exclude Paragraphs 170 seemed to be driven by the mere absence/presence of reference to GATT.

A holistic approach under the VCLT rules directs the interpreters to take into account all interpretive elements. The singular term "rule" in Article 31 was meant to address the risk of applying individual interpretive means in isolation of others. The Appellate Body, though paying lip service to the VCLT rule,[242] nevertheless accorded the text of Paragraph 11.3 a primary role and relegated the other interpretive elements to a residual role. In examining the immediate context of Paragraph 11.3, the Appellate Body contrasted the reference to the GATT in Paragraphs 11.1 and 11.2 with the silence in Paragraph 11.3. Turning to the broader context, the Appellate Body limited its contextual examination to a few paragraphs in the Working Party Report without valid reasons. Only cursory attention was paid to the object and purpose of the WTO Agreement, which was summarily dismissed as

[241] Appellate Body Report, footnote 576.
[242] *Id.* 278, 307.

irrelevant. The Appellate Body justified the dismissal by arguing that these objectives were too board to provide specific guidance to the interpretation of explicit commitment, an interpretive invention that could not find support from any interpretive canons. Since objectives in most treaties are usually termed in a broad manner, following the Appellate Body's reasoning that broad objectives cannot guide interpretation on specific issues would essentially relegate the interpretive element of "object and purpose" to futility.[243] The Appellate Body continued to cement its interpretation of the silence by not taking into account the principle of permanent sovereignty over natural resources.[244]

No attempt was made to use the supplementary means of interpretation by the Appellate Body, who insisted that the silence in Paragraph 11.3 amounted to an intentional waiver of rights under a textualist interpretation. Although the preparatory works on China's Accession Protocol are not available to be examined,[245] the Appellate Body could have turned to the circumstances of the conclusion of the Protocol. China's Accession Protocol was the first accession instrument under the WTO to have to take on lots of WTO-plus obligations.[246] The text of the Protocol has been described as "imperfectly formulated"[247] with "many lacunae and inaccurate provisions."[248] This was most likely due to an inadequate level of legal competence

[243] Qin, *supra* note 204, at 243.
[244] Elisa Baroncini, *The Applicability of GATT Article XX to China's WTO Accession Protocol in the Appellate Body Report of the China Raw Materials case: Suggestions for a Different Interpretative Approach*, 1 CHINA-EU LAW J 1–34 (2013).
[245] Julia Ya Qin, *The Challenge of Interpreting WTO-PLUS Provisions*, 44 JOURNAL OF WORLD TRADE 127–172 (2010).
[246] Baronicini, *supra* note 244, at 27.
[247] Bronckers and Maskus, *supra* note 198.
[248] Baroncini, *supra* note 244, at 27.

and sophistication on the Chinese side at the time of accession negotiation.[249] A careful investigation into the circumstances of the conclusion would have revealed that the silence was a drafting error[250] rather than an intentional design. Regrettably, the Appellate Body stopped at applying Article 31 of the VCLT and engaged in no such supplementary means of interpretation.

The Appellate Body's "silence equates waiver" approach marked a departure from its own jurisprudence on how to interpret silence. Silence can be intended omission, but "does not exclude the possibility that the requirement was intended to be included by implication."[251] How to interpret silence depends on what is being implied, on the nature of the treaty, and the interaction of the various elements of the Vienna rule. The Appellate Body often sought for causes and motivations behind the silence by resorting to supplementary means of interpretation. The Appellate Body in *China-Raw Materials* made no such effort before jumping to the conclusion that "silence equals waiver." It is a "deplorable" [252] and environmentally insensitive interpretation that sovereign states can sign away their rights to pursue environmental policies in a drafting error.

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[249] *Ibid.*
[250] Bronckers and Makus, *supra* note 198, at 400.
[251] US-Countervailing Duties on Certain Corrosion-Resistant Carbon Steel Flat Products from Germany, WT/DS213/AB/4, para 65.
[252] Bronckers and Maskus, *supra* note 198, at 400.

8. China-Rare Earths (2014)

Two years after its decision in *China-Raw Materials*, The WTO Appellate Body issued its decision in a similar case arising from China's GATT-plus obligations of eliminating export duties. The disputed measures in *China - Rare Earths* concerned export restrictions on tungsten, molybdenum, and rare earths, a group of seventeen minerals used in the manufacturing of a wide range of high-tech and strategic products such as weapons and clean energy products.[253] While possessing only 37% of the total global reserve of rare earths, China maintained an undisputed monopoly of the supply of rare earths, accounting for more than 95% of global production in 2010.[254] The monopoly comes at the cost of grave ecological degradation and resource depletion. The mining and the production of rare earths poses serious ecological risks of radioactive waste and toxic acids.[255] Weak enforcement of environmental law further exacerbated the ecological degradation. Citing environmental and human health concerns as well as increases in illegal mining of rare earths, China started to take measures to reduce the export of rare earths. These measures, including export duties, export quotas and export administration, were challenged by EU, Japan and the US at the WTO Dispute Settlement Body.

A. Facts and Proceedings

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[253] Eric W. Bond & Joel Trachtman, *China–Rare Earths: Export Restrictions and the Limits of Textual Interpretation*, 15 WORLD TRADE REVIEW 189–209 (2016).
[254] https://www.asil.org/insights/volume/18/issue/10/wto-law-and-right-regulate-china-%E2%80%93-rare-earths
[255] https://www.asil.org/insights/volume/18/issue/10/wto-law-and-right-regulate-china-%E2%80%93-rare-earths

The legal complaints filed to the WTO Panel were almost identical with the ones raised in *China-Raw Materials*. The complaints alleged that China's export duties and quotas breached (1) the obligation to eliminate export duties under Article 11.3 of China's Accession Protocol; and (2) the obligation to eliminate quantitative restrictions on exports under Article XI of GATT 1994. In defense, China invoked the environmental and health exceptions under GATT Article XX (b) and (g) to justify the breach. The key legal issue of *China-Rare Earths*, same as in *China-Raw Materials*, concerned the systematic relationship among the various agreements under the WTO framework. The gist of the case was about whether Article XX GATT can be invoked to defend breach of GATT-plus obligations under China's Accession Protocol.

Given the de facto binding status of previous Appellate Body Reports,[256] China advanced four new arguments to show that GATT Article XX is applicable to Paragraph 11.3 of its Accession Protocol. All four arguments were rejected by the Panel. China only appealed the Panel's rejection of the second argument that Paragraph 11.3 of China's Accession Protocol must be treated as an integral part of the GATT 1994.

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[256] Although international law does not have a strict stare decisis precedent system, previous decisions and doctrines are highly persuasive in WTO jurisprudence. Formally speaking, previous Panel and Appellate Body decisions are not binding on future cases. Article IX:2 of the WTO Agreement provides that "the Ministerial Conference and the General Council shall have the exclusive authority to adopt interpretations of this Agreement and of the Multilateral Trade Agreements." In practice, however, stare decisis operates in a de facto sense. The WTO Panels have rarely deviated from prior Appellate Body rulings, and the Appellate Body have included extensive references to prior case law in order to support its position in cases with factual similarities. For example, see Appellate Body Reports, US-Stainless Steel (Mexico), para. 160 reads that "absent cogent reasons, an adjudicatory body will resolve the same legal question in the same way in a subsequent case." For a general review of the de facto precedential status of previous Appellate Body Reports, see Raj Bhala, PRECEDENT SETTERS: DE FACTO STARE DECISIS IN WTO ADJUDICATION (PART TWO OF A TRILOGY), 9 J. Transnat'l L. & Pol'y, 1 (1999).

B. The Appellate Body's Analysis

In reviewing the Panel's decision, the Appellate Body had to address critiques on its ruling in *China-Raw Materials* and a significant change in opinions both at the Panel and from third parties. In *China-Raw Materials*, China's invocation of GATT Article XX exceptions to defend its export control was met with unanimous opposition from the Panel and all third parties. Barely two years later, one panelist in *China-Rare Earths* and several third parties (at both Panel and Appellate Body stage) sided with China on the applicability of the GATT Article XX exceptions.[257] Aware of the critiques on its narrow textualist approach in *China-Raw Materials*, the Appellate Body explicitly held that the applicability of GATT Article XX to non GATT agreements must be answered through "a thorough analysis of the relevant provisions on the basis of the customary rules of treaty interpretation and the circumstances of the dispute."[258]

The essence of China's appeal lies in the interpretation of Article XII:1 of the Marrakesh Agreement and Article 1.2 of China's Accession Protocol. Article XII:1 of the Marrakesh Agreement reads that:

> Any State … may accede to this Agreement, on terms to be agreed between it and the WTO. Such accession shall apply to this Agreement and the Multilateral Trade Agreements annexed thereto.

[257] Julia Ya Qin, *Judicial Authority in WTO Law: A Commentary on the Appellate Body's Decision in China-Rare Earths*, 13 CHINESE JOURNAL OF INTERNATIONAL LAW 639–651 (2014).
[258] Appellate Body Report, para 5.62.

Paragraph 1.2 of China's Accession Protocol provides that:

> [T]his Protocol, which shall include the commitments referred to in paragraph 342 of the Working Party Report, shall be an integral part of the WTO Agreement.

Figure 1 visualizes the interpretive task the Appellate Body took on in terms of the relationship between the different agreements.

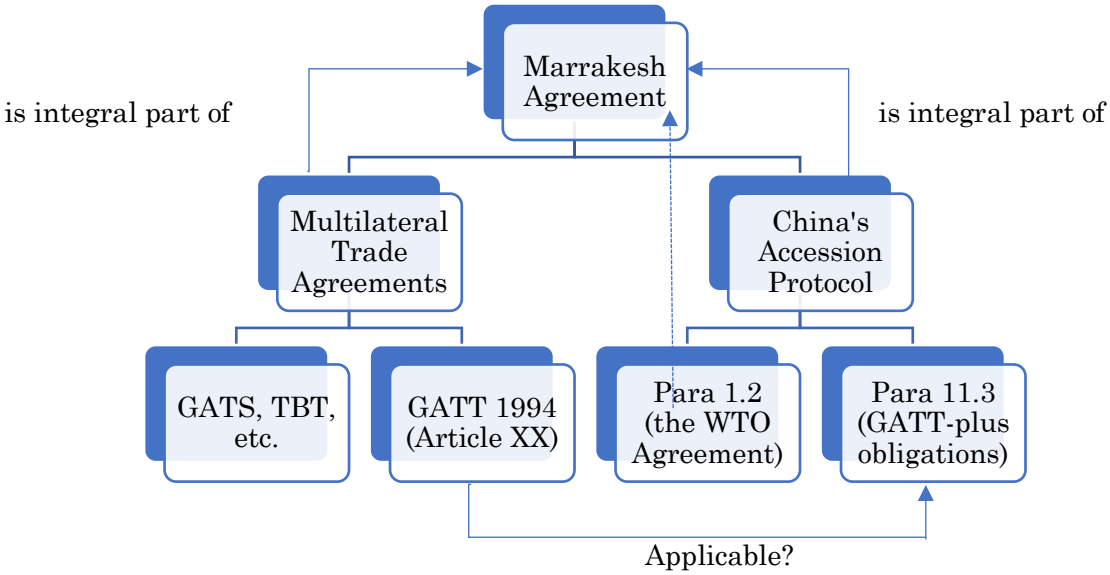

Figure 1. Interpretive Issue in China-Rare Earths

It is undisputed that Multilateral Trade Agreements such as the GATT 1994 are integral parts of the Marrakesh Agreement.[259] It is also firmly established that China's Accession Protocol in its entirety is an integral part of the Marrakesh Agreement.[260] The key interpretive issue turns to whether individual paragraph in the Accession Protocol is also an integral part of the Multilateral Trade Agreements annexed to the Marrakesh Agreement. China submitted that under a holistic approach, "the WTO Agreement" in Paragraph 1.2 of China's Accession Protocol provides a strong textual link to the GATT 1994 and makes individual paragraph under the Accession Protocol an "integral part" of the "intrinsically related" WTO agreement, which would render the GATT Article XX applicable to Paragraph 11.3 of the Accession Protocol.[261]

In re-examining China's appeal, the Appellate Body made an effort to distance itself from the textualist approach for which it was criticized. The Appellate Body acknowledged that "the WTO Agreement" in Paragraph 1.2 of China's Accession Protocol served to "build a bridge" between the Protocol and the GATT,[262] but determined that this express textual reference was only the starting point of the investigation and was not dispositive of the issue.[263] The Appellate Body reiterated

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[259] Article II:2 of the Marrakesh Agreement provides that "The agreements and associated legal instruments included in Annexes 1, 2 and 3 (hereinafter referred to as "Multilateral Trade Agreements") are integral parts of this Agreement, binding on all Members." The GATT 1994 can be found in Annex 1.
[260] Panel Reports, para. 7.93.
[261] China's Appellant's submission, para. 11.
[262] WTO Appellate Body, para. 5.61.
[263] *Id.* para. 5.61.

that the necessity of a thorough analysis should take into account both immediate context and broader context of the overall architecture of the WTO system.[264]

However, the Appellate Body resorted to no such contextual analysis in its broad sense. It continued to follow a strict textualist approach and focused on whether Article XII:1 of the Marrakesh Agreement clarifies what the "terms" of accession should be, and whether the wording speaks to "the question of the specific relationship between individual provisions of an accession protocol and individual provisions of the Marrakesh Agreement and the Multilateral Trade Agreements."[265] As to China's claim that a specific provision of the Accession Protocol should be treated as "an integral part" of the GATT 1994 which the provision "intrinsically relates to," the Appellate Body rejected this argument on the grounds that China did not provide "a clear definition" of the "intrinsic relationship" test.[266] The Appellate Body also rejected China's defense that its Accession Protocol should be differentiated from the Multilateral Trade Agreements, in that unlike the Multilateral Trade Agreements the Protocol did not include any general exceptions and was not a "self-contained agreement." The Appellate Body dismissed this comparison as of "limited relevance" for the purpose of determining the specific relationship between a Protocol provision and provisions of a covered agreement under the WTO.[267]

C. Assessing the Interpretive Arguments

[264] *Id.* paras. 5.62, 5.74.
[265] *Id.* para. 5.34.
[266] *Id.* para. 5.67.
[267] *Id.* para. 5.70.

The Appellate Body's interpretive arguments in *China - Rare Earths* did not follow the "single combined operation" approach under the VCLT. It remained a narrow textualist interpretation focusing on the ordinary meaning. Admittedly, the text of China's Accession Protocol, in particular the unspecified "the WTO Agreement" in Paragraph 1.2 of China's Accession Protocol, left a large margin of indeterminacy for the interpreters. The Appellate Body then turned to the immediate context of Paragraph 1.3 of China's Accession Protocol to ascertain the meaning. The legal reasoning was based on an *a contrario* argument: since Paragraph 1.3 of China's Accession Protocol refers to the WTO Agreement and the Multilateral Trade Agreements separately, the "WTO Agreement" in Paragraph 1.2 of China's Accession Protocol only referred to the Marrakesh Agreement alone excluding the Multilateral Trade Agreements.[268] After noticing that the term "the WTO Agreement" was nevertheless used in a broad sense in other parts of China's Accession Protocol, the Appellate Body returned to the narrow textualist approach in China-Raw Materials in interpreting Article 11.3 of China's Accession Protocol. The entire interpretive process was devoted to a narrow contextual investigation and made no efforts in engaging the "object and purpose" and other interpretive elements required under the VCLT rule. The Appellate Body also ignored one third parties' request that it was necessary to examine the preparatory work of China's accession negotiations.[269]

[268] *Id.* para. 4.44.
[269] The Appellate Body merely acknowledged this request briefly. *Id.* para. 2.238.

The Appellate Body's "abstemious"[270] textualist approach to interpretation in *China - Rare Earth*s is highly problematic. Judges at international tribunals enjoy considerable discretion in assigning weight to the various interpretive arguments. In *China - Rare Earths*, the pendulum has swung too far in the direction of a limited textualism divorced from broader context and other interpretive elements.[271] An inquiry into the preamble of the WTO Agreement which calls for a balance between environment and trade would have made the GATT Article XX exceptions available for China's GATT-plus obligations. Doing so is not to open the floodgate for protectionist measures disguised in environmental cover: China's export restrictions are likely to fail under this alternative interpretive approach if they could not pass the rigorous Article XX two-tier test. However, it is a "manifestly absurd and unreasonable" result to deny the availability of GATT Article XX exceptions to a country-specific obligation, while even the pillars of trade liberalization (Most Favored Nations and National Treatment) may be derogated by domestic environmental measures.[272] The Appellate Body's decisions in *China - Raw Materials* and *China - Rare Earths* have significant implications for China's right to regulate the export for environmental reasons.

[270] Bond and Trachtman, *supra* note 253, at 208.
[271] *Id.* at 195.
[272] Qin, *supra* note 204, 240.

9. Canada – Renewable Energy/Feed-in Tariff (2013)

With climate change topping the global agenda, developing renewable energy has become a crucial task for governments of many countries. Governments around the world promote the development of renewable energy through a multitude of policy instruments under the broad term "subsidies" which include tax reductions and credits, favorable lending conditions, feed-in tariff (FIT) schemes, etc.[273] These government measures either apply to renewable energy itself or the equipment used to produce the electricity such as solar panels and wind turbines.[274] A FIT program applies to the clean electricity itself and typically includes three features: guaranteed electricity purchase prices, guaranteed grid access, and long-term contracts.[275] Under a FIT program, eligible renewable energy producers are paid a cost-based price for the electricity they supply to the grid. They are also guaranteed a long-term (15–25 years) purchasing contract from the electricity grid. These features are designed to incentivize the private sector to invest in renewable energy by ensuring long-term economic returns. Feed-in tariff ("FIT") schemes were recommended by the Intergovernmental Panel on Climate Change as the "most efficient and effective"[276] and are used by governments worldwide to incentivize the deployment of renewable

[273] Ilaria Espa & Gracia Marín Durán, *Renewable Energy Subsidies and WTO Law: Time to Rethink the Case for Reform Beyond Canada – Renewable Energy/Fit Program*, 21 JOURNAL OF INTERNATIONAL ECONOMIC LAW 621 (2018).
[274] *Id.* at 625.
[275] Marie Wilke, *Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review* (2011) ICTSD Programme on Trade and Environment; Trade and Sustainable Energy Series, Issue Paper No. 4, 1 (2011).
[276] Espa and Marín Durán, *supra* note 273, at 627.

energy.[277] FIT schemes are essentially an environmental measure in the light of its objective and result.[278] Many FIT schemes feature local content requirement that conditions the eligibility to participate in the FIT program to the use of domestic products. Local content requirement is generally perceived as an industrial policy that can distort trade.

The *Canada – Renewable Energy/Feed-in Tariff* (*Canada – FIT*) case was the first time the Appellate Body placed renewable energy subsidies under scrutiny and addressed the relationship between climate and trade.

A. Facts and Proceedings

Canada – FIT concerned the domestic content requirement of the renewable energy subsidy program of the province of Ontario, Canada. In 2009, the Government of Ontario launched a FIT program that offered guaranteed rates for electricity generated from renewable sources[279] delivered into the Ontario grid under twenty-year or forty-year contracts.[280] The Ontario Power Authority (OPA), an agency of the Government of Ontario,[281] was entrusted with the authority to implement the FIT program, including price setting and administration of contracts.[282]

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[277] Luca Rubini, *"The Good, the Bad, and the Ugly" Lessons on Methodology in Legal Analysis from the Recent WTO Litigation on Renewable Energy Subsidies*, 48 JOURNAL OF WORLD TRADE 895–938 (2014).
[278] *Id.* at 898.
[279] The FIT Program accommodates electricity generated from wind, solar PV, renewable biomass, biogas, landfill gas, and waterpower. See Canada - FIT, AB Report, WT/DS426/R, para. 4.17.
[280] *Id.* at para. 4.17.
[281] *Id.* at para. 4.9.
[282] Wilke, *supra* note 275, at 3.

The Ontario FIT program was expected to serve several goals: to mitigate climate change by phasing out fossil fuel energy, to facilitate the development of renewable energy in Ontario, and to create new jobs.[283] In order to achieve the second and the third goals, the OPA imposed local content requirement on electricity generators participating in the FIT program. Unless the generators used a minimum percentage of Ontario-produced renewable energy generation equipment (e.g. Ontario-made wind turbines or solar panels) in developing and constructing their generation facilities, they were not eligible to participate in the Ontario FIT program.[284] The Government of Ontario signed a CA$7 billion green energy deal with Samsung, promising Samsung the preferential access to the grid and procurement of power from Samsung. In return, Samsung agreed to build plants to manufacture components for wind and solar projects in Ontario.[285]

Japan and the European Union challenged the local content requirement of Ontario's FIT program at the WTO respectively. The complainants argued that the FIT program's domestic content requirement was inconsistent with Canada's obligation under (1) the GATT and the TRIMs, and (2) the SCM Agreement.

The legal claim brought under the GATT and the TRIMs had a different focus than the legal claim brought under the SCM Agreement. The former directly

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[283] Kent Avidan & Vyoma Jha, *Keeping up with the Changing Climate: the WTO's Evolutive Approach in Response to the Trade and Climate Conundrum*, 15 *THE JOURNAL OF WORLD INVESTMENT & TRADE* 254 (2014).
[284] Rajib Pal, *Has the Appellate Body's Decision in Canada – Renewable Energy / Canada – Feed-in Tariff Program Opened the Door for Production Subsidies?*, 17 JOURNAL OF INTERNATIONAL ECONOMIC LAW 125, 126 (2014).
[285] Keith Leslie, *Ontario-Samsung Green Energy Deal Dubbed 'Clossal Failure'*, Global News, (June 20, 2013) http://globalnews.ca/news/658399/ontario-samsung-deal-slashed-by-3-7-billion/

challenged the legality of the local content requirement. The latter had to first classify the FIT program as a subsidy before assessing the local content requirement's legality under the SCM Agreement.[286] Both the Panel and the Appellate Body easily concluded that the domestic content requirement in Ontario's FIT program violated the non-discrimination obligation under Article III:4 of the GATT and Article 2.1 of the TRIMs.[287] The key to the Appellate Body's review hinged on whether the domestic content requirement of the FIT program made it a prohibited subsidy under the SCM Agreement, which is to be explained and assessed in the ensuing sections.

B. The Appellate Body's Interpretation

To better appraise the WTO Appellate Body's interpretation in *Canada - FIT*, it is helpful to briefly overview how the SCM Agreement operates. Article 1 of the SCM Agreement defines a subsidy as having three necessary components: (1) a "financial contribution"; (2) the contribution was made by a government or a public body; and (3) the contribution confers a benefit.[288] Article 3 of the SCM Agreement explicitly prohibits export subsidies and subsidies contingent on the use of domestic goods. To determine whether the Ontario FIT program was a prohibited subsidy within under the SCM Agreement, the Appellate Body first needed to determine whether the FIT program constituted a subsidy within the meaning of the SCM Agreement.

(1) The Determination of Subsidy - An Overview

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[286] Rubini, *supra* note 277, at 901-902.
[287] Panel Report, *Canada - Certain Measures Affecting the Renewable Energy Generation Sector/Canada - Measures Relating to the Feed-in Tariff Program*, ¶7.166, WT/DS412/R, WT/DS426/R (Dec.19, 2012) [hereinafter Panel Report, *Canada – FIT*].
[288] Agreement on Subsidies and Countervailing Measures art.1, Apr. 15, 1994.

The WTO has interpreted "financial contribution" broadly as covering both direct and indirect forms of financial contribution. Direct financial contributions cover direct transfer of funds from the government, foregone government revenue that is otherwise due, and goods and services provided by the government other than infrastructure.[289] Indirect financial contributions cover government payment to a funding mechanism or a private body.[290]

The element "conferral of "benefit" requires establishing that the recipient is "better off" than it would have been without the contested measures. The WTO jurisprudence on benefit analysis prior to *Canada - FIT* has been highly consistent in examining benefit from the recipient's side, as distinct from the question of financial contribution. The Appellate Body decided in *Canada – Civilian Aircraft* that a benefit arises when the recipient has received a "financial contribution" on terms more favourable than those available to the recipient in the market.[291] The rule that "benefit is determined from the recipient's side" was then upheld in *US - Bismuth Carbon Steel Products from the United Kingdom*[292] and *US – Softwood lumber from Canada*.[293] All three cases illustrate that in determining if a certain measure confers benefit the Appellate Body solely focuses on the market condition as a point of

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[289] SCM art. 1.
[290] SCM art. 1.
[291] Appellate Body Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/AB/R (Aug. 2, 1999) ¶157.
[292] *See* Appellate Body Report, *United States – Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom*, WT/DS138/AB/R (Oct.5, 2000).
[293] *See* Appellate Body Report, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada, Recourse by Canada to Article 21.5 of the DSU*, WT/DS257/AB/R (Dec.20, 2005).

comparison. This is in line with the WTO jurisprudence of focusing on market competitiveness in analyzing "like product."[294]

(2) The Appellate Body's Subsidy Analysis in *Canada – FIT*

Having decided that the FIT Program was a financial contribution from the Government of Ontario,[295] the Appellate Body embarked on a complex analysis on the "conferral of benefits." The key question to be decided was what constituted "prevailing market conditions." The Appellate Body introduced a two-prong analysis of the relevant electricity market that examines substitutability on both the supply side and the demand side of electricity generated from renewable sources.[296] On the demand side, the Appellate Body acknowledged that consumers could not distinguish between electricity generated from fossil fuels and electricity generated from renewable sources, because "all electricity fed into the grid is blended regardless of the energy generation technology used."[297] On the supply side, the Appellate Body found that conventional energy and renewable energy differed so profoundly in terms of "cost structures and operating costs characteristics" that it was "very unlikely, if not impossible" for "the former to exercise any form of price constraint on the latter."[298] Due to the these significant differences, the Appellate Body concluded that "markets for wind- and solar PV-generated electricity can only come into existence as

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[294] *See* Appellate Body Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS161/AB/R, WT/DS169/AB/R (Nov.12, 2000). Appellate Body Report, *Philippines – Taxes on Distilled Spirit*, WT/DS396/AB/R, WT/DS403/AB/R (Nov.21, 2011).
[295] AB Report. at para. 5.128.
[296] *Id.* at para. 5.171.
[297] *Id*. at para. 5.176.
[298] *Id*. at para. 5.174.

a matter of government regulation."[299] While the demand-side analysis favored a single market, the supply-side analysis favored treating the renewable energy market separately from conventional energy market. The Appellate Body leaned towards the supply-side analysis and decided that the relevant benchmark for conducting the benefit analysis should have been the "competitive markets for wind- and solar PV-generated electricity." [300] The Appellate body explained the unique market for renewable energy in the following paragraph:

> Nevertheless, a distinction should be drawn between, on the one hand, government interventions that create markets that would otherwise not exist and, on the other hand, other types of government interventions in support of certain players in markets that already exist, or to correct market distortions therein. Where a government creates a market, it cannot be said that the government intervention distorts the market, as there would not be a market if the government had not created it.[301]

To complete the benefit analysis, the Appellate Body turned to the factual findings and concluded that there were not sufficient factual findings or uncontested evidences to determine whether the FIT program conferred a benefit to the producers of solar or wind power in Ontario. Hence, the Appellate Body ruled that it could not

[299] *Id*. at para. 5.175.
[300] *Id*. at para. 5.178.
[301] *Id*. at para. 5.188.

determine whether the Ontario FIT program was a subsidy within the meaning of Article 1.1(b) of the SCM Agreement or whether it constituted a prohibited subsidy inconsistent with Articles 3.1(b) and 3.2 of the SCM Agreement.[302]

C. Assessing the Interpretive Arguments

The Appellate Body's decision in *Canada - FIT* generated an "avalanche" [303] of commentaries on the benefit analysis and its implication for the future of renewable energy subsidies as a tool for climate mitigation. Unlike most of its previous decisions, the Appellate Body's benefit analysis in *Canada - FIT* did not use any interpretive means provided for in the VCLT. A number of legal commentaries described the reasoning process as "legal acrobatics" [304] and faulted the Appellate Body's approach in the *Canada-FIT* case as overly activist. The critiques argued that the Appellate Body had no basis for concluding that those supply side factors should outweigh the demand side factors for determining the relevant market. Even if the supply-side factors weighed in favor of defining the relevant market as the competitive market for renewable energy, the critiques questioned why the converse reasoning could not be equally true. [305] The critiques lamented that the Appellate Body "reinvented themselves as principals and decided what the law should be" instead of behaving as agents called to apply laws decided by the national government principals.[306]

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[302] *Id*. at para. 5.246.
[303] For an overview of the commentaries, see Ilaria Espa and Gracia Marin Durán, Renewable Energy Subsidies and WTO Law: Time to Rethink the Case for Reform Beyond *Canada – Renewable Energy/Fit Program*, Journal of International Economic Law, Volume 21, Issue 3, 21 September 2018, Pages 621–653.
[304] Cosbey and Mavroidis, *supra* note 38.
[305] Pal, *supra* note 284, 132-133.
[306] *Id*. 12. Also *see* Liesbeth Casier & Tom Moerenhout, *WTO Members, Not the Appellate Body, Needs to Clarify Boundaries in Renewable Energy Support* (July 2013)

Critiques also challenged that the Appellate Body's benefit analysis deviated from the counterfactual methodology articulated in previous cases.[307] In *EC – Large Civilian Aircraft*, the Appellate Body held that to determine whether a benefit exists requires a determination of "whether the financial contribution places the recipient in a more advantageous position than would have been the case but for the financial contribution."[308] In the *Canada – FIT* case, the Appellate Body shelved the counterfactual method and instead included the government's choice of energy supply-mix in identifying the relevant market. Critiques argued that the Appellate Body was creating a de facto exception for government intervention, which had no textual basis under the SCM Agreement.[309] To allow for supply-side analysis in determining the relevant market would open the floodgate for states to engage in industrial policies.[310]

Climate change is closely associated with the fast growth of international trade, yet the international climate regime under the UNFCCC and the international trade regime under the WTO have involved in parallel and are largely disengaged from each other.[311] The WTO has been under great pressure to make its trade rules more compatible with climate policies. The relationship between national policies to promote renewable energy, and WTO rules on subsidies and unfair trade practices in

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https://www.iisd.org/pdf/2013/wto_members_renewable_energy_support.pdf (last visited Jun. 12, 2015).

[307] Pal, *supra* note 284, at 133.

[308] Appellate Body Report, *Canada – Civilian Aircraft*, *supra* note 30, para. 149.

[309] Cosbey & Mavroidis, *supra* note 38, 27.

[310] *Id*. 26.

[311] Kati Kulovesi, Real or Imagined Controversies? A Climate Law Perspective on the Growing Links Between the International Trade and Climate Change Regimes, 6(1) TRADE LAW & DEVELOPMENT 57 (2014).

particular, seems to be emerging as the most acute testing ground for the compatibility between international trade rules and climate policies.[312]

The Appellate Body's approach in the present case seems to be responsive to the general critiques that desirable subsidies are not properly distinguished from undesirable subsidies under the WTO. It is important to clarify which subsides are allowed and which are not under the WTO regime so that the legal certainty will encourage national governments to further their climate mitigation efforts.[313] Not all types of subsidies are destructive; subsidies designed for public goods can serve to correct market failures. The traditional energy market has been pervasively distorted by subsidies provided to producers and consumers of fossil fuels.[314] It is also a market in which existing networks for the distribution and retailing of energy have been largely designed to favor fossil fuels. In addition, subsidies schemes and tax systems have often led to a reduction in incentives for energy efficiency in that they relieve users from paying the full marginal cost of an additional unit of energy.[315] In this context, subsidies to renewable energy can correct the distortion and reflect positive environmental externalities that would not otherwise be reflected.[316]

The Appellate Body's benefit analysis in *Canada - FIT* analysis can be understood as establishing an exemption/shelter to the SCM Agreement for

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[312] Kulovesi, *supra* note 311*,* 59.
[313] *See* Robert Howse, Climate mitigation subsidies and the WTO legal framework: a policy analysis (May, 2010) https://www.iisd.org/pdf/2009/bali_2_copenhagen_subsidies_legal.pdf 1(last visited Jun. 12, 2015).
[314] Chris Wold et als., *Leveraging Climate Change Benefits through the World Trade Organization: Are Fossil Fuel Subsidies Actionable*, 43 GEORGETOWN JOURNAL OF INTERNATIONAL LAW 635 (2011).
[315] Howse, *supra* note 313, at 6.
[316] *Id.* at 5.

renewable energy subsides.[317] In completing the benefit analysis, the Appellate Body decided to take into account non-market components such as "positive externalities", "negative externalities", and government's definition of energy-mix, all of which were characteristic of environmental policies. [318] This was distinct from prior jurisprudence of benefit analysis that exclusively focused on market substitutability, an approach that was criticized as "myopic".[319] The Appellate Body's differentiation between the role of government in the creation of a market, on the one hand, and its role of intervention in an existing market, represented an important development in the subsidy jurisprudence that explicitly recognized the pressing needs in climate mitigation. The judicially created shelter defers to the sovereign defendants' unilateral climate subsidies except outright discriminatory measures such as domestic content requirements. In a time when national governments fail to reach a consensus on how to collectively address the challenge of climate change, the WTO jurisprudence on renewable energy that puts the restrictive subsidy analysis aside should be a boon to national efforts in developing renewable energy and mitigating climate change.

[317] Avidan & Jha, *supra* note 283, 265.
[318] *Id*.
[319] Alan O. Sykes, *The Questionable Case for Subsidies Regulation: A Comparative Perspective*, 2.2 JOURNAL OF LEGAL ANALYSIS 23 (2010).

10. India – Solar Cells (2016)

Trade watchers predicted that the Appellate Body's legal reasoning in *Canada – FIT* provided a shelter for green industrial policies from WTO's restrictive scrutiny of subsidies under the SCM Agreement. While it takes more trade disputes to verify the validity of this claim, countries have already responded to the *Canada – FIT* jurisprudence by dropping subsidy claims in their complaints. The *India – Solar Cells*[320] was the second case where the WTO addressed the issue of renewable energy subsidies. United States, the complaint, included SCM claims in its first consultation request, but withdrew the SCM claims in their second consultation request after the *Canada-FIT* Appellate ruling came out.

A. Facts and Proceedings

India - Solar Cells closely resembled *Canada - FIT* in that both involved domestic content requirement for renewable energy products. The Indian government in 2010 launched the Jawaharlal Nehru National Solar Mission under which the government entered into long term power purchase agreements with solar power developers at guaranteed rates. The program imposed domestic content requirement on the solar power developers mandating the use of Indian produced solar cells and solar modules.[321] The United States, worried that the domestic content requirements would undermine its export of solar products to India, challenged the domestic content requirement measures to the WTO DSB on the grounds that the measures

[320] The chapter does not address the interpretation in India-Solar Cells. India did not invoke environmental reasons to justify its violation of the GATT and the TRIMs, which disqualifies it as an "environmental dispute" under the working definition made in Chapter Two,
[321] India - Solar Cells, AB Report, WT/DS456/AB/R, paras. 1.1 - 1.5.

violated the national treatment obligations under the GATT and the TRIMs. India in its defense invoked the government procurement derogation under the GATT Article III.8, the general exception for short supply under the GATT Article XX(j), and the general exception for necessary compliance with laws and regulations under the GATT Article XX(d). The Panel rejected all of India's justifications and determined that India's domestic content requirements breached its WTO obligations. India appealed to the Appellate Body.

Among the three justifications invoked by India, the one under Article XX(d) directly addressed the tension between climate mitigation and free trade obligations. India argued that the domestic content requirement ensured compliance with domestic and international instruments both of which qualify as "laws and regulations" within the meaning of Article XX(d) of the GATT 1994. Specifically, India contended that the domestic content requirement should be excused from the GATT obligations because they were necessary for the compliance with obligations embodied in the following instrument:

(1) domestically, India's Electricity Act, the National Electricity Policy, the National Electricity Plan, the National Action Plan on Climate Change

(2) internationally, the preamble of the WTO Agreement, the UNFCCC, the RIO Declaration on Environment and Development (1992), and UN Resolution A/RES/66/288 (2012) (Rio+20 Document: "the Future We Want").[322]

B. The Appellate Body's Interpretation

[322] *Id.* at para. 5.96.

Article XX(d) of the GATT 1994 sets out a general exception for measures that are:

> necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks and copyrights, and the prevention of deceptive practices;

The Appellate Body's interpretation focused on elaborating the legal standard for determining what constitutes "laws or regulations" under Article XX(d). The interpretation started with examining the ordinary meaning of the terms "laws" and "regulations" as recorded in the dictionary.[323] It then examined the textual context of the illustrative list,[324] finding that it reinforced the notion that "laws or regulations" referred to rules and principles that formed part of the domestic legal system. This understanding was further confirmed by reference to the Appellate Body's interpretation of Article XX(d) in *Mexico - Taxes on Soft Drinks*.[325] In ascertaining whether a rule fell within the scope of "laws or regulations" for the purpose of Article XX(d), the Appellate Body turned to the immediate context "to secure compliance"[326]

[323] *Id.* at para. 5.106.
[324] *Id.* at para. 5.106.
[325] *Id.* at para. 5.106
[326] *Id.* at para. 5.108.

and the case law in *Mexico - Taxes on Soft Drink*[327] to arrive at the broad interpretation that "laws or regulations" were not limited to legally enforceable instruments that were accompanied by penalties and sanctions.[328] This broad scope is qualified by the degree of normativity and specificity of the instrument at issue,[329] which is assessed on a case-by-case basis.[330]

The Appellate Body applied this legal standard to India's claim that the renewable energy subsidy program's domestic content requirements were necessary for the compliance with four domestic environmental instruments that should qualify as "laws or regulations" for the Article XX(d) exception. It found that the National Electricity Policy, the National Electricity Plan and the National Action Plan on Climate Change did not pass the specificity test,[331] and that India's Electricity Act failed the normativity test.[332]

The Appellate Body then turned to examine if non-WTO international obligations could justify domestic regulations under Article XX(d). The Appellate Body reasoned that international agreements can qualify as part of the domestic legal system of a Member for the purpose of Article XX(d) in "*at least*" two ways: to be incorporated into a domestic legal system; to have direct effect on the domestic system.[333] Implementation of international instruments by the government alone

[327] *Id.* at para. 5.108.
[328] *Id.* at para. 5.109.
[329] *Id.* at para. 5.121.
[330] *Id.* at para. 5.114.
[331] *Id.* at para. 5.121.
[332] *Id.* at para. 5.136.
[333] *Id.* at para. 5.140.

does not satisfy the "direct effect" test,[334] the meaning of which the Appellate Body did not clarify. International agreements are subject to the same legal standard of normativity and specificity as the domestic instruments for the Article XX(d) analysis.[335] Applying this standard of review to the four international instruments in India's claim, the Appellate Body found that they did not qualify as "laws or regulations" under Article XX(d).

Based on the above analysis, the Appellate Body held that the domestic content requirement could not be provisionally justified under the GATT Article XX(d) exception because none of the domestic or international instruments identified by India qualified as "laws or regulations" within the scope of Article XX(d).[336] No Article XX chapeau analysis was carried out on the grounds of judicial economy.

C. Assessing the Interpretive Arguments

The India - Solar decision offered some new insights on the relevance of international environmental agreements to trade obligations under the WTO. The Appellate Body interpreted the scope of "laws or regulations" broadly to open the possibility for international environmental agreements to be covered under Article XX(d), provided they "form part of the domestic legal system of a Member" or have "direct effect" on the domestic system.[337] This represented an environment friendly move in the WTO jurisprudence on Article XX(d) that used to exclude non-WTO international

[334] *Id.* at para. 5.148.
[335] *Id.* at para. 5.141.
[336] *Id.* at para. 5.151.
[337] *Id.* at para. 5.140.

obligations from its scope.[338] However, this move was only a "timid step"[339]: the seemingly expansive interpretation on the scope of Article XX(d) was severely curbed by the "specificity" and "normativity" requirement. The Appellate Body avoided delineating the exact meaning of the test but simply announced a convenient "case-by-case" approach.

What was also left unspecified was the meaning of "direct effect" or "form part of the domestic legal system." The Appellate Body held that domestic implementation of international rules alone was not sufficient to demonstrate "direct effect".[340] Here, the Appellate Body did not differentiate between international instruments that were legally binding on member states and soft international law that had no binding power on member states. The distinction between the two types of instruments is essential as it is inherently related to the specificity and normativity test for international instruments. The unreasonably high threshold the Appellate Body set for international instruments seemed to render the principle of *pacta sunt servanda* void.

Unlike *Canada - FIT*, *India - Solar* may not be characterized as a climate friendly decision. India - Solar was unprecedented in the sense that the UNFCCC was for the first time invoked to justify non-compliance with trade obligation. By laying out rigorous requirements for international environmental agreements to fall

[338] Marianna Karttunen & Michael O. Moore, *India–Solar Cells: Trade Rules, Climate Policy, and Sustainable Development Goals*, 17 WORLD TRADE REVIEW 215, 233 (2018).
[339] *Ibid.*
[340] Sherzod Shadikhodjaev, *India—Certain Measures Relating to Solar Cells and Solar Modules*, 111 AMERICAN JOURNAL OF INTERNATIONAL LAW 139, 146 (2017).

within the scope of the Article XX(d) exceptions, the Appellate Body avoided the thorny interpretive task of adjudicating the parallel obligations under the UNFCCC and the WTO agreements. Compared to *Canada - FIT*, the first WTO dispute over renewable energy subsidies, *India - Solar* broke little new ground in developing a climate-friendly interpretation building on the case law of *Canada - FIT*. The *Canada - FIT* decision affirmatively sheltered the renewable energy subsidies from the restrictive subsidy regime under the SCM agreement. The *India - Solar* decision merely acknowledged the remote possibility of justifying domestic regulations with the UNFCCC, which did not apply in the present case. Notably, the Appellate Body's interpretation on "laws or regulations" carried out within the VCLT perimeter yielded an expansive scope of the term. The application of the VCLT rule was limited to the term's ordinary meaning and its context and a brief acknowledgement of the WTO agreement's object of promoting sustainable development. The specificity and normativity test that the Appellate Body introduced to narrow down the broad scope was not derived from application of the VCLT rule but informed by its previous decisions.

VI. Interpretive Arguments and Regulatory Space at the ICSID Arbitral Tribunals

1. Foreign Investment and Environmental Protection: An Overview

Historical Context

To better understand the backlash against the international law of foreign investment, it is essential to step into the colonial history that gave rise to the modern system of investment law. Standard discourse takes the 1959 German-Pakistan investment treaty as the beginning of modern investment legal regime and conceptualizes investment treaties as a credible commitment to foreign investors against host government's uncompensated expropriation.[1] Such an ahistorical understanding is incomplete and greatly discounts investment law's colonial origins.

The rules on foreign investment protection originated as a tool to protect the interests of capital-exporting states and their nationals and to achieve commercial and political hegemony during the seventeenth to early twentieth centuries.[2] The ostensibly universal rules of foreign investment protection were based on the European conceptions of property rights and was imposed on the rest of world through diplomatic pressure, military intervention and outright territorial

[1] Jennifer L. Tobin & Susan Rose-Ackerman, *When BITs have some bite: The Political-Economic Environment for Bilateral Investment Treaties*, 6 THE REVIEW OF INTERNATIONAL ORGANIZATIONS 1 (2011).
[2] KATE MILES, THE ORIGINS OF INTERNATIONAL INVESTMENT LAW: EMPIRE, ENVIRONMENT AND THE SAFEGUARDING OF CAPITAL 19, 31 (2013).

annexation.[3] During this period, the interests of private investors were aligned with those of the home states. The close relationship between the colonial home state and trading companies such as the English East India Company created new international legal norm that granted right to non-sovereign actors under international law.[4] In European colonies, investment disputes were largely settled through the imperial legal system. Between the United States and Latin America countries, investment dispute settlement took a different form as the capital-exporting United States insisted that the dispute settlement be internationalized and handled by external tribunals.[5] The U.S. developed a number of legal instruments to institutionalize its dominance on the Americas, among which were the friendship, commerce and navigation treaties that became the forerunners of modern investment treaties.[6] Foreign investment protection law became an integral part of colonial expansion.[7] Latin American countries countered by putting forward what came to be known as the Calvo Doctrine[8] to impede foreign investors from invoking diplomatic protection to settle investment dispute. The Calvo doctrine embodied two

[3] KATE MILES, *supra* note 2, at 23.
[4] KATE MILES, *supra* note 2, at 33-34.
[5] M. SORNARAJAH, RESISTANCE AND CHANGE IN THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 32-35 (2015).
[6] Other instruments include unequal treaties, which conferred one-sided rights to the dominant party; and concession agreements, which are concluded between a host state and an individual or company and granted the individual the right to engage in an activity that had previously been the sole realm of the state. See KATE MILES, *supra* note 2, at 25-31.
[7] Antony Anghie, *The Evolution of International Law: Colonial and postcolonial realities*, 27 THIRD WORLD QUARTERLY 739 (2006). Brett Bowden, *The Colonial Origins of International Law - European Expansion and the Classical Standard of Civilization*, 7 JOURNAL OF THE HISTORY OF INTERNATIONAL LAW 1 (2005).
[8] The doctrine was named after the nineteenth century Argentinian jurist and diplomat Carlos Calvo.

propositions: states should not intervene in another state's affairs; foreign investors are placed on same equal footing with nationals and can only seek redress for grievances from local courts. The Calvo Doctrine was dismissed by the international law community dominated by Europeans and Americans. The nascent stage of investment protection law featured maximum extraction of natural resources in the non-European territories for the benefit of foreign investors and their colonial home country. Regulatory space in the non-European territories was diminished to a minimal level.[9]

With the decolonization of African and Asian states in the second half of the twentieth century, foreign investment law entered a new phase that featured polarized stances and searing conflicts between developing countries and developed countries. While newly independent states of Africa and Asia sought to regain exclusive national control over foreign investment, the former colonial powers tried to maintain their advantages by passing over judicial procedure in the host states and internationalizing investment disputes. During this period, the focus of conflict was for the newly independent countries to regain control over natural resources, many of which used to be subject to foreign-controlled concessions, to nationalize the property of the foreign investors and the extent of the compensation paid for the nationalization. [10] Efforts to conclude a multilateral investment agreement comparable to the GATT remained largely futile. Contestation among states over negotiating a multilateral investment agreement gave way to conclusion of bilateral

[9] KATE MILES, *supra* note 2, at 42-44.
[10] M. SORNARAJAH, *supra* note 5, at 35. KATE MILES, *supra* note 2, at 78.

investment treaties ("BITs"). During this time, the investor-state dispute settlement ("ISDS") was introduced to displace the traditional state-state dispute settlement and removed the need for investors to rely on diplomatic protection of their home state. Under the new ISDS form, investors are granted direct standing under the newly established multilateral institution of International Centre for Settlement of Investment Disputes ("ICSID").[11] ICSID did not prescribe standards of treatment to be applied in the dispute. The applicable law was set in the investment agreements. Between the year of 1959 when the first BIT was signed to the end of the Cold War in 1990, many of BITs did not contain compulsory arbitration or any compliance mechanism.[12] This period of international investment law featured a strong emphasis on sovereignty, with developing countries passed the Declaration of Permanent Sovereignty over Natural Resources at the United Nations General Assembly in 1962. Regulatory autonomy on environmental issues as part of sovereignty was preserved in the nascent investment regime.

Changing political and economic conditions after the dissolution of the Soviet Union ushered in the era of neoliberalism during which time the investment law regime expanded unprecedentedly. The prevailing discourse about investment law shifted from decolonization and "permanent sovereignty over natural resources" to shielding foreign investors from host state's political risks. Not only did the number of investment agreements increase exponentially from less than 400 in 1989 to almost 3000 in 2018; new investment treaties provide for stronger protection for foreign

[11] KATE MILES, *supra* note 2, at 87.
[12] M. SORNARAJAH, *supra* note 5, at 38-39.

investors and contain prior consent of states to be subject to arbitration for disputes arising from regulatory decisions at the unilateral initiation of the foreign investor. As a result, investor-state arbitration rose from almost non-existent in the 1990s to 855 in 2017.[13] The expanding network of investment agreements and growing number of cases since the 1990s must be appraised in the light of its historical origins. The current investment law system was initially a mere exception to the principle of permanent sovereignty over natural resources that grew out of proportion since the 1990s at the expense of regulatory autonomy on environmental issues.[14]

The booming investment agreements and investment arbitration has been facing rising backlashes shortly after they took off. The critiques against investment regime mainly focus on the ISDS and the adverse arbitration rulings against states in disputes that involve the host state's regulatory measures. Procedurally, investment law regime suffers from legitimacy deficit on issues including pervasive confidentiality of the ISDS,[15] the unrepresentative pool of arbitrators who are predominantly "male, pale, and stale",[16] ethical issues over arbitrators' double hatting of acting sequentially or even simultaneously as arbitrators and legal

[13] UNCTAD, Investor-State Dispute Settlement: Review of Developments in 2017.
[14] Jorge E. Viñuales, *Foreign Direct Investment: International Investment Law and Natural Resource Governance*, in RESEARCH HANDBOOK ON INTERNATIONAL LAW AND NATURAL RESOURCES 26, 27 (Elisa Morgera & Kati Kulovesi eds., 2015).
[15] Emilie M. Hafner-Burton & David G. Victor, *Secrecy in International Investment Arbitration: An Empirical Analysis*, 7 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 161 (2016). Emilie M. Hafner-Burton et al., *Against Secrecy: The Social Cost of International Dispute Settlement*, 42 YALE JOURNAL OF INTERNATIONAL LAW 279 (2017).
[16] http://arbitrationblog.kluwerarbitration.com/2014/04/10/icca-2014-does-male-pale-and-stale-threaten-the-legitimacy-of-international-arbitration-perhaps-but-theres-no-clear-path-to-change/

counsels,[17] tribunals' reluctance in admitting amicus curiae briefs,[18] intimidating arbitration cost,[19] etc. Substantively, critics contend that the ISDS favors investors and unduly constrains states' regulatory space. Investment arbitration has been conceptualized as part of the "global administrative law," as investment agreements set standards for state conduct vis-à-vis foreign investors and authorize foreign investors to file claims against the host state's regulatory decisions in disputes arising from the state's public authority.[20] With investment arbitration taking a private mode of adjudication modelled after commercial arbitration, investment arbitration is being criticized as privatizing public values in favor of foreign investors' profits. Critics on the ISDS also decry arbitrators' broad interpretation of treaty obligations[21] and rigid views on contracts and property rights that take an insensitive attitude to non-economic public values.[22] The tarnished reputation of the ISDS has led the

[17] Malcolm Langford et al., *The Revolving Door in International Investment Arbitration*, 20 JOURNAL OF INTERNATIONAL ECONOMIC LAW 301 (2017).
[18] Eugenia Levine, *Amicus Curiae in International Investment Arbitration: The Implications of an Increase in Third-Party Participation*, 29 BERKELEY JOURNAL OF INTERNATIONAL LAW 200 (2011).
[19] Susan D. Franck, *Rationalizing Costs in Investment Treaty Arbitration*, 88 WASHINGTON UNIVERSITY LAW REVIEW 769 (2010).
[20] Gus Van Harten & Martin Loughlin, *Investment Treaty Arbitration as a Species of Global Administrative Law*, 17 EUROPEAN JOURNAL OF INTERNATIONAL LAW 121 (2006). Benedict Kingsbury & Stephan W. Schill, *Investor-State Arbitration as Governance: Fair and Equitable Treatment, Proportionality and the Emerging Global Administrative Law*, SSRN ELECTRONIC JOURNAL (2009), http://www.ssrn.com/abstract=1466980 (last visited Feb 21, 2019)
[21] William Burke-White, The Argentine Financial Crisis: State Liability under BITs and the Legitimacy of the ICSID System, 407.
[22] Louis T. Wells, *Backlash to Investment Arbitration: Three Causes*, in THE BACKLASH AGAINST INVESTMENT ARBITRATION: PERCEPTIONS AND REALITY 341, 342-345 (Michael Weibel et al. eds., 2010).

International Court of Justice, the most reputable international court in the world, to prohibit its sitting judges from serving as ISDS arbitrators.[23]

Beyond the controversy around the ISDS, debates over whether BITs live up to their promise of increasing foreign investment have never ceased.[24] Disenchanted with the shrinking regulatory space under the ISDS, a number of states renegotiated or terminated their investment agreements and withdrew from the ICSID Convention. As Bolivia, Ecuador and Venezuela successively denounced the ICSID Convention, it was commented that the Calvo Doctrine was revived in Latin America.[25] The initial eagerness with which developing countries participated in investment law regime has largely been replaced by careful calibration in renegotiating investment agreements, as developing countries learn about the legal and political consequences of investment arbitration from the expanding pool of ISDS cases.[26]

Legal Instruments Governing ISDS

For investor-state arbitration adjudicated pursuant to the ICSID rules, the applicable legal instruments include the ICSID Convention and the ICSID Arbitration Rules

[23] Speech by H.E. Mr. Abdulqawi A. Yusuf, President of the International Court of Justice, On the Occasion of the Seventy-Third Session Of The United Nations General Assembly, https://www.icj-cij.org/files/press-releases/0/000-20181025-PRE-02-00-EN.pdf.
[24] Karl P. Sauvant & Lisa E. Sachs, THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES, AND INVESTMENT FLOWS (Oxford University Press) (2009).
[25] Wenhua Shan, *Is Calvo Dead?*, 55 THE AMERICAN JOURNAL OF COMPARATIVE LAW 123 (2007).
[26] Yoram Z. Haftel & Alexander Thompson, *When Do States Renegotiate Investment Agreements? The Impact of Arbitration*, 13 THE REVIEW OF INTERNATIONAL ORGANIZATIONS 25 (2018).

that largely govern procedural and jurisdictional issue, and the investment agreement between the investor's home state and the host state that provide for substantive investment protection. The ICSID Convention and the ICSID Arbitration Rules cover issues including requests for arbitration, constitution of the tribunal, nationality of the investor as it pertains to jurisdiction, annulment of the award, and enforcement of the award. Unlike disputes adjudicated under the UNCITRAL rules on *ad hoc* basis, ICSID disputes are managed by the knowledgeable ICSID Secretariat as part of the World Bank. Bilateral investment agreements and the investment chapters in free trade agreements are typically negotiated following a Model BIT template. They resemble each other in structure but vary in exact wording and scope of coverage.

BITs typically begin with a preamble stating the goals of the treaty that invariably include promoting investment between the two countries. Some investment agreements also incorporate right to regulate and sustainable development in their preambles. Compare the Preambles from Greece-Azerbaijan BIT (2004) and Japan-Kenya BIT (2016): the former is exclusively about promoting investment without referring to any public policy values; the latter recognizes that investment protection shall not derogate the state's right to regulate its own environment.

Greece-Azerbaijan BIT Preamble:

Desiring to intensify their economic co-operation to the mutual benefit of both States on a long term basis,

Having as their objective to create favourable conditions for investments by investors of either Contracting Party in the territory of the other Contracting Party,

Recognising that the promotion and protection of investments, on the basis of this Agreement will stimulate the initiative in this field,

Japan-Kenya BIT Preamble:

Desiring to further promote investment in order to strengthen the economic relationship between Japan and the Republic of Kenya;

Intending to further create stable, equitable, favourable and transparent conditions for greater investment by investors of a Contracting Party in the Area of the other Contracting Party;

Recognising the growing importance of the progressive liberalisation of investment for stimulating initiative of investors and for promoting prosperity in the Contracting Parties;

Recognising that these objectives can be achieved without relaxing health, safety and environmental measures of general application;

Investment agreements usually adopt a broad asset-based definition of investment that covers moveable and immovable property, interests in companies, contractual rights, intellectual property rights, and business concession. Many investment agreements also require that investment is being made in accordance with the laws and regulations of the host state. Both natural persons and corporation entities can bring claims under investment treaties against the host state. Compared to trade law, the non-discrimination standard of national treatment does not feature prominently in investment-environment disputes. Most-Favoured-Nations ("MFN"), another standard of treatment that trade law and investment law have in common, has been a popular tool of treaty shopping.[27] The interpretation of MFN clause in investment agreements has generated a great deal of controversy over whether MFN clauses can be used to import dispute settlement provisions substantive standards of treatment from another treaty. For investment-environment disputes, the interpretation of the MFN clause carries significant consequences for determining the scope and extent of states' obligations concerning treatment of foreign investors.[28]

While practically all trade-environment disputes are initiated over the single cause of action of national treatment violation, there are two common causes of action

[27] Alejandro Faya Rodriguez, *The Most-Favored-Nation Clause in International Investment Agreements: A Tool for Treaty Shopping?*, 25 JOURNAL OF INTERNATIONAL ARBITRATION 89 (2008).
[28] Simon Batifort & J. Benton Heath, *The New Debate on the Interpretation of MFN Clauses in Investment Treaties: Putting the Brakes on Multilateralization*, 111 AMERICAN JOURNAL OF INTERNATIONAL LAW 873 (2017). Zachary Douglas, *The MFN Clause in Investment Arbitration: Treaty Interpretation Off the Rails*, 2 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 97 (2011).

in investment-environment disputes: unlawful expropriation and breach of the fair and equitable treatment standard ("FET" standard). The expropriation clause usually covers both direct and indirect expropriation. Many arbitral tribunals take the position that that expropriation is allowed if the taking is done for the public interest, not arbitrary or discriminatory, takes place in accordance with domestic legal procedure, and is accompanied by compensation.[29]

The practice and the case law of expropriation have gone through considerable changes. The early years of international investment law focused on outright taking of foreign property by the state during nationalization and decolonization movements. Today, the predominant form of expropriation is indirect expropriation,[30] including measures such as disproportionate tax increases, unjustified interference with the management of the investment, revocation or denial of government permits or licenses, etc.[31] The focus of the jurisprudence on expropriation has accordingly shifted from the amount of compensation to what amounts to an unlawful indirect taking. Early investment arbitral awards prescribed a "sole effect" test that uses the effect of state measure on investors as the only factor in determining whether an indirect expropriation has taken place.[32] The intent of the state in adopting the regulatory measure was irrelevant under this line of cases. In their defense, states usually resort

[29] RUDOLF DOLZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW 99-100 (2nd ed., 2012).
[30] JESWALD W. SALACUSE, THE LAW OF INVESTMENT TREATIES 325 (2nd ed., 2015).
[31] Id. at 328-334.
[32] Martins Paparinskis, *Regulatory Expropriation and Sustainable Development*, *in* SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 299, 305-312 (Marie-Claire Cordonier Segger et al. eds., 2011).

to the doctrine of non-compensable regulatory takings[33] known as police powers.[34] Recent case law tends to take into consideration the purpose of the regulatory measure in determining whether an indirect expropriation has occurred, and applies a proportionality analysis in evaluating the relationship between the regulatory purpose and the effect on the investor.[35] The jurisprudence on indirect expropriation under investment law is in a state of flux, which mirrors the unsettled jurisprudence on indirect expropriation and police powers in domestic law.[36]

FET based claims have replaced expropriation as the most popular litigation strategy in ISDS.[37] It is the most frequently invoked standard in ISDS, the violation

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[33] M SORNARAJAH, *supra* note 5, at 244-45.

[34] The doctrine of police powers as it is applied in international investment law is generally believed to be rooted in the constitutional law of the United States. The American Law Institute in Restatement of the Law (Third) – Foreign Relations Law of the United States defines police power as follows: A state is not responsible for loss of property or for other economic disadvantage resulting from bona fide general taxation, regulation, forfeiture for crime, or other action of the kind that is commonly accepted as within the police power of states, if it not discriminatory. See JORGE E. VIÑUALES, FOREIGN INVESTMENT AND THE ENVIRONMENT IN INTERNATIONAL LAW 367-369 (2012). The legal status of this doctrine under international law is still up for debate. See Catherine Titi, *Police Powers Doctrine and International Investment Law*, in GENERAL PRINCIPLES OF LAW AND INTERNATIONAL INVESTMENT ARBITRATION 323 (Andrea Gattini et al. eds., 2018).

[35] Martins Paparinskis, *supra* note 32, at 312-320, discusses the emergence of the purpose approach in determining expropriation. The proportionality analysis has been described as overly stringent. See Caroline Henckels, *Indirect Expropriation and the Right to Regulate: Revisiting Proportionality Analysis and the Standard of Review in Investor-State Arbitration*, 15 JOURNAL OF INTERNATIONAL ECONOMIC LAW 223 (2012).

[36] L. Yves Fortier & Stephen L. Drymer, *Indirect Expropriation in the Law of International Investment: I Know It When I See It, or Caveat Investor*, 19 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 293, 326 (2004).

[37] UNCTAD, 'Investor-State Dispute Settlement: Review of Developments in 2016' (IIA Issues Note, May 2017) 4; M. Sornarajah, Resistance and Change in the International Law on Foreign Investment, (CUP 2015) 298; UNCTAD, Fair and Equitable Treatment: UNCTAD Series on Issues in International Investment Agreements II, 10; Christopher Schreuer, 'Fair and Equitable Treatment' in Anne K Hoffmann (ed) Protection of Foreign Investments through Modern Treaty Arbitration – Diversity and Harmonisation (Association Suisse de l'Arbitrage 2010) 135.

of which is the basis of the majority of successful claims in international arbitration.[38] Most FET treatment provisions do not define what constitutes fair and equitable treatment. The FET standard is intended to "fill gaps which may be left by the more specific standards,"[39] and may offer "redress where the facts do not support a claim for expropriation." [40] Increasingly, the prominence of the FET standard in investment-environment disputes has come under mounting criticism that its broad construction unduly favors investors and threatens to restrict legitimate regulatory autonomy of the host countries.[41] Arbitral tribunals have overwhelmingly interpreted the FET standard as the obligation to satisfy or not to frustrate the investor's legitimate expectations in the host state's legal framework, although neither the customary international law nor the investment agreement itself provides any basis for doing so.[42] This invention by arbitrators reflects the "credible commitment" theme of contemporary investment law and acquired the status of established jurisprudence

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[38] MARTINS PAPARINSKIS, THE INTERNATIONAL MINIMUM STANDARD AND FAIR AND EQUITABLE TREATMENT 4 (2013). DOLZER AND SCHREUER, *supra* note 29, at 131. See also UNCTAD, Fair and Equitable Treatment.

[39] DOLZER AND SCHREUER, *supra* note 29, at 132.

[40] *Ibid.* The significance of the FET standard as a guarantee for the investors is further elevated by the recognition of regulatory expropriation and the increasing difficulty in finding of expropriation. See SORNARAJAH, *supra* note 5, at 246.

[41] See Gus Van Harten & Dayna Nadine Scott, *Investment Treaties and the Internal Vetting of Regulatory Proposals: A Case Study from Canada*, 7 JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT 92 (2016). Markus Wagner, *Regulatory Space in International Trade Law and International Investment Law*, 36 UNIVERSITY OF PENNSYLVANIA JOURNAL OF INTERNATIONAL LAW 1 (2014). MILES, *supra* note 2, at 168-173.

[42] Josef Ostřanský, An Exercise in Equivocation: A Critique of Legitimate Expectations As a General Principle of Law Under the Fair and Equitable Treatment Standard, in General Principles of Law and International Investment Arbitration 344 (Andrea et al. eds., 2018). Christopher Campbell, *House of Cards: The Relevance of Legitimate Expectations under Fair and Equitable Treatment Provisions in Investment Treaty Law*, 30 JOURNAL OF INTERNATIONAL ARBITRATION 361 (2013).

by referring to previous arbitral awards which have endorsed such an idea.[43] In determining whether the investor's expectation is legitimate and reasonable, arbitral tribunals do not always consider the overall circumstances surrounding the investment but rely largely on the subjective expectations of the investors. The evolving understanding of environmental risks is usually not duly considered by arbitral tribunals. This interpretation of the FET obligation subjects state's regulatory measures to an exacting standard that unquestionably favors the investors.

A small but growing number of investment agreements now include general exceptions clauses to provide greater regulatory flexibility. The majority of bilateral investment treaties still do not include public policy exceptions to investment obligations.[44] General public policy exceptions of investment agreements are usually modelled after Article XX of the General Agreement on Tariffs and Trade ("GATT") and Article XIV of the General Agreement on Trade in Services ("GATS"). The exceptions clauses are intended to exempt host states from treaty liability for good faith regulatory measures taken to pursue public interest objectives such as environmental protection and public health. As most investment arbitral awards were rendered under treaties that do not have public policy exceptions, tribunals have

[43] Michele Potestà, *Legitimate Expectations in Investment Treaty Law: Understanding the Roots and the Limits of a Controversial Concept*, 28 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 88 (2013).
[44] Out of 2963 BITs only 103 BITs have a general public policy exception. Wolfgang Alschner & Kun Hui, MISSING IN ACTION: GENERAL PUBLIC POLICY EXCEPTIONS IN INVESTMENT TREATIES (2018), https://papers.ssrn.com/abstract=3237053 (last visited Feb 18, 2019), 3.

not got plenty opportunities to elucidate their interpretation of the exceptions clauses. Many interpretive questions remain unanswered.[45]

The turbulent history of foreign investment protection and the heterogeneous, evolving investment agreement network governing investment law departs significantly from the stable legal framework of the WTO under which trade-environment disputes are adjudicated. Yet arbitrators face the similar challenge of balancing environmental concerns and investment protection. The inadequate guidance provided in the openly worded investment treaties highlights the critical role interpretation plays in settling the disputes. The rest of the chapter focuses on the interpretation of expropriation and the FET standard by arbitral tribunals established under the ICSID Arbitral Rule in adjudicating investment-environment disputes.

2. CDSE v. Costa Rica (2000)

A. Facts and Background

Compañia del Desarrollo de Santa Elena, S.A. v. Republic of Costa Rica ("*CDSE v. Costa Rica*") is the rare case in which the foreign investor and the state agreed to bring their dispute to international arbitration in the absence of any investment agreements or contractual arrangement on arbitration. As one of the pioneer

[45] For discussion about the interpretive challenges of the public policy exceptions clauses, see Suzanne A. Spears, *The Quest for Policy Space in a New Generation of International Investment Agreements*, 13 JOURNAL OF INTERNATIONAL ECONOMIC LAW 1037, 1062-1064 (2010). Wolfgang Alschner & Kun Hui, *supra* note 44, at 10-13.

environmental disputes under investment law, it set out a controversial formula of compensation for expropriation, which future tribunals in adjudicating environmental disputes frequently referred to as an important precedent.

The claimant, Compañia del Desarrollo de Santa Elena ("CDSE"), was a Costa Rican company owned by U.S. citizens. In 1970, CDSE purchased a piece of property named "Santa Elena" bordering Costa Rica's Santa Rosa National Park at the price of US$ 395,000 to develop it as a tourist resort. Santa Elena covers more than 40,000 acres of land[46] that features rich biological diversity in a highly diverse geological environment.[47] Santa Elena, which formed part of the Area de Conservación Guanacaste, was inscribed as a World Heritage Site by UNESCO in 1999 for its importance as a key natural habitat for endangered or rare plant and animal species.[48]

In 1978, the Costa Rican government determined that the original size of the Santa Rosa National Park was insufficient to maintain its ecological vitality and should be expanded to include the adjoining Santa Elena property for conservationist purposes.[49] It issued an expropriation decree preventing Santa Elena from developing the property and offered to pay CDSE US$ 1.9 million in compensation.

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[46] Charles Brower & Jarrod Wong, *General Valuation Principles: The Case of Santa Elena (2005)*, in INTERNATIONAL INVESTMENT LAW AND ARBITRATION: LEADING CASES FROM THE ICSID, NAFTA, BILATERAL TREATIES AND CUSTOMARY INTERNATIONAL LAW 748 (Todd Weiler ed., 2005). One of the authors, Charles Brower, served as the counsel to Costa Rica in the *Santa Elena* case at the ICSID.

[47] Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica, ICSID Case No. ARB/96/1, Final Award, para. 15 (Feb. 17, 2000) [hereinafter *CDSE*]. The property includes over 30 kilometers of Pacific coastline and lots of rivers, springs, valleys, forests and mountains.

[48] https://whc.unesco.org/en/list/928

[49] The 1978 Decree listed preservation of feline animals and protection of breeding sites for sea turtles as its intended objective. See *CDSE*, 18.

The claimant did not object the expropriation itself but contested that the compensation should be raised to a much higher figure of US$ 39 million.

The arbitral proceeding was initiated under the shadow of extraordinary political circumstances. As no investment agreements between the U.S. and Costa Rica existed at the time of the dispute that would allow the American investor to commence international arbitration against Costa Rica, CDSE initiated domestic proceedings against the government of Costa Rica that yielded no result in its favor. Frustrated with the unsuccessful domestic proceedings, CDSE sought to have the U.S. government to intervene on its behalf. The US government invoked the "Helms Amendment" that prohibits U.S. foreign aids to any countries that expropriates U.S. citizen's property without adequate compensation, and blocked a US$ 170 million loan to Costa Rica by the Inter-American Development Bank unless Costa Rica submitted the dispute to international arbitration at the ICSID.[50] To further complicate the situation, a number of newspapers reported that the Central Intelligence Agency built a clandestine airport in Santa Elena to supply the rebel "Contras" in their fight against the Nicaraguan Government in the 1980s.[51]

B. Evaluating the Interpretive Arguments

The gist of the *CDSE v. Costa Rica* Tribunal concerned how to determine the amount of compensation.[52] The claimant CDSE favored applying the Costa Rican law under which compensation was calculated as at the date on which the compensation was

[50] Brower and Wong, *supra* note 46, at note.17.
[51] *Id.* at 754-756.
[52] *CDSE*, para. 54.

paid. The defendant Costa Rica favored applying international law under which compensation was calculated as at the date of expropriation. The *CDSE* Tribunal turned to Article 42(1) of the ICSID Convention for guidance. It agreed with Costa Rica and decided that international law governed the dispute because doing otherwise would defeat the purpose of the purpose of the ICSID Convention.[53]

Having decided that international law prevailed, the Tribunal turned to the issue of valuation. Costa Rica contended that the expropriation was justified by its obligation under a number of domestic environmental statutes[54] and multiple international environmental agreements on preserving biodiversity,[55] which should factor into the valuation of compensation. The Tribunal flatly rejected Costa Rica's environmental justification. The Tribunal famously held that:

> "…the purpose of protecting the environment for which the property was taken does not alter the legal character of the taking for which adequate compensation must be paid. The international source of the obligation to protect environment makes no difference."[56]

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[53] *CDSE*, at para. 64.
[54] Brower and Wong, *supra* note 46, at 763.
[55] *Id.* at 763-764. The listed international environmental agreements include the Western Hemisphere Convention, the Convention Concerning the Protection of the World Cultural and Natural Heritage, the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, the 1992 Convention on Biological Diversity and the Central American Regional Convention for the Management and Conservation of the Natural Forest Ecosystems.
[56] *CDSE*, at para. 71.

> "Expropriatory environmental measures - no matter how laudable and beneficial to society as a whole - are, in this respect, similar to any other expropriatory measures."[57]

The Tribunal went on to hold that the claimant was entitled to an award of compound interest on the value of the Property, calculated from the date of the expropriation.[58] The Tribunal mainly relied on selective case law[59] and academic writing to support its decision,[60] although it conceded that the majority of case law awarded simple interest rather than compound interest.[61] Applying the compound interest, the Tribunal determined that the compensation due shall be US$ 16 million, a figure somewhat in the middle of the parties' claims.

The legal reasoning by the *CDSE* Tribunal did not feature any application of the customary international law on interpretation as codified in the VCLT. Although the non-application might be excused for the absence of an investment treaty between the United States and Costa Rica, the adjudicators were nevertheless bound to apply the customary international law on interpretation in adjudicating a case which claims were based on customary international law. Article 31(3)(c) VCLT would have obliged the *CDSE* Tribunal to assess the multiple international environmental agreements on biodiversity cited by Costa Rica as they constitute relevant rules of international

[57] *Id. at* para. 72.
[58] *Id. at* para. 96.
[59] *Id. at* paras. 98-100.
[60] *Id. at* paras. 101-102.
[61] *Id. at* para. 97.

law for the Tribunal's interpretation. Strikingly, the *CDSE* Tribunal did not even mention those international environmental agreements in its analysis.[62] The *CDSE* jurisprudence that environmental purpose was irrelevant in determining compensation for expropriation subordinated environmental interests to protection of foreign investors. In a sense, the *CDSE* Tribunal's unapologetically pro-investor ruling became a harbinger for the enduring controversy over the jurisprudence of investment-environment dispute. This stands in stark contrast with the WTO's debut environment dispute *US-Reformulated Gas* that showed some deference to the state's environmental regulation through a restrictive interpretation of Article XX(g).

3. MTD v. Chile (2004)

A. Facts and Background

MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile ("MTD v. Chile")[63] is renowned for the Tribunal's interpretation of the FET standard. It is the first published arbitral award in which the MFN clause was used to import a more favorable substantive standard from a third-party BIT. The tribunal's interpretation of the FET standard in the context of inter-agency conflict is particularly relevant for environmental disputes under investment law.

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[62] Katharina Berner, *Reconciling Investment Protection and Sustainable Development: A Plea for an Interpretive U-Turn*, in SHIFTING PARADIGMS IN INTERNATIONAL INVESTMENT LAW: MORE BALANCED, LESS ISOLATED, INCREASINGLY DIVERSIFIED 177, 198 (Steffen Hindelang & Markus Krajewski eds., 2016).

[63] *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile*, ICSID Case No. ARB/01/7, Award (May 25, 2004) [hereinafter *MTD*].

Malaysian investor MTD Equity sought to develop a real estate project near Santiago. Under the Chilean land regulations, the proposed site of the complex needed to be upzoned from agricultural to urban use,[64] which decision was subject to approval from a number of government agencies. The Chilean Foreign Investment Commission ("FIC") approved MTD's investment proposal in 1997.[65] After receiving the FIC's approval and assurance by a few other agencies and officials that the rezoning would be approved, MTD purchased the land to be developed for around US$ 17 million and applied for the zoning changes.[66] The application, however, was rejected by the Chilean Ministry of Housing and Urban Development on environmental and urban planning grounds.[67] In particular, the Ministry of Housing and Urban Development questioned the adequacy of the project's environmental impact statement.[68] MTD brought an arbitral action against the Chilean government under the Malaysia-Chile BIT at the ICSID in 1999. The tribunal found that the inconsistency of action between the FIC and the Ministry of Housing and Urban Development amounted to violation of the FET standard and awarded the investor US$5,871,322,42 plus compound interest.[69]

B. Evaluating the Interpretive Arguments

The main thrust of this dispute concerns whether the Chilean government's rejecting of rezoning application violated the FET obligation. Since the Chile-Malaysia BIT

[64] *MTD*, para. 45.
[65] *MTD*, para. 53.
[66] *MTD*, paras. 55, 66.
[67] *MTD*, para. 148.
[68] *MTD*, para. 81.
[69] *MTD*, para. 253.

under which this arbitral proceeding was initiated does not provide explicit guarantee for granting permits subsequent to approval of an investment, MTD turned to the Chile-Croatia BIT that offered such guarantee. Under the Chile-Croatia BIT, it is provided that a contracting party shall grant the necessary permits in accordance with its laws and regulations when it has admitted an investment in its territory. The tribunal agreed with the investor in invoking the MFN clause in the Chile-Malaysia BIT to import a more favorable FET standard from Chile-Denmark BIT and Chile-Croatia BIT. The MFN clause in the Chile-Malaysia BIT requires Chile provides that:

> Investment made by investors of either Contracting Party in the territory of the other Contracting Party shall receive treatment which is fair and equitable, and not less favourable than that accorded to investments made by investors of any third State.

In a single paragraph, the tribunal provided a flawed reasoning for the broad application of the MFN clause, the interpretive process of which markedly deviated from the VCLT rule. The Tribunal skipped the inquiries into the ordinary meaning of the terms in the Chile-Malaysia BIT MFN clause. It then took the object and purpose as self-evident and did not explain how it established the object and purpose of the BIT. Without even citing the Chile-Malaysia BIT Preamble or any treaty clause from which the object and purpose of the treaty would be derived, the Tribunal went

straight to argue that the FET standard had to be "interpreted in the manner most conducive to the fulfillment of the BIT's objectives of protecting and promoting conditions favourable to investments."[70] For the Tribunal, it was "in consonance" with these objectives to include the more favorable protections available under the Denmark and Croatia BITs.[71] The Tribunal then briefly engaged in *a contrario* reasoning[72] based on "the general nature of the MFN clause."[73] As explained in Chapter 4, *a contrario* arguments about bilateral agreements are not permissible under Article 31(3)(c) of the VCLT because treaties concluded with third states do not qualify as "applicable in the relations between the parties." Neither did the tribunal provide any evidence to validate its presumption about the general nature of the MFN clause. On the contrary, there was a significant degree of variation in the language of MFN clauses among investment agreements.[74] The diversity of language among the MFN clauses demands strong caution against importing substantive standards of treatment such as FET from third-party treaties.

Having established that the more favorable FET standard from third-party BITs applied to the present dispute, the Tribunal proceeded to clarify the meaning of the FET standard. The Tribunal reversed the usual order of interpretation by first referring to expert opinions[75] and case law under the NAFTA,[76] both of which

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[70] *MTD*, para. 104.
[71] *Ibid.*
[72] *Ibid.* "*A contrario sensu*, other matters that can be construed to be part of the fair and equitable treatment of investors would be covered by the clause."
[73] *Ibid.*
[74] Simon Batifort & J. Benton Heath, *supra* note 28, at 878-882.
[75] *MTD*, para. 109.
[76] *MTD*, para. 110.

espoused a broad construction of the standard. It then engaged in a superficial VCLT interpretation by deriving the terms' ordinary meaning from the Concise Oxford Dictionary of Current English.[77] Among the four listed dictionary definitions, the tribunal did not indicate which one was to be used as if they were synonymous. It next referred to the BIT Preamble to establish the object and purpose of BIT as promoting investment[78] and reasoned that the FET standard should be interpreted to further that goal. Lastly, the Tribunal cited the arbitral award of *TECMED v. Mexico* which interpreted the FET standard as the obligation of not to "affect the investor's basic expectations."[79] Other than relying on the *TECMED* Award handed down under a different treaty between different parties, the Tribunal provided no further support for arriving at the "legitimate expectation" interpretation of the FET standard.

In clarifying the content of legitimate expectation, the *MTD* Tribunal went a step further than the *TECMED* Tribunal in insisting that state under international law is a unitary "monolith"[80] and has an obligation to act coherently and to prevent inter-agency inconsistency.[81] No explanation was provided about such an exacting standard. Later in the Award, the Tribunal acknowledged that MTD had been negligent in assessing the zoning requirements for its real-estate project,[82] but

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[77] *MTD*, para. 113.
[78] *Ibid.*
[79] *MTD*, para. 114.
[80] *MTD*, para. 166.
[81] *MTD*, para. 163. "What the Tribunal emphasizes here is the inconsistency of action between two arms of the same Government vis-à-vis the same investor even when the legal framework of the country provides for a mechanism to coordinate."
[82] *MTD*, para. 176, 177, 178.

insisted that the investor's lack of due diligence was independent from the state's obligation of ensuring consistent decision making among agencies. Due diligence in learning about the permitting procedure under different agencies implies the possibility of conflicting decision making at different agencies. The Tribunal essentially contradicted itself on the two issues. The *MTD* Tribunal's broad construction of the FET standard served as a telling example of how an interpretation that did not apply the VCLT rule can unduly constrain the state's regulatory sovereignty.

4. Marion Unglaube and Reinhard Unglaube v. Costa Rica (2012)

A. Facts and Background

Similar to the *CDSE* dispute, the *Unglaube* dispute concerned the Costa Rican government's expropriation of a beach resort project for the environmental purpose of creating a national park for endangered species. The resort in question was near critical nesting sites for the endangered Leatherback sea turtles on the picturesque Playa Grande peninsula on Costa Rica's Pacific coast.[83] The claimants Marion Unglaube and her husband Reinhard Unglaube were German nationals who purchased several plots of land on the peninsula with the goal of developing an eco-tourism resort in 1987. The land involved two contiguous areas referred to as Phase I Property and Phase II Property.[84] Due to the drastic decline in leatherback

[83] Marion Unglaube v. Republic of Costa Rica, ICSID Case No. ARB/08/1, Award, (May 16 2012) [hereinafter *Unglaube*] para. 37.
[84] *Unglaube*, para. 40.

populations, the Costa Rican government in 1991 announced in a decree that it intended to acquire private properties on the Playa Grande peninsula to create a national park to protect the endangered leatherback sea turtles.[85] The Unglaubes continued construction despite the decree. [86] The decree was later elevated to law in 1995 that defined the boundaries of the national park within which part of the claimants' properties were located.[87] In the eight years after the legislations passed, the claimants continued to develop their resort project.[88] In 2003, the Costa Rican government moved to expropriate a strip of beach land owned by the Unglaubes to create the national park pursuant to the 1995 law[89] and suspended permits for future development of the resort. The Costa Rican government provided no compensation to the Unglaubes for the expropriation.[90] In 2008, the Unglaubes brought an arbitral proceeding against Costa Rica under the German-Costa Rica Bilateral Investment Treaty under the ICSID Arbitral Rule, claiming unlawful expropriation and breach of the FET obligation.[91]

The parties held widely divergent views of how the investment dispute had materialized. The Unglaubes alleged that they entered into an agreement with the Costa Rican government in 1992 to donate a portion of their properties to the Costa Rican government[92] in exchange for the government's approval of the resort project

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[85] *Unglaube*, para. 48.
[86] *Unglaube*, paras. 51, 53, 55.
[87] *Unglaube*, para. 56, 57.
[88] *Unglaube*, para. 58.
[89] *Unglaube*, paras. 60, 61.
[90] *Unglaube*, para. 58.
[91] The Unglaubes first registered the arbitration separately but later agreed to consolidate their claims.
[92] *Unglaube*, para. 49.

and guarantee of issuance of permits.[93] The Costa Rican government rebuked that the 1992 agreement offered no guarantee for approval and permits and promised no such immunity from future *bona fide* laws and regulations.[94] The Tribunal sided with the Costa Rican government on this issue.[95] Meanwhile, environmental activists sought to halt the Unglaubes' development by bringing *amparo* petitions to the the Supreme Court of Costa Rica to bar the Ministry of Environment and Energy from issuing any permits that may affect the leatherback turtles.[96] The Supreme Court agreed with the activists' petitions, ordering the government to withdraw existing permits and to suspend future permits regarding the Phase II Project.[97] The parties also vehemently disagreed over the scope of expropriation. The Unglaubes insisted that the expropriated property comprised of a 75-meter by 100-meter strip of land within Phase II Project in the national park, the remaining Phase II Project, as well as the Phase I Project as the court-ordered permit suspension made Phase I properties unsellable.[98] The Costa Rican government insisted that it only sought to expropriate the 75-meter strip and did not object to compensation.[99] Regarding the remaining Phase II and Phase I Project, the Costa Rican government contended that the permit freeze was a *bona fide* exercise of its regulatory authority under its

[93] *Unglaube*, paras. 64., 68.
[94] *Unglaube*, paras. 117, 119.
[95] *Unglaube*, paras. 180, 184.
[96] *Unglaube*, paras. 66, 78.
[97] *Unglaube*, paras. 79, 80.
[98] *Unglaube*, paras. 61, 83.
[99] *Unglaube*, para. 137.

constitution and the Inter-American Convention for the Protection and Conservation of Sea Turtles[100] and therefore did not constitute *de facto* or indirect expropriation.[101]

The Tribunal rejected all of the Unglaubes' claims except expropriation of the 75-meter strip of land. The Costa Rican government was ordered to pay the Unglaubes a total of US$4,065,900.33 as compensation for the expropriated strip of land.[102]

B. Evaluating the Interpretive Arguments

The expropriation clause of the German-Costa Rica BIT provides that:

> Investments by nationals or companies of either Contracting Party shall not be expropriated, nationalized or subjected to any other measure the effects of which would be tantamount to expropriation or nationalization in the territory of the other Contracting Party except for the public benefit and against compensation. These measures must be authorized by statute. Such compensation shall be equivalent to the value of the expropriated investment immediately before the date on which the actual or threatened expropriation, nationalization or similar measure has become publicly known. . . Provision shall have been made in an appropriate manner at or prior to the time of expropriation, nationalization or comparable measure for the determination

[100] *Unglaube*, para. 103.
[101] *Unglaube*, paras. 139, 144, 145.
[102] *Unglaube*, para. 332.

and payment of compensation shall be subject to review by due process of law.[103]

The Tribunal first consulted academic writing to tease out the elements that must be cumulatively fulfilled to establish lawful expropriation: public purpose, non-discriminatory, due process, prompt and adequate compensation. [104] Under this test, the tribunal found the expropriation to be unlawful for it only fulfilled the first three process requirements but failed the last payment one.[105] The tribunal then cited the text[106] and the textual context[107] of the BIT's expropriation clause, both of which require timely compensation for expropriation. The Tribunal next referred to the *CDSE* reasoning that the regulation's environmental purpose was irrelevant in determining the legality of expropriation. [108] Under this test, the Costa Rican government's *bona fide*, non-discriminative expropriation for preserving endangered species was irrelevant for finding of expropriation of the 75-meter strip of land. With regards to the remaining Phase II, the Tribunal rejected the expropriation claim on the ground that the claimant failed to discharge the burden of proof.[109] As to the

[103] German-Costa Rica BIT Article 4(2). The official version of the treaty is in Germany and Spanish. The English version was quoted from the Award at para. 194.
[104] *Unglaube*, paras. 203, 204. The tribunal cited Dolzer and Schreuer's treatise Principles of International investment Law.
[105] *Unglaube*, para. 205.
[106] *Unglaube*, para. 206.
[107] *Unglaube*, para. 207.
[108] *Unglaube*, paras. 217, 218.
[109] *Unglaube*, para. 229.

adjacent Phase I Project, the tribunal also ruled that the it was not subjected to expropriation within the meaning of the BIT.[110]

As in *CDSE*, the *Unglaube* Tribunal flatly ignored Costa Rica's claim that the Inter-American Convention for the Protection and Conservation of Sea Turtles obligated Costa Rica to protect natural resources and was a relevant rule of international law for the Tribunal's interpretation on expropriation. Article 31(3)(c) VCLT directs interpreters to take into account any relevant rules of international law applicable to the relations between the parties. The mandatory character of Article 31(3)(c) is clearly indicated by "shall" in the chapeau of Article 31(3). The Tribunal merely mentioned the Convention in passing[111] and dismissed its relevance without any explanation. As reviewed in Chapter 4, not all international agreements are relevant for the purpose of interpretation. The international agreement to be taken into account under Article 31(3)(c) must apply to all parties to the dispute as well. As Germany is not a party to the Inter-American Convention for the Protection and Conservation of Sea Turtles, the Tribunal could have pointed out that the Convention was not admissible under Article 31(3)(c) and dismissed its relevance on a legitimate base.[112] Instead, the *Unglaube* Tribunal simply skipped the mandatory analysis at the risk of diminishing the interpretation's legitimacy.

Turning to the FET claim, the Tribunal merely cited the FET clause of the German-Costa Rica BIT[113] and noted the object and purpose of the BIT as evinced in

[110] *Unglaube*, para. 234.
[111] *Unglaube*, para. 103.
[112] Katharina Berner, 193, 199.
[113] *Unglaube*, para. 240.

its Preamble was "to create favorable conditions for investment."[114] The Tribunal made no effort to investigate the ordinary meaning of "fair" and "equitable" in their context and jumped to the conclusion that the FET standard should be interpreted to incorporate no arbitrary or discriminatory treatment, due process, and legitimate expectation not to be disturbed.[115] The tribunal then cited a number of arbitral awards,[116] a separate opinion of ICJ decision,[117] two treatises on state liability,[118] and the U.S. Restatement of the Law of Foreign Relations[119] to delimit the contour of the FET standard. By citing a few more arbitral awards, the tribunal concluded that the FET standard also included stability in the legal and business framework in the host state.[120] This broad construction of the FET standard did not help the claimants to win the claims, however. The tribunal showed deference to the authority of the Costa Rica Supreme Court in deciding the boundaries of the national park[121] and suspending the permitting process as requested in the *amparo* petitions initiated by environmental activists.[122]

Although the Tribunal declared from the outset of its analysis that its interpretation would be bounded by the rule embodied in the VCLT Article 31(1),[123] the Tribunal's actual use of the VCLT rule was sloppy and incomplete. In interpreting

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[114] *Unglaube*, para. 241.
[115] *Unglaube*, para. 242.
[116] *Unglaube*, paras. 244-246.
[117] *Unglaube*, para. 247.
[118] *Unglaube*, para. 247.
[119] *Unglaube*, para. 246.
[120] *Unglaube*, paras. 248, 249.
[121] *Unglaube*, para. 253.
[122] *Unglaube*, para. 259.
[123] *Unglaube*, para. 31.

expropriation, the Tribunal essentially relied on one treatise and one particular arbitral award and skipped the obligatory analysis into the relevant rule of international law. On the FET standard, the Tribunal carried out a brief and superficial examination of the BIT's object and relied on academic writings and case law for its interpretation. On neither expropriation nor FET standard did the Tribunal articulate the authority of referring to these sources in interpreting treaties. As explained in Chapter 4, scholarly writings and judicial decisions are not covered in the VCLT interpretive rule. Recourse made to one case and one academic commentary in exclusion of cases and research holding different views makes this interpretive means a suspect of *ex post* reasoning. By the time the Unglaube Tribunal issued its Award, there were plenty of scholarly writings and case law which held the opposite view that *bona fide* expropriation for public interests as non-compensable.[124] The approach cited by the Tribunal in determining lawful expropriation was one of the many voices and barely claimed an orthodox status.[125] This broad construction of expropriation and FET standard was generated by interpretive means not provided for in the VCLT rule and can hardly be described as environmentally sensitive.

5. Quiborax v. Bolivia (2015)

A. Facts and Background

[124] For a detailed review of the literature and the incoherent case law on this topic, see Steven R. Ratner, *Compensation for Expropriations in a World of Investment Treaties: Beyond the Lawful/Unlawful Distinction*, 111 AMERICAN JOURNAL OF INTERNATIONAL LAW 7 (2017).
[125] Sornorajah argues that non-compensation for legitimate regulatory expropriation does not render the expropriation unlawful under international investment law. SORNORAJAH, *supra* note 5, AT 406–10.

Located in the Bolivian region of Potosi, Salar de Uyuni is the world's largest salt flat. Not only does the flat contain the world's largest deposit of lithium, the essential element for batteries, and significant reserve of boron and potassium.[126] It is also considered as one of the world's most magnificent vistas. Rain turns the salt flat to a perfect mirror reflection of the sky. At night time, the landscape is transformed into a starscape.

The Bolivian government since 1965 has designated Salar de Uyuni as a fiscal reserve the mining operations of which could only be authorized by law.[127] In 1998, Bolivia passed law (known as *Ley Valda*) to reduce the perimeter of the fiscal reserve, making part of Salar de Uyuni open to mining concession request.[128] As a result, forty three mining concessions were requested out of which seven were granted to the Bolivian company *Compañia Minera Río Grande Sur S.A.* ("Rio Grande") owned by former Bolivian Ministry of Mining officials David Moscoso and Álvaro Ugalde.[129] Local communities protested against the granting of these concessions and petitioned to reverse *Ley Valda* in 2001 and 2003.[130]

The dispute, *Quiborax S.A. and Non Metallic Minerals S.A. v. Plurinational State of Bolivia* ("*Quiborax v. Bolivia*"), arose out of Chilean corporation's effort to exploit mineral resources in Salar de Yuni.[131] Following the *Ley Valda*, Rio Grande

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[126] Lawrence Wright, *Lithium Dreams*, THE NEW YORKER, Mar. 15, 2010, https://www.newyorker.com/magazine/2010/03/22/lithium-dreams (last visited Feb 28, 2019).
[127] Award, para.7
[128] para. 10.
[129] para. 12.
[130] para. 12.
[131] Quiborax S.A. and Non Metallic Minerals S.A. v Plurinational State of Bolivia, ICSID Case No ARB/06/2, Award (Sep.16, 2015) [hereinafter *Quiborax*].

partnered with the Chilean mining company Quiborax S.A. ("Quiborax") to exploit minerals in Salar de Yuni and together obtained four additional mining concessions in 2003.[132] In 2003, Bolivia passed a new law that abrogated the 1998 *Ley Valda*, restored the perimeter of the fiscal reserve of the Salar de Uyuni,[133] and annulled the mining concessions granted under the *Ley Valda*.[134] The new law also authorized the Bolivian government to audit the concessions granted while the *Ley Valda* was in force and to annul the concessions if violation was found.[135] During the audit, the Ministry of Sustainable Development first determined that Quiborax did not obtain required environmental documentation, [136] but later granted Quiborax the environmental license for one of its eleven concessions.[137] The granting decision triggered strong protests from grassroot activists that escalated to hunger strikes and road blockade.[138] The popular reaction led the Ministry of Sustainable Development to revoke all of Quiborax's mining concessions in a Revocation Decree[139] and banned the export of boron and ulexite.[140] In 2004, Quiborax initiated an arbitral proceeding against the Bolivian government at the ICSID under the Bolivia-Chile Bilateral Investment Treaty ("Bolivia-Chile BIT"), claiming illegal expropriation and violation of the FET obligation and seeking compensation of US$146,848,827, plus compound

[132] *Quiborax*, paras. 18, 19.
[133] *Quiborax*, para. 20.
[134] *Quiborax*, para. 20.
[135] *Quiborax*, para. 21.
[136] *Quiborax*, para. 25.
[137] *Quiborax*, para. 26.
[138] *Quiborax*, para. 26.
[139] *Quiborax*, para. 27.
[140] *Quiborax*, para. 28.

interest.[141] The Tribunal ruled in favor of the investor on both expropriation and FET claims and awarded damages of US$48,619,578 with compound interest.[142]

Three years after Quiborax commenced the arbitration, Bolivia became the first country to withdraw from the ICSID Convention. Bolivia's decision to denounce the ICSID Convention was made amid aggressive nationalization of natural resources as politics in Bolivia took a definitely indigenous-populist turn since the mid-2000s.[143] Bolivia remains the poorest country in South America[144] despite its wealth in natural resources. To many Bolivians, foreign corporations investing in Bolivia's mining sector exploits the natural resources to the detriment of the general interest of the Bolivian people, wields disproportionate influence over the economy, and exacerbates inequality and social division. [145] The resistance Quiborax encountered in Bolivia was not unique; it was part of the widespread social protest against privatization and neoliberal economic policies, which has become a defining feature of Bolivian politics since the early 2000s.[146]

B. Evaluating the Interpretive Arguments

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[141] *Quiborax*, para. 73.
[142] *Quiborax*, para. 626.
[143] Diego Andreucci, *Populism, Hegemony, and the Politics of Natural Resource Extraction in Evo Morales's Bolivia*, 50 ANTIPODE 825 (2018).
[144] The GDP per capita of Bolivia was US$3,393 in 2017, ranking the last among all South American countries. Data can be accessed at https://data.worldbank.org/.
[145] Alexander S. Farr, *Bolivia, Batteries, and Bureaucracy Comments & Casenotes*, 17 LAW AND BUSINESS REVIEW OF THE AMERICAS 319 (2011).
[146] Thomas Perreault, *From the Guerra Del Agua to the Guerra Del Gas: Resource Governance, Neoliberalism and Popular Protest in Bolivia*, 38 ANTIPODE 150 (2006). Benjamin Kohl, *Stabilizing Neoliberalism in Bolivia: Popular Participation and Privatization*, 21 POLITICAL GEOGRAPHY 449 (2002).

In finding that the claimants were unlawfully expropriated of their investment, the Tribunal exclusively relied on the evolving case law in spelling out its test for lawful expropriation. The Tribunal first applied the three-prong test in *Burlington v. Ecuador* to the present dispute and focused on the third part whether the measure was justified by the police powers doctrine.[147] The Tribunal upheld the police power doctrine that legitimate regulatory measure does not require compensation and cited the American Law institute's Restatement of the Foreign Relations Law[148] and a few case law to support this position.[149] In determining whether the Revocation Decree was a legitimate exercise of police power, the Tribunal cited the test articulated in *Metalclad v. Mexico* that emphasized the due process aspect of the regulation.[150] It was concluded that the revocation did not comply with the standards of due process under either international law or Bolivian law.[151] The Tribunal also found that the revocation discriminated against Quiborax as other mining companies in like circumstances did not have their concessions revoked.[152] This discrimination finding and the finding of lack of due process under Bolivian law were later used to bolster the Tribunal's conclusion that the Bolivian government breached its obligation to ensure FET treatment.[153] Although the Tribunal nodded to Bolivia's "sovereign right to determine what is in the national and public interest" and its legitimate interest

[147] *Quiborax*, para. 200.
[148] *Quiborax*, para. 202.
[149] *Quiborax*, paras. 204, 205, 206.
[150] *Quiborax*, para. 207.
[151] *Quiborax*, paras. 221-227.
[152] *Quiborax*, paras. 247, 254.
[153] *Quiborax*, para. 292.

in preserving the Salar de Uyuni,[154] the sovereign right to preserve natural resources was nevertheless found to be irrelevant in the tribunal's finding on BIT breach.

The driving analytical force in the *Quiborax* award was the application of case law from other tribunals.[155] The decision examined each legal issue by citing and analyzing prior arbitral decisions instead of relying on the mandatory interpretive means provided in the VCLT rule. It essentially replaced the VCLT rule on interpretation with a *de facto* doctrine of precedent. Doctrinally, there is no express textual basis in Article 31 and 32 VCLT to treat case law as a legitimate interpretive means. Relying on previous decisions in interpretation also puts the tribunal's legitimacy at risk. In the decentralized system of investment arbitration where case law is notoriously inconsistent and no appellate mechanism rectifies flawed legal reasoning, excessive reliance on case law risks advancing the arbitrator's preferred norm over the competing norm under the façade of enhancing consistency and predictability, where the value of pursuing consistency depends on what is being made consistent.[156] Excessive reliance may lead to a "closed-circuit feedback loop between tribunals and academics, unconstrained by the discipline of the treaty parties' practice or expectations."[157] Dissatisfied with this skewed balance of power in interpretation, a few states exited the ISDS regime. The credibility of investment

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[154] *Quiborax*, para. 245.
[155] Julian Davis Mortenson, *Quiborax SA et al v Plurinational State of BoliviaThe Uneasy Role of Precedent in Defining Investment*, 28 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 254, 258 (2013).
[156] Thomas Schultz, *Against Consistency in Investment Arbitration*, in THE FOUNDATIONS OF INTERNATIONAL INVESTMENT LAW: BRINGING THEORY INTO PRACTICE 297, 298 (Zachary Douglas et al. eds., 2014).
[157] Anthea Roberts, *Power and Persuasion in Investment Treaty Interpretation: The Dual Role of States*, 104 THE AMERICAN JOURNAL OF INTERNATIONAL LAW 179, 190 (2010).

arbitration was severely undermined. However, this is not to suggest that arbitral tribunals should refrain from consulting previous awards at all. Tribunals may rely on previous arbitral awards to confirm the interpretation based on application of the VCLT rule. They must not rely on previous awards before they have applied the VCLT rule.[158]

The *Quiborax* decision was also notable for conducting the factual analysis isolated from the broad socio-economic context. Privatization creates winners and losers. In the case of mining concessions, privatization often offers windfalls to a small number of politically connected and exacerbates socioeconomic inequality.[159] In finding the concession revocation constituted discrimination against the Chilean investors, the Tribunal mainly relied on anecdotal media reports to support its reasoning that the revocation was driven by historical animosity between Bolivia and Chile.[160] What was conspicuously passed over was Bolivians' strong opposition to privatizing the Salar de Uyuni as a general matter. Such a framing essentially elevated the sovereign state's obligation to foreign investors over state's democratic accountability to its own citizens.

6. Al Tamimi v. Oman (2015)

A. Facts and Background

[158] Katharina Berner, 201.
[159] David McKenzie et al., *The Distributive Impact of Privatization in Latin America: Evidence from Four Countries*, 3 ECONOMÍA 161 (2003). Nancy Birdsall & John Nellis, *Winners and Losers: Assessing the Distributional Impact of Privatization*, 31 WORLD DEVELOPMENT 1617 (2003).
[160] *Quiborax*, paras. 250-254.

Adel A Hamidi Al Tamimi v. Sultanate of Oman ("*Al Tamimi v. Oman*") arose out of the investment of U.S. businessman Al Tamimi in the development and operation of a limestone quarry in the Jebel Wasa mountain range in Oman. In 2006, the claimant made his investment through two of his investment vehicles, Emrock and SFOH, which respectively signed a leasing agreement with the Omani state-owned enterprise Oman Mining Company LLC ("OMCO").[161] The leasing agreements provided for termination by either party in case of substantial breach of environmental, mining and crushing laws of Oman.[162] In 2007, the Omani Ministry of Environment and Climate Affairs issued an initial environmental permit for the Jebel Wasa quarry and reminded the claimant not to operate outside the quarry's parameters.[163] Soon after the claimant commenced quarrying operations, the Ministry of Environment and Climate Affairs issued a number of complains against the claimant for conducting operations outside the permitted boundaries, operating without the necessary permits, blasting outside the concession area and uprooting trees.[164] The claimant did not correct the operation accordingly. OMCA consequently declared in 2008 that its agreement with SFOH was null due to the latter's failure to register the company in Oman[165] and formally terminated its agreement with Emrock in 2009.[166] In 2009, the Royal Oman Police arrested Al Tamimi at the request

[161] Adel A. Hamadi Al Tamimi v. Sultanate of Oman, ICSID Case No. ARB/11/33, (Nov. 3, 2015) [Hereinafter *Al Tamimi*], paras. 49, 54.
[162] *Al Tamimi*, para. 55.
[163] *Al Tamimi*, para. 62.
[164] *Al Tamimi*, paras. 63, 64, 74.
[165] *Al Tamimi*, para. 63.
[166] *Al Tamimi*, para. 63.

of the Ministry of Environment and Climate Change for his alleged breach of environmental laws.[167] Production at the Jebel Wasa quarry site permanently ceased accordingly.

In 2011, Mr. Al Tamimi registered an arbitration against Oman at the ICSID, claiming unlawful indirect expropriation and breach of FET standard by the Omani government among others and US$560 million for compensation.[168] Unlike the BIT-based cases discussed in this chapter, this arbitration was initiated under the investment provisions of the US-Oman Free Trade Agreement ("US-Oman FTA"). The Tribunal rejected all of the claimant's claims and ordered the claimant to reimburse 75% of Oman's arbitration expense.[169]

B. Evaluating the Interpretive Arguments

The Tribunal substantially narrowed the claimant's case through jurisdictional findings that restricted the gateway to analysis on the merits. The Tribunal first narrowed the claimant's case by ruling that it did not have jurisdiction over the lease agreement between SFOH and OMCO. A textual examination into the treaty language [170] and reference to the codified international law governing retrospectivity[171] established that the FTA was not intended to apply retrospectively. While OMCO formally terminated its agreement with Emrock after the FTA entered

[167] *Al Tamimi*, para. 76.
[168] *Al Tamimi*, para. 39.
[169] *Al Tamimi*, para. 480.
[170] *Al Tamimi*, para. 283.
[171] *Al Tamimi*, FN 604. The Tribunal cited Article 28 of the Vienna Convention on the Law of Treaties. "Unless a different intention appears from the treaty or is otherwise established, its provisions do not bind a party in relation to any act or fact which took place or any situation which ceased to exist before the date of the entry into force of the treaty with respect to that party."

into force, its termination decision with regards to SFOH was made before the FTA entered into force. The Tribunal accordingly found that only the Emrock agreement fell within the Tribunal's jurisdiction.[172] The jurisdiction was further curtailed by the attribution analysis concerning the OMCO's status as a state-owned enterprise. The Tribunal rejected Al Tamimi's claim that OMCO's termination of leasing agreements was attributable to Oman, citing the provision in the FTA which provided that the conduct of a state-owned enterprise was attributable to the state only if the enterprise exercised regulatory, administrative, or other governmental authority delegated to it by the state. The US-Oman FTA's attribution provision exemplifies the recent development in treaty practice that states are circumventing liability under investment agreements by restricting the scope of attribution of SOEs' conducts.[173]

The claim for creeping indirect expropriation was easily dismissed. The Tribunal disagreed with the claimant's framing of creeping expropriation and instead determined that expropriation was essentially about the termination of the lease agreements. [174] As previously decided in the jurisdictional analysis, OMCO's termination of agreement was not attributable to Omani government. The claimant's lost investment was not caused by sovereign expropriation but by a contractual dispute governed by private contract law rather than the public international law of

[172] *Al Tamimi*, para. 312.
[173] Carlo de Stefano, *Adel A Hamadi Al Tamimi v Sultanate of Oman: Attributing to Sovereigns the Conduct of State-Owned Enterprises: Towards Circumvention of the Accountability of States under International Investment Law*, 32 ICSID REVIEW - FOREIGN INVESTMENT LAW JOURNAL 267 (2017).
[174] *Al Tamimi*, para. 351.

the US-Oman FTA.[175] The expropriation claim must fail. This finding was built on textual examination of the expropriation clause and contextual argument that referred to the FTA's Annexes which prescribed interpretive guidance adjudicators must follow.[176]

Turning to the FET claim, the Tribunal first established that the FET clause must be interpreted in its context of Annex 10-A to the FTA and the environmental chapter in the FTA. The former provides that the content of the FET standard shall be found in customary international law.[177] The latter qualifies investment protection by providing that no element in the treaty shall be construed to thwart environmental protection effort.[178] In a rare manner, the Tribunal examined arbitral awards that came to different conclusions on this issue. It was then argued that the plain text of the FET clause and of the Annex 10-A made it clear that the state parties intended to impose only the minimum standard of treatment under customary international law.[179] Specifically, the Tribunal dismissed the interpretive relevance of arbitral awards adjudicated under different treaties.[180] The Tribunal then looked into the environmental provisions of the US-Oman FTA that expressly provided forceful defense for environmental regulation.[181] The Tribunal also reasoned that the FET clause shall be interpreted to give effect to the objective of environmental protection

[175] *Al Tamimi*, para. 353.
[176] *Al Tamimi*, para. 346. Annex 10-B provides that non-discriminatory regulatory actions to protect public welfare objectives, including environmental protection, do not constitute indirect expropriation.
[177] *Al Tamimi*, para. 378.
[178] *Al Tamimi*, para. 379.
[179] *Al Tamimi*, para. 386.
[180] *Al Tamimi*, para. 386.
[181] *Al Tamimi*, paras. 387-389.

as provided in the FTA's preamble. [182] These interpretive arguments confirmed the Tribunal's finding that the FET standard should be constructed as imposing a high bar for breach, which requires more than inconsistency or inadequacy in the state's regulation.[183] Rather, a breach of the FET standard requires willful or otherwise egregious failure to protect foreign investors.[184] This interpretation stood in stark contrast with the *Metalclad* Tribunal's ruling (discussed later in this Chapter) that state is under a stringent obligation to ensure consistency and total transparency for foreign investors.

The *Al Tamimi* decision afforded significant deference to state's environmental regulation in its construction of treaty terms. Unlike most of the arbitral awards examined in this Chapter, the *Al Tamimi* decision featured little reliance on previous decisions. Although no mention was made to the VCLT rule on interpretation, the interpretive process embodied the "single combined operation" approach codified in Article 31 VCLT. The vigorous application of the VCLT rule was to a large extent credited to the explicit interpretive guidance prescribed in the treaty and the treaty's environmental chapters that restrained the arbitrator's discretion in disregarding environmental interests.

[182] *Al Tamimi*, footnote 777.
[183] *Al Tamimi*, paras. 382, 390.
[184] *Al Tamimi*, para. 390.

7. Selective Environmental Disputes under UNCITRAL and ICSID AF Rules

Metalclad v. Mexico (2000)[185]

A. Facts and Background

The California based company Metalclad purchased a Mexican subsidiary named Confinamiento Tecnico de Residuos Industriales, S.A. de C.V. ("COTERIN") in 1993. COTERIN since 1990 had received authorization from the federal government of Mexico to construct and operate a transfer station for hazardous waste in the city of Guadalcazara of the San Luis Potosi State (hereinafter "SLP"). In 1993, COTERIN received both federal and state permit to construct a hazardous waste landfill in the same location. Relying on reassurance from the federal and state officials, Metalclad acquired COTERIN, the landfill site and the associated permits in 1993. In 1994, Metalclad commenced construction of the landfill.

Shortly after the construction started, the Guadalcazara municipal government ordered Metalclad to halt construction on the grounds that Metalclad did not obtain a municipal construction permit.[186] Metalclad resumed construction after receiving further reassurance from the federal government.[187] In the meantime, Metalclad applied to the city for the municipal permit.[188] When Metalclad completed

[185] Metalclad Corporation v. The United Mexican States, ICSID Case No. ARB(AF)/97/1, Award (Aug.30, 2000) [Hereinafter *Metalclad*].
[186] *Metalclad*, para. 40.
[187] *Metalclad*, paras. 41, 42.
[188] *Metalclad*, para. 42.

the construction in 1995, it was blocked from operating by local demonstrations.[189] Its application for the municipal construction permit was also denied.[190] The SLP Governor also issued an Ecological Decree declaring the landfill site as a rare cactus preservation Natural Area,[191] thus preventing it from future operation. The landfill consequently remained dormant.[192] It was to be noted that while the tension between Metalclad and local/state government escalated Metalclad kept an amicable and cooperative relationship with the Mexican federal government.

Unable to solve the dispute at domestic court, Metalclad instituted an arbitral proceeding against Mexico under Chapter 11 of the NAFTA under the ICSID Additional Facility rule. The complaint argued that the local and state government's actions amounted to unlawful expropriation under NAFTA Article 1110 and breach of the FET treatment under NAFTA Article 1105. The Tribunal sided with Metalclad on both claims.

B. Evaluating the Interpretive Arguments

The Tribunal engaged in an incomplete contextual interpretation that highlighted pro-investor obligations and ignored contextual arguments upholding environmental concerns. The Tribunal first argued that the principle of transparency and the objective of investment facilitation should inform the interpretation of NAFTA text. The Tribunal's analysis started with reciting the interpretive rules set out in NAFTA Article 102(2), which provides that:

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[189] *Metalclad*, para. 46.
[190] *Metalclad*, para. 50.
[191] *Metalclad*, para. 59.
[192] *Metalclad*, para. 62.

"The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law."

The objectives set out in paragraph 1 of NAFTA Article 102 explicitly include "substantial increase in investment opportunities" but make no reference to environmental protection. Also explicitly provided for in Article 102 is the principle of transparency.[193] To accentuate the centrality of transparency, the Tribunal cited the VCLT rule[194] which directed the Tribunal to refer to context of NAFTA Preamble that proclaimed the purpose of NAFTA is to "ensure a predictable commercial framework for business planning and investment."[195] The Tribunal also turned to the context of NAFTA Article 1802.1, which obligates the member states to make their regulations promptly available to foreign investors.

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[193] Article 102(1) of NAFTA provides that:
1. The objectives of this Agreement, as elaborated more specifically through its principles and rules, including national treatment, most-favored-nation treatment and transparency, are to:
(a) eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the territories of the Parties;
(b) promote conditions of fair competition in the free trade area;
(c) increase substantially investment opportunities in the territories of the Parties;
(d) provide adequate and effective protection and enforcement of intellectual property rights in each Party's territory;
(e) create effective procedures for the implementation and application of this Agreement, for its joint administration and for the resolution of disputes; and
(f) establish a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits of this Agreement.

[194] *Metalclad*, para. 70.

[195] *Metalclad*, para. 71. Also see NAFTA Preamble para. 6, emphasis in original.

By highlighting NAFTA's objective of promoting investment,[196] ensuring successful implementation of investment initiatives, and the principle of transparency,[197] the Tribunal set a stringent standard of "fair and equitable treatment" under Article 1105. According to the Tribunal, the host state government should ensure that the regulation left "no doubt or uncertainty" for the investors.[198] Under this test, the Tribunal found that the failure of Mexico to ensure "a transparent and predictable framework"[199] for issuing the construction permit amounted to a violation of fair and equitable treatment.[200]

Although the Tribunal was obligated to apply all interpretive methods as provided in Article 31 VCLT, the Tribunal dismissed the VCLT authorized interpretive arguments that support pro-environment interpretation without adequate explanations. The Tribunal plainly dismissed the relevance of Article 1114 NAFTA which provides that nothing in the investment chapter should be construed as to prevent the state to from making environmental regulations.[201] It also ignored Mexico's claim that the subsequent agreement of North American Agreement on Environmental Cooperation ("NAAEC") and the Preamble recital of promoting sustainable development were relevant for interpreting the FET standard.[202] Had the holistic "single combined operation" interpretive approach been applied, the Tribunal

[196] *Metalclad*, para. 75.
[197] *Metalclad*, para. 76.
[198] *Metalclad*, para. 76.
[199] *Metalclad*, para. 99.
[200] *Metalclad*, para. 101.
[201] *Metalclad*, para. 98.
[202] Katharina Berner, 196.

would have developed a different ruling that showed more deference to state's environmental concerns and imposed less stringent standard of review on the state.

Turning to the expropriation claim, the Tribunal interpreted expropriation broadly to include both direct expropriation and indirect expropriation. The Tribunal announced that expropriation went beyond the traditional meaning of takings of property under classical public international law; it also embodied the use of property that deprived the owner the economic benefit of property.[203] This interpretation significantly expanded the meaning of expropriation to include "regulatory takings" in the US constitutional law sense,[204] and opened the door to expropriation claims on environmental regulations.[205] The Tribunal exclusively relied on a previous arbitral award to arrive at this interpretation instead of applying any elements embodied in the VCLT rule, even though it conceded that it was not bound by previous decisions.[206]

S.D. Myers v. Canada (2000)

A. Facts and Background

[203] *Metalclad*, para. 103.
[204] Philippe Sands, *Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law*, LAW OF THE SEA, ENVIRONMENTAL LAW AND SETTLEMENT OF DISPUTES 313 (2007).
[205] Id.
[206] *Metalclad*, para. 108.

S.D. Myers, Inc. v. Government of Canada[207] was the first case to see an award rendered against Canada. It featured prominently in the empirical study on investment arbitration's regulatory chill on domestic regulation.

Polychlorinated biphenyl ("PCB") is a highly toxic hazardous compound that harms both human and animal health. After its toxicity became widely recognized in the 1970s, PCBs have been put under increasingly strict regulation both domestically and internationally. Both the U.S. and Canada had banned future production of PCBs. The U.S. also banned the import of PCB from Canada. The international transportation of PCBs is also regulated under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal ("Basel Convention"), which prohibits the export and import of hazardous wastes like PCBs from and to states that are not party of the Convention. Canada is a party to the Basel Convention; the U.S. is not.[208]

S.D. Myers is a United States corporation based in Ohio that processes and disposes of PCB. Eyeing its shrinking business in the U.S. due to the manufacturing ban, S.D. Myers established its Canadian sales office (Myers Canada) in 1993 with the aim of obtaining Canadian PCB waste to be treated at its Ohio facility.[209] Despite the import ban by the U.S., S.D. Myers through a successful lobby campaign obtained an Enforcement Discretion from the U.S. EPA that allowed it to import PCBs from

[207] S.D. Myers Inc. v Government of Canada, UNCITRAL, Partial Award (Nov.13, 2000) [hereinafter *S.D. Myers*].
[208] The U.S. was a signatory to the Basel Convention but did not ratify it.
[209] *S.D. Myers*, para. 93.

Canada from 1995 to 1997.[210] The Canadian government responded by immediately issuing an Interim Order that prohibited exports of PCBs to the U.S.[211] In 1997, the Ninth Circuit of the U.S. Court of Appeals ruled that the EPA enforcement discretion was not authorized under the Toxic Substances Control Act.[212]

S.D. Myers initiated arbitration against Canada under UNCITRAL rule, alleging that Canada's export ban on the PCBs was protectionist in nature to promote Canada's fledging PCB remediation industry. The claimant argued that Canada had violated its obligations under Chapter 11 of the NAFTA including national treatment, minimum standard of treatment, performance requirements, and expropriation. Canada countered that its export ban was enacted for environmental protection purpose in compliance with its obligations under the Basel Convention. The *Myers* Tribunal rejected the expropriation claim but found that Canada violated the national treatment and minimum standard of treatment and owed the claimant C$850,000 plus interest as compensation.

B. Evaluating the Interpretive Arguments

The Tribunal faithfully applied Article 31(3)(c) VCLT to examine the relevant rules of international law in its legal reasoning. It started with recalling the NAFTA rules on interpretation provided in Article 102(2) and Article 1131(1), both of which direct the adjudicators to examine "applicable rules of international law" outside the NAFTA text. The Tribunal first turned to the Transboundary Agreement to which

[210] *S.D. Myers*, paras. 118, 119.
[211] *S.D. Myers*, para. 123.
[212] Sierra Club v. EPA,118F.3d 1324,1327 (9th Cir.1997).

both the U.S. and Canada were parties and the Basel Convention to which only Canada ratified. It then turned to the side agreement of the NAFTA on the environment, the North American Agreement on Environmental Cooperation ("NAAEC"). The survey of the relevant rules of international law as well as the Preamble of the NAFTA led to Tribunal to conclude that the NAFTA text shall be interpreted in a manner that upholds both the states' right to regulate its environment and the obligation to avoid trade distortive acts.[213]

The faithful application of Article 31(3)(c) VCLT did not result in a favorable finding on national treatment for Canada. In clarifying the meaning of national treatment under NAFTA Article 1102, the Tribunal assigned substantial weight to the legal context of Article 1102. The Tribunal referred to a wide range of context that includes the rest of the NAFTA, the NAAEC, the international legal principles in the Rio Declaration, the WTO jurisprudence on national treatment, the decision by the Supreme Court of Canada, and the state practice of the OECD members. The survey of this wide range of context reaffirmed the "general principles" that a proper interpretation should uphold both environmental concerns and the need to avoid trade distortion. This inherently ambiguous construction did not specify the criteria for assessing "like circumstances" and allowed the Tribunal to determine a national

[213] The Tribunal reasoned that the interpretation of the NAFTA text should be informed by the following general principles:
• Parties have the right to establish high levels of environmental protection. They are not obliged to compromise their standards merely to satisfy the political or economic interests of other states;
• Parties should avoid creating distortions to trade;
• environmental protection and economic development can and should be mutually supportive.
S.D. Myers, para. 220.

treatment violation without carrying out a carefully structured comparison between the claimant and the Canadian companies. Although the proclaimed contextual approach would have treated environmental protection on an equal footing with trade liberalization, it actually subordinated the environmental concerns to investment protection.

The Tribunal's interpretation of the minimum standard of treatment was characteristic of judicial over-reach. As one of the earliest cases on this standard under the NAFTA, the Tribunal did not have much case law to rely on. Instead it turned to the case law of the US-Mexican Claims Commission[214] and academic writings for guidance,[215] and ignored case law and scholar works arguing in the opposite direction. The Tribunal provided no reasoning for its finding that breach of the national treatment obligations under Article 1102 would amount to violation of the minimum standard of treatment under Article 1105.[216] The NAFTA member states corrected this judicial overreach by jointly publishing a note of interpretation in the following year.[217]

The Tribunal's interpretation on expropriation applied a number of interpretive means under the VCLT rule. The Tribunal examined the ordinary

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[214] *S.D. Myers*, para. 260.
[215] *S.D. Myers*, para. 265.
[216] *S.D. Myers*, para. 266.
[217] NAFTA FREE TRADE COMMISSION, NOTES OF INTERPRETATION OF CERTAIN CHAPTER 11 PROVISIONS (2001), available at http://www.sice.oas.org/tpd/nafta/commission/ch11understanding_e.asp. For the judicial context that gave rise to the Interpretation Note, see Gabrielle Kaufmann-Kohler, *Interpretive Powers of the Free Trade Commission and the Rule of Law*, in FIFTEEN YEARS OF NAFTA CHAPTER 11 ARBITRATION 175 (Emmanuel Gaillard ed., 2009).

meaning of the word "tantamount" [218] and referred to the case law on regulation and expropriation. [219] As one of the earliest cases that clarified the meaning of "tantamount to expropriation," the Tribunal came to the opposite conclusion from *Metalclad* that the term "tantamount to" did not expand the definition of expropriation to cover indirect expropriation.[220] It instead reasoned that regulatory acts generally did not amount to expropriation under Article 1110 NAFTA. The diametrically different interpretation in the *Myers* Award and the *Metalclad* Award, which were published in the same year under the same treaty, tellingly illustrated the fragmentation and inconsistency of investment law jurisprudence.

[218] *S.D. Myers*, para. 285.
[219] *S.D. Myers*, para. 281.
[220] *S.D. Myers*, para. 286.

VII. Conclusion

Interpretation, the process of assigning meaning to treaties, is one of the most venerable topics in international law. It is an indispensable part of international law that concretizes the abstract and open-textured international treaties and establishes right and obligation for parties in dispute settlement. It also contributes to the evolution of legal norms where formal legislation among nation states is typically difficult and protracted. Interpretation instills life to the abstract and static international treaties.

Interpretation is essentially an argumentative practice and directly impacts legitimacy of international adjudication. Fairness of adjudication requires principled interpretation. A well-reasoned judicial decision allows the community directly impacted by the decision to assess whether the decision is a product of impartial legal reasoning or merely the adjudicators' own personal choice of the values. Interpretation under international law is bound by the customary international law on interpretation enshrined in the 1969 Vienna Convention on the Law of Treaties ("VCLT"). The VCLT rule prescribes a "single combined operation" approach to interpretation for all international treaties. Under the VCLT rule, interpreters are obligated to investigate in a holistic manner a wide range of elements: the ordinary meaning of the text, the immediate and broad context of the term to be interpreted, the object and purpose of the treaty, subsequent agreement and practice, and relevant rules of international law. Interpretation under the VCLT rule is a process of

"progressive encirclement" that does not privilege any of the mandatory interpretive means.

Broad construction of obligations under international economic treaties gives rise to vehement backlash against international economic law. Adjudicating environmental disputes under international economic law is essentially about balancing the rights and obligations between the parties to the dispute. Both trade law and investment law have been criticized as prioritizing market access and protecting rights and privileges of foreign stakeholders over state's right to environmental regulation. This shared challenge of reconciling environmental concerns and international economic obligations is theorized as the challenge of ensuring "regulatory space" under international economic law. Investor-state dispute settlement attracts tremendous controversy in cases where arbitrators side with foreign investors who seek damages from the host state for canceling a real estate project or mining concession due to environmental concerns. In a similar vein, the World Trade Organization ("WTO") Appellate Body was once denounced as a menace to environment when the Appellate Body struck down environmental regulations as trade restrictive. It is now commonly acknowledged the WTO Appellate Body has made good progress in reconciling the tensions between international trade and protection of environment.

This dissertation examines the relationship between interpretive arguments and regulatory space under international economic law. Specifically, this dissertation seeks to explain how interpretive arguments give rise to broad or narrow

constructions of state's international economic obligation that restrict or uphold the state's regulatory space on environmental issues. Using the mandatory VCLT interpretation rule as the benchmark, this dissertation scrutinizes the extent to which the WTO Appellate Body and the ICSID arbitral tribunals adhere to the VCLT's "single combined operation" approach in adjudicating environmental disputes. The comprehensive scope of analysis covers all environmental cases under the two institutions between 1995 and 2016. By treating interpretive arguments as data of judicial practice, this dissertation opens the black box of international tribunals' inner workings and bridges the doctrinal tradition and the empirical tradition in the study of international economic law.

The empirical findings on the interpretive arguments are summarized in Table 1 to 3. Overall, rigorous application of the VCLT's "single combined operation" approach to interpretation is more likely to generate narrow construction of obligations under international economic law that upholds state's regulatory space on environment. In contrast, slack application and non-application of the VCLT's "single combined operation" approach to interpretation is more likely to generate broad construction of obligations under international economic law that restricts state's regulatory space on environment.

Table 1. Interpretive Arguments by the WTO Appellate Body in Adjudicating Environmental Cases

	Finding	Construction of Obligations	Mandatory "Single Combined Operation" under VCLT Art. 31					VCLT Art. 32	Case Law	Scholarly Works	Interpretive Canons
			ordinary meaning	context	object & purpose	subsequent agreement & practice	relevant rules of intl' law				
Gasoline	pro-trade	narrow	√	√	√			preparatory work	ICJ	√	effectiveness
Shrimp/ Turtle	pro-trade	narrow	√	√	√	√	√	preparatory work	WTO ICJ	√	effectiveness
Asbestos*	pro-environment	narrow	√	√		√			WTO		
Retreaded Tyres	pro-trade	narrow		√					WTO		
Tuna II	partially pro-trade**	narrow	√	√	√				WTO		
Raw Materials	pro-trade	broad	√	√	rejected as irrelevant				WTO		
Rare Earths***	pro-trade	broad	√	√					WTO		
Feed-in Tariff****	pro-environment	narrow							WTO		
Solar Cells	pro-trade	narrow	√	√	√		failed normal & specific test		WTO		

* The *Asbestos* decision comprised of interpretation of both "like products" under Article III GATT and Article XX GATT. ** The Appellate Body ruled that the dolphin-safe labelling provisions were inconsistent with Article 2.1 but consistent with Article 2.2 of the TBT Agreement. *** Summarized here is the Appellate Body's interpretation on the relationship between Paragraph 11.3 of China's Accession Protocol and the GATT Article XX.
**** Summarized here is the Appellate Body's interpretation on the SCM Agreement.

Table 2. Interpretive Arguments on FET Standard by ICSID Tribunals in Adjudicating Environmental Cases

	Finding	Construction of Obligations	Mandatory "Single Combined Operation" under VCLT							Non-VCLT method		
			ordinary meaning	context		object & purpose		subsequent agreement & practice	relevant rules of intl' law	case law		scholarly works
				pro-invest	pro-environment	pro-invest	pro-environment			pro-invest	pro-environment	
CDSE*												
MTD	pro-investor	broad	√	√		√				√		√
Unglaube	pro-investor	broad				√				√		√
Quiborax	pro-investor	broad								√		
Al Tamimi	pro-environment	narrow	√	√	√		√			√	√	
Metalclad	pro-investor	broad		√	dismissed	√	dismissed	dismissed				
Myers**	pro-investor	broad			√	√	√	√		√		√

* No FET claim.

** The *Myers* Tribunal's FET analysis hinges on its national treatment analysis. Summarized here is the interpretation of the national treatment.

Table 3. Interpretive Arguments on Expropriation by ICSID Tribunals in Adjudicating Environmental Cases

	Finding	Construction of Obligations	Mandatory "Single Combined Operation" under VCLT							Non-VCLT method		
			ordinary meaning	context		object & purpose		subsequent agreement & practice	relevant rules of intl' law	case law		scholarly works
				pro-invest	pro-environment	pro-invest	pro-environment			pro-invest	pro-environment	
CDSE*		broad								√		√
MTD**	pro-investor	broad										
Unglaube	pro-investor	broad				√				√		√
Quiborax	pro-investor	broad								√		
Al Tamimi	pro-environment	narrow	√	√	√							
Metalclad	pro-investor	broad								√		
Myers	pro-environment	broad	√								√	

* Strictly speaking, the *CDSE* decision concerned the compensation for expropriation, not expropriation itself.
** No expropriation claim.

Between the WTO Appellate Body and the ICSID tribunals, the former's interpretive arguments in environmental cases features a much higher degree of adherence to the "single combined operation" discipline. Except in *Canada-Feed in Tariffs* and *Brazil-Retreaded Tyres*, the WTO Appellate Body duly examined most of the interpretive elements prescribed in the VCLT rule. The Appellate Body's generally conducted meticulous and sophisticated analysis into each of the interpretive element. The interpretation typically started with the Appellate Body's signature recourse to the dictionary to establish the ordinary meaning of the term. This was followed by inquiries into the term's immediate context and broad context including other provisions in the treaty, the Preamble and the Annexes. The Appellate Body in all environmental cases took a pluralist view on the object and purpose of the WTO agreements that upholds both environmental values and trade liberalization. The environmental object was used to inform its interpretation in most cases except in *China-Raw Materials*. It also looks into the object and purpose of specific provisions such as the GATT Article XX chapeau. Recourse was made to the subsequent agreement and practice, international environmental agreements and the treaty's preparatory work, if they were available. The Appellate Body made extensive reference of its own case law and limited use of scholarly works and interpretive canons in adjudicating environmental cases.

The WTO Appellate Body arrived at narrow construction of obligations under the WTO agreements in most of its environmental cases. Some of the environment-friendly interpretation features an evolutionary understanding of environment by

invoking international environmental agreements under Article 31(3)(c) VCLT. Interpretive arguments that prioritized textualist approach and downplayed the broad context likely gave rise to broad construction of state's trade obligations, as exemplified in the two cases concerning China's Accession Protocol. *Canada-Feed in Tariffs* was an exception to this pattern. The Appellate Body's narrow interpretation of the Agreement on Subsidies and Countervailing Measures and deference to Canada's climate subsidy program was not built on reasoning applying the VCLT rule. Overall, the WTO Appellate Body's interpretation in environmental cases has not raised serious legitimacy concerns among its member states.

Compared to the WTO Appellate Body, most of the ICSID arbitral tribunals only paid lip service to the mandatory "single combined operation" approach under the VCLT in adjudicating environmental cases. The driving analytical force in most of the environmental cases surveyed in this dissertation was the application of previous case law and reference to scholarly works. Only two out of the seven arbitral awards (*MTD v. Chile*; *Al Tamimi v. Oman*) followed the VCLT's "single combined operation" approach. Legal reasoning in most of environmental cases skipped the initial step of establishing the ordinary meaning and jumped to examine the context and the object and purpose. When effort was made to examine the ordinary meaning, the interpretation usually preceded the ordinary meaning examination by academic writings and case law that supported broad construction of treaty obligation. In most cases, the tribunals exclusively referred to the pro-investment treaty context. Occasionally did the tribunals refer to treaty provisions and preamble recitals that

uphold environmental values, but they were likely to be summarily dismissed without justification. The tribunals also refused to examine the relevant international environmental agreements in all of the environmental cases. Arbitral tribunals' analysis into each interpretive element was typically superficial and crude compared to the WTO Appellate Body's dogmatical and lengthy style. Some of the tribunals did not disclose the interpretive means through which they arrived at the very broad construction of the FET standard. The undisciplined and un-transparent interpretive process was the underlying reason for the broad construction of host state's obligation and the diminished regulatory space under investment law. The flawed interpretation is responsible for the strong backlash against investor-state arbitration of environmental cases.

The VCLT's "single combined operation" approach of interpretation is capable of reconciling international economic obligations and environmental concerns. The VCLT rule itself does not favor either economic values or environmental values. Rather, it prescribes a holistic and open-minded approach that is capable of incorporating a multitude of norms and accommodating changing dynamics in international law. If followed rigorously, the VCLT's "single combined operation" approach would prevent the adjudicators from assuming a certain purpose before they fully examine the context of the treaty, including subsequent agreement/practice and relevant rules of international law that are primarily concerned with competing values. The VCLT rule provides a safeguard against interpreters prioritizing a certain purpose where competing values are at stake and therefore enhances the

legitimacy of the dispute settlement. Applying the VCLT rule in interpretation does not guarantee a certain type of adjudication outcome, as fact-finding during dispute settlement plays an equally critical function in shaping the outcome. Rather, the VCLT rule functions as a structure for legal reasoning that compels the interpreter to make her arguments transparent and visible. Interpretation is inherently linked to the legitimacy of the process of dispute settlement.

The findings support the reform proposal of establishing an appellate review mechanism for investor-state dispute settlement. A standing appellate review mechanism for investment arbitration modelled after the WTO Appellate Body has the potential of rectifying *ad hoc* arbitral tribunals' incoherent and flawed interpretation. It also encourages the party-appointed arbitrators to bound their legal reasoning within the parameters of the VCLT interpretive discipline. The legitimacy of investor-state arbitration can be rebuilt through dogmatically tenable and transparent interpretation.

Appendix I

Vienna Convention on the Law of Treaties

Article 31
General rule of interpretation

1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:

(a) any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty; (b) any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

3. There shall be taken into account, together with the context:

(a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions; (b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation; (c) any relevant rules of international law applicable in the relations between the parties.

4. A special meaning shall be given to a term if it is established that the parties so intended.

Article 32
Supplementary means of interpretation

Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31:

(a) leaves the meaning ambiguous or obscure; or (b) leads to a result which is manifestly absurd or unreasonable.

Appendix II

General Agreement on Tariffs and Trade

Article XX
General Exceptions

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

…

(b) necessary to protect human, animal or plant life or health;

…

(d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trade marks and copyrights, and the prevention of deceptive practices;

…

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

Appendix III

North American Free Trade Agreement

Chapter 11: Investment

Article 1105: Minimum Standard of Treatment

1. Each Party shall accord to investments of investors of another Party treatment in accordance with international law, including fair and equitable treatment and full protection and security.

2. Without prejudice to paragraph 1 and notwithstanding Article 1108(7)(b), each Party shall accord to investors of another Party, and to investments of investors of another Party, non-discriminatory treatment with respect to measures it adopts or maintains relating to losses suffered by investments in its territory owing to armed conflict or civil strife.

3. Paragraph 2 does not apply to existing measures relating to subsidies or grants that would be inconsistent with Article 1102 but for Article 1108(7)(b).

Article 1110: Expropriation and Compensation

1. No Party may directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation of such an investment ("expropriation"), except:

(a) for a public purpose;
(b) on a non-discriminatory basis;
(c) in accordance with due process of law and Article 1105(1); and
(d) on payment of compensation in accordance with paragraphs 2 through 6.

2. Compensation shall be equivalent to the fair market value of the expropriated investment immediately before the expropriation took place ("date of expropriation"), and shall not reflect any change in value occurring because the intended expropriation had become known earlier. Valuation criteria shall include going concern value, asset value including declared tax value of tangible property, and other criteria, as appropriate, to determine fair market value.

Article 1114: Environmental Measures

1. Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.

2. The Parties recognize that it is inappropriate to encourage investment by relaxing domestic health, safety or environmental measures. Accordingly, a Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor. If a Party considers that another Party has offered such an encouragement, it may request consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement.

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