Chapter 20

International Negotiations

Radoslav S. Dimitrov

Introduction

The proliferation of global environmental institutions is a distinct development in modern international relations. In recent decades, states have negotiated over 700 multilateral policy agreements and over 1000 bilateral agreements on ecological issues (Mitchell 2003). International policy-making is accelerating as governments negotiate new agreements and renegotiate existing ones. Climate change alone was the subject of 20 rounds of formal negotiations between 2007 and the end of 2011. At any given time, a multilateral environmental meeting of government representatives is taking place somewhere in the world, with Geneva, New York, Bonn, Bangkok, and New Delhi being among the most common venues for diplomacy. Between 1992 and 2007, major conferences related to only 10 of the existing multilateral environmental agreements filled 115 days per year (Muñoz *et al.* 2009). When we add other environmental issues as well as the plethora of technical workshops and pre-negotiations, we observe an international community of states in perpetual negotiation over environmental policy.

Multilateral negotiations have been described as "a process of mutual persuasion and adjustment of interests and policies which aims at combining non-identical actor preferences into a single joint decision" (Rittberger 1998: 17). In a more recent definition, negotiation is

purposeful communication consisting of strategies developed and implemented by two or more actors to pursue or defend their interests. The entire pattern of interaction constitutes a *process* played against a *structure* of background factors that change slowly over the long term (Avenhaus and Zartman 2007: 5).

The Handbook of Global Climate and Environment Policy, First Edition. Edited by Robert Falkner. © 2013 John Wiley & Sons, Ltd. Published 2013 by John Wiley & Sons, Ltd.

the process through which human communities make collective decisions in the governance of public affairs is shaped by many factors that have preoccupied the academic literature.

The negotiation process unfolds in analytically distinct stages. I. William Zartman (1994) described three phases: problem diagnosis, invention of the bridging formula, and negotiation on the details. Oran Young (1994) more usefully distinguished between pre-negotiation, negotiating, and implementation of international regimes and showed that each stage is affected by different political factors. Pamela Chasek (2001) borrows this insight and provides perhaps the most elaborate discussion of stages in various environmental negotiations. Pre-negotiation, for instance, involves agenda-setting where countries choose the negotiating forum, decision-making procedures, relevant actors, and which policy issues to include and exclude from discussions. Negotiations typically consist of years of formal and informal discussions on the rules of a treaty, including targets, timetables, policy implementation options, and compliance procedures. The third stage, implementation, consists of domestic treaty ratification and policy development. Chasek charts the unfolding of negotiations with an elaborate "phased process model" that includes precipitants, issue definition, statements of initial positions, bargaining, and turning points.

Analytical Perspectives on Negotiations

Negotiations are the principal means of constructing international environmental institutions (Haas *et al.* 1993; Levy *et al.* 1995; Young 1998; Goldstein *et al.* 2000). Logically, the intellectual roots of the negotiations literature are in neoliberal institutionalism, a school of thought that focuses on the role of institutions in world politics and posits that institutions affect state behavior by creating incentives for cooperation and reducing transaction costs. Scholarship on environmental regime formation, in particular, is prolific and has strengthened neoliberal institutionalism in IR theory (see for instance Hasenclever *et al.* 1997 and the work of Oran Young, Scott Barrett, and Peter Haas, to name a few). Today the academic literature on environmental negotiations can be divided in three primary realms: rationalist, constructivist, and descriptive work by insiders, the latter driven mostly by interest in policy-making.

Rationalism

Early research sought to explain why some negotiations succeed while others fail to produce policy agreements. To take one instance, a project funded by the Ford Foundation attempted to identify the "determinants of success" through a comparison of five empirical cases of successful regime formation (Young and Osherenko 1993). The authors concluded that none of the independent variables under consideration could explain the outcomes. Subsequent scholarship has scaled down its ambition and desisted from broad theoretical explanations of negotiation outcomes. In another classic example of rationalism, Detlef Sprinz and Tapani Vaahtoranta (1994) stress cost–benefit analysis and explain country positions in negotiations with their expected policy costs and vulnerability to ecological problems.

In other empiricist-rationalist scholarship, explorations of multilateral negotiations examine configurations of interests and changes in national positions (Andresen and Agrawala 2002; Vogler and Bretherton 2006), coalition-building (Hampson 1995; Dupont 1996), the role of leadership (Young 1991; Underdal 1994), and the role of issue linkage (Zartman 1994; Hopmann 1996; Jinnah 2011). The intellectual roots of this work can be found in game theory.

Game Theory Game theory focuses on formal modeling of negotiations and utilizes formal logic to derive probable outcomes from fixed actor preferences. Models such as the prisoner's dilemma, chicken, or stag hunt usually portray the situation as a matrix indicating the choices facing negotiators and consequences for each strategy, without describing the negotiation process (Avenhaus and Zartman 2007). Howard Raiffa and others have utilized elaborate models and decision analysis to calculate optimal solution outcomes given a particular configuration of state preferences (Raiffa 1982, 2002).

Scott Barrett (1998, 2003) has built a body of work that consistently uses game theory to clarify the obstacles to global environmental cooperation. Another pioneer in this realm is Hugh Ward, who used the game of chicken to illuminate climate negotiations (1993) and showed that iterative prisoner's dilemma games can yield cooperation if states do not discount the future too heavily (Ward 1996). Related work developed a model of climate negotiations incorporating divergent national positions of dragger and pusher countries (Ward *et al.* 2001). Rational choice models have been used to explain both the domestic sources of national policy positions and the dynamics of international negotiations, and generate recommendations for promising political strategies (Grundig 2009).

Kaitala and Pohjola (1995) developed a dynamic model of global climate change negotiations that differentiates between countries depending on their vulnerability to climate impacts. In their model, countries negotiate international transfer payments to address the asymmetric effects of global warming but concrete negotiations are not described. Akira Okada (1999) applied a cooperative market model to illuminate international trading of carbon emission permits. This study is not empirical either; it evaluates hypothetical allocation rules for the United States, Russia, and Japan. Bruce Bueno de Mesquita (2009) declared with great confidence that predicting the future is possible and used a computer to state that the 2009 Copenhagen conference would fail and that global climate policy would gain momentum over several decades, then steadily decline between 2050 and 2100.

Three observations are in order. First, game theory is the most elegant, parsimonious approach to the study of negotiations. It brings major insights into bargaining and is indispensable in clarifying strategic choices that political actors face, identifying zones of agreement, and explaining failure to reach agreement. Second, formal models of bargaining¹ have rarely been applied to actual cases of environmental negotiations (Avenhaus and Zartman 2007). A collection of essays, for instance, used extended game theoretic methods to speculate on potential agreements on the reduction of greenhouse gases (Carraro 1997). Heterogeneity of state actors was theorized to benefit the prospects for burden-sharing arrangements and coalition-building, while issue linkage is believed to improve the chances of agreements. Whether this

actually occurs in negotiations is unknown since existing studies do not compare formal models with actual negotiations.

Third, because of their focus on a priori preferences and outcomes, game theorists skip the entire *process* of negotiations. This undermines their position, particularly given recent findings that the process of communicating policy preferences has a pronounced impact on the prospects for agreement – independent of distributional issues and concerns about cheating (Earnest 2008). Finally, assumptions used in modeling are rarely applicable in the real world of environmental negotiations: the number of actors is rarely only two (there are more than 190 in climate change negotiations); actors are rarely unified; information about the positions and preferences of other countries is far from perfect; and preferences of a country change, sometimes dramatically, as in the case of Australia's turnabout in ratifying the Kyoto Protocol in 2007.

Oran Young sought to correct these well-known shortcomings with his seminal model of integrative bargaining (1994). He noted that power theorists overemphasize the role of hegemons, rational-choice theorists use models of bargaining that are simplistic, and cognitivists have not modeled the process through which social learning leads to convergence of policy preferences. Young calls for a model of institutional bargaining that captures the role of multiple actors, consensus rules of decision-making, the veil of uncertainty about future costs and benefits, and evolving configurations of interests, among other factors. His model is commonly recognized as influential in the discipline but, curiously, has not been applied in empirical studies of negotiations.

Leadership Hegemonic power appears rarely to determine outcomes in environmental negotiations, because military or even economic power is not fungible, and the academic study of environmental diplomacy features few studies in the realist tradition. Scholars of global environmental politics agree that structural power matters little in environmental diplomacy (Young 1991; Underdal 1994; Falkner 2005). In a thorough treatment of the topic, Robert Falkner (2005) reminds us of the role of American hegemony but shows that hegemony provides an incomplete perspective that can explain neither the direction of US policy nor international outcomes such as regime formation. Furthermore, even small countries can exercise strong influence in negotiations. The Netherlands has used initiative and shrewd diplomacy to influence both European and global negotiations (Kanie 2003). The Alliance of Small Island States has been an active participant in the climate change negotiations and has influenced the process and outcomes considerably. Politically weak countries such as Tuvalu, Micronesia, Barbados, and the Maldives have shaped climate negotiations by "borrowing external power" (Betzold 2010).

The weak relevance of power hierarchy has led to a vibrant body of research on leadership. There are three principal types of leadership: structural, directional, and instrumental (Gupta and Grubb 2000).² Structural leadership derives from material resources a state possesses that give it power in the structure of the game, including a share of polluting emissions. Deborah Davenport (2005), for instance, argues that US policy preferences are the principal explanatory factor behind the failure of negotiations to produce a global forest convention. Directional leaders such as the European Union in climate change or the United States in the ozone negotiations lead

by example through unilateral domestic policies that demonstrate feasible solutions to other countries (Underdal 1994). Instrumental leadership is a function of political initiative, skill, and creativity in the process of negotiations, including submission of policy proposals and persuasive arguments.

Instrumental leadership can be subdivided into two types: entrepreneurial and intellectual (Young 1991; Kanie 2003). One entrepreneurial leader is the small island nation of Tuvalu, whose delegation has been remarkably influential in climate discussions by providing concrete proposals, including a full-fledged, elaborate treaty text tabled in 2009 that they insisted be the basis of negotiations in Copenhagen. Intellectual leaders introduce innovative policy solutions to the ecological problem at hand. The United States played an intellectual leadership role in the 1990s by introducing the idea of emission trading into the Kyoto Protocol negotiations.

Some of the most sophisticated scholarship explores the causal mechanisms through which leaders emerge. Norichika Kanie (2003), for instance, provides us with a rich empirical study of the Netherlands' leadership in climate talks. Replete with concrete facts from the negotiation of the Kyoto Protocol and an extensive account of domestic policy formation, his article shows that Dutch leadership was made possible by domestic political processes as well as intense cooperation between the government delegation and Dutch NGOs during the international game. The study of environmental diplomacy could greatly benefit from more such multilevel work that straddles both state–society interactions and the domestic–international interface.

Explaining European Leadership The European Union has provided strong leadership in environmental negotiations on various issues (Gupta and Grubb 2000; Vogler 2005; Harris 2007; Oberthür and Kelly 2008) and generates an academic debate on how to explain it. Some scholars argue that EU environmental leadership is a product of norms and identity of Europe as an ideational leader (Manners 2002; Krämer 2004). Others caution against idealism and argue that political economy and material considerations can explain EU positions (Falkner 2007). When the USA abandoned the Kyoto Protocol in 2001, some IR scholars predicted the end of the global climate regime. Theorists expected other states to abandon the regime out of concerns with relative gains: why stay to pay high policy costs and give competitive advantage to America? The facts interfered with that theory as well: Europe did precisely the opposite of what scholars and pundits expected. The EU not only staved in Kyoto but adopted unilateral policies for steep emission reductions. They emerged as the international leader, whose followers included Canada, Japan, and Russia, who also ratified the treaty, and the Kyoto Protocol entered into force in February 2005.

Vogler (2005) considers carefully institutionalist hypotheses and finds evidence of "normative entrapment." European leadership is a product of a normative stance on climate change and remains part of an enduring self-image that continues to propel strong policies. Jon Hovi and his colleagues compare four alternative explanations and argue that the EU move is a product of the combined effects of domestic institutional inertia and a power-seeking desire for international leadership (Hovi *et al.* 2003). By pulling out of Kyoto, the USA offered the EU and other actors an opportunity to gain political power in one of the most important current negotiations.

Domestic-International Connections The interplay between domestic politics and international discussions is another fruitful area of study in the rationalist framework. Robert Putnam's seminal work established that each state actor in negotiations plays two "games" simultaneously with domestic constituents and foreign counterparts (Putnam 1988). His concept of the two-level game continues to inform scholars in understanding state behavior. In her award-winning work, Beth DeSombre (2000) shows the domestic sources of foreign environmental policy that can indirectly illuminate negotiations, too. Aslaug Asgeirsdottir (2008) examines bargaining between Iceland and Norway over fish stocks, and her findings confirm Putnam's view that powerful domestic interest groups actually strengthen the negotiating position of states vis-à-vis other countries. Iceland's strong fishing industry exerted pressures on the government that helped its delegation win concessions from Norway, whose weaker internal pressures left the delegation with more maneuvering space and therefore more openness for compromise. Other empirical studies cast doubt on the theory and suggest that state leaders may choose to ignore domestic constraints and may pursue international strategies without paying close attention to the "domestic game." In a study of the Kyoto Protocol, McLean and Stone argue that the European Union has made a principled commitment to climate cooperation and subordinates its domestic politics to the international level regardless of negotiation outcomes (2012).

Issue Linkage Negotiations on a specific environmental problem rarely develop in isolation from international discussions on other ecological problems. Tapping into the literature on institutional interplay (Young 2002), studies of issue linkage have enriched our understanding of its impacts on the construction of agreements (Jinnah 2011). State and non-state actors make deliberate decisions to affect policy outcomes by drawing linkages between climate change, forestry, desertification, ozone depletion, biodiversity, and other issues. These strategies have inundated UNFCCC conferences, making the climate problematique a central hub of global environmental politics at large:

Indeed, with over 1,200 NGO and IGO observers now accredited to attend the UNFCCC negotiations, representing over 22 issue areas, and drawing over 20,000 observers, it seems that everyone from McDonald's to the Vatican is jumping on the proverbial climate change bandwagon (Jinnah 2011: 2).

The particular effects of such issue linkage are still open for debate. Linking environmental and trade issues made negotiations on ozone depletion easier and is credited with contributing to the success of the Montreal Protocol (Barrett 1997). Bandwagoning has the potential to facilitate more effective policy outcomes on climate change (Jinnah 2011). At the same time, linkages increase issue complexity that is already overwhelming in climate politics and presents an obstacle to productive negotiations (Victor 2011).

Constructivism

Norms and Trust Constructivist scholars argue that shared global norms affect international environmental policy. Ozone treaties resulted from social discourse

tailored to favor the precautionary principle (Litfin 1994). A norm of environmental multilateralism explains the creation of the impotent UN Forum on Forests and global state participation in it (Dimitrov 2005). And outcomes of the 1991 Earth Summit reflect a broad normative paradigm of liberal environmentalism (Bernstein 2001).

In the same intellectual tradition, John Vogler (2010) offers constructivist advice on how to strengthen the global climate policy-making process. He calls for building trust between states as a key ingredient in the kitchen of environmental institution-building. Trust can be developed not only through strict compliance mechanisms or long-term institutional interactions but also through the development of shared understanding of the problem and domestic policy action that signals commitment. Ultimately, Vogler sees the development of trust as inextricable from the evolution of identity and perceptions of national interests. His inspiring work is future-oriented rather than empirical as it provides important recommendations for future political efforts. Systematic observations on the actual behavior of actors in building or undermining trust would be an important follow-up in this line of research.

Persuasion and Argumentation in Negotiations Despite the widespread recognition that "in essence, international negotiation is communication" (Stein 1988: 222), communication is the *terra incognita* of negotiation studies. Sweeping literature reviews conclude that the exchange of arguments is the least-explored topic in this field of research (Jönsson 2002; Zartman 2002). There is an academic tendency to treat international politics as a series of strategic policy moves, hence our traditional focus on state "behavior" and action rather than words. Talk is cheap indeed (because the supply exceeds the demand, one might quip), yet international relations occur through speech acts as well as policy actions. Besides, we have empirical evidence that cheap-talk diplomacy can diffuse international crises and prevent war between countries in bargaining games with multiple equilibria (Ramsay 2011). Listening to intergovernmental conversations is important and also interesting.

What do delegations actually say to one another? "The back-and-forth communication... the dynamics of mutual persuasion attempts that we usually associate with negotiations are insufficiently caught" (Jönsson 2002: 224). Thomas Risse (2000) and Harald Müller (2004) cogently argued for the need to study communicative behavior, but the few scholars who tried to follow up admitted failure to produce conclusive results, partly due to a lack of verbatim records of negotiations (Deitelhoff and Müller 2005). Scholars rarely have access to international negotiations, particularly those held behind closed doors. Important books by Farhana Yamin and Joanna Depledge rectify the general neglect of process and provide detailed descriptions of the logistical and bureaucratic organization of climate negotiations but also leave out the discursive exchange among delegations (Yamin and Depledge 2004; Depledge 2005).

In a complex marriage between rationalism and constructivism, Christian Grobe advances a rationalist theory of argumentative persuasion. He claims that changes in bargaining positions are motivated by new causal knowledge about the problem at hand. After a thoughtful review of the relevant literature, Grobe makes a compelling case for the study of persuasion and sketches two empirical cases: negotiations on the International Convention for the Prevention of Pollution from Ships (MARPOL)

and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). Paradoxically, his work dismisses the role of arguments made during negotiations in changing policy preferences:

In the MARPOL negotiations, where the parties were perfectly informed about the situation at hand, argumentative talk was without effect on the outcome... On the other hand, states were highly receptive to arguments in the CCAMLR case. But these arguments did not lead to a reformulation of preferences (Grobe 2010: 22).

Notably, Grobe does not examine actual argumentation during the negotiations. The two brief case studies underlying his "functional persuasion theory" draw on secondary sources and include no information about the actual conversation between delegations during the negotiations.

Others argue, alternatively, that persuasion and discourse do alter policy preferences (Dimitrov 2012). European arguments during the climate negotiations induced fundamental change in many countries' views on the economic benefits of climate policy. International discussions during the 1990s were dominated by the premise that climate policy is expensive and countries must choose between economic and environmental interests. In the early 2000s, the European Union introduced the concept of "win-win solutions" to the climate discourse (Dimitrov 2012). Their new argument was contrary to conventional wisdom at the time: climate policy can bring economic *benefits* and there is no juxtaposition between economic and environmental interests. States can reduce emissions through energy savings and renewable energy. The benefits of such action are multiple: financial savings, increased economic competitiveness, improved energy security, increased political independence from unstable regions such as the Middle East, improved public health – as well as mitigating climate change and its devastating impacts.

The EU pounded this argument tirelessly over many years of discussions. They also backed their words with actions and unilaterally adopted the ambitious 2007 "Energy and Climate Package" that is binding on all 27 members (Morgera *et al.* 2010; Oberthür and Pallemaerts 2010). In March 2011, after extensive continent-wide public consultations, the European Commission publicized a "Roadmap for Moving to a Competitive Low-Carbon Economy in 2050." The roadmap envisions emission reductions up to 95% by 2050. The transition would cost €270 billion per year, or 1.5% of GDP, but would save up to €320 billion per year on fuel costs. The "win-win" rationale was embraced by other countries, including South Korea, who adopted "Green Growth" as the paradigm underlying their current economic development (see also Chapter 12 in this volume).

Insider Perspectives and Empirical Accounts

Empirical studies based on direct observation of negotiations are relatively few. Much published work offers recycled information that can be derived without negotiations actually having been observed. Typically studies of international regime formation produce a chronological list of conferences and their main outcomes (agreements whose text can be obtained online), and select dramatic moves by particular countries, such as Canada's withdrawal from the Kyoto Protocol (which one can learn

by following the newspaper headlines). The dynamics around the negotiation table often remain hidden. What is the verbal exchange? What are the offers and responses made during informal consultations? Relevant literature tends to avoid these questions and gravitate toward related topics such as theorizing about the creation of institutions and their impact on state behavior (Young 1994; Barrett 2003) or future policy options (Victor 2011).

This tendency is understandable and perhaps unavoidable. Lack of direct access to negotiations is the likely main reason for leaving the process out. Few scholars attend UN environmental conferences or carry out extensive interviews with key actors. The very few who do are observers without access to what goes on behind closed doors. They attend as non-governmental participants (typically with accreditation through environmental groups) and are barred from sessions of the "working groups" and informal consultations where most of the strategic political exchange takes place.

One distinct body of literature comes from participants and rectifies the problem of data shortage. Detailed accounts of negotiation processes offer an insider view, based either on authors' direct involvement (Benedick 1998; Depledge 2005; Rajamani 2008, 2010; Kulovesi and Gutiérrez 2009; Smith 2009; Bodansky 2010; Dimitrov 2010) or interviews with key actors (Falkner 2000). A recent compendium offers intimate perspectives on various environmental negotiations from expert writers for the Earth Negotiations Bulletin with extensive exposure to actual negotiations (Chasek and Wagner 2012). These and other works offer a palpable taste of environmental diplomacy and an in-depth expertise that can inform both theory and practice.

Climate Change Negotiations

Global climate negotiations have attracted considerable academic attention. Matthew Paterson and Daniel Bodansky have documented the early efforts to formulate a global response to climate change in 1980s and the 1990s (Paterson 1996; Bodansky 2001). Participants in the UN political process have documented more recent negotiations on post-Kyoto policy (Fry 2008; Kulovesi and Gutiérrez 2009; Dimitrov 2010; Sterk et al. 2010; Oberthür 2011). These comprehensive guides to global climate change negotiations clarify the notoriously complex policy issues on the table and the positions of key countries and coalitions. Many studies analyze existing climate agreements and discuss future prospects for cooperation (Paterson 1996; Ott 2001; Victor 2001; Betsill 2004; Yamin and Depledge 2004; Depledge 2006; Clémençon 2008; Ott et al. 2008; Watanabe et al. 2008). Others focus on national policies and negotiation positions of particular actors (Hovi et al. 2003; Kanie 2003; Najam 2005; Oberthür and Kelly 2008; Betzold 2010) and study domestic policy discourse (Pettenger 2007; McCright and Dunlap 2008; Harrison and Sundstrom 2010). Finally, another important body of literature debates future policy options, offers policy recommendations, and discusses issues of justice and equity (Agrawala and Andresen 2001; Aldy et al. 2003; Najam et al. 2003; Bodansky 2004; Victor 2004; Adger et al. 2006; Roberts and Parks 2007; Hare et al. 2010; Müller 2011).

Current international negotiations on climate change are an example of *post-agreement negotiation* defined by Bertram Spector as "dynamic and cooperative

processes, systems, procedures and structures that are institutionalized to sustain dialogue on issues that cannot, by their nature, be resolved by a single agreement" (Spector 2003: 55). Countries disagree on a splendid variety of contentious issues (Dimitrov 2010). One disagreement pertains to "the legal architecture" of the future climate policy regime: whether to extend the Kyoto Protocol that places the onus on industrialized countries, or create a new global agreement with obligations for all major emitters - or both. In addition, the method of determining national targets for emission reductions is disputed. The European Union and the Alliance of Small Island States advocated a classic "top-down approach" of determining global targets based on science-based goals (e.g. 25-40% global emission cuts needed to keep temperature rise to below the critical threshold of 2 °C). Others such as Australia, the USA, and China fought for a "bottom-up" approach allowing every country to determine its national goals regardless of global environmental results. Other key debates pertain to obligations for developing countries; level and mechanisms of international funding for climate policy in poor countries; the role of agriculture and forestry in calculating emission levels (LULUCF, or land-use and land-use change and forestry); the transfer of environmentally friendly technologies; and the creation of an Adaptation Framework.

Twenty rounds of formal negotiations occurred in the four years between Bali and Durban (December 2011). In a historic breakthrough, the Cancun Agreements of 2010 established for the first time an official global goal of limiting temperature rise to below 2 °C, and stipulated that developing countries "will" take nationally appropriate mitigation actions. The deal also included a principled agreement to establish a Global Adaptation Framework; an international registry for developing country policies; and a Green Climate Fund to provide up to US\$100 billion per year for climate policy by 2020.

The negotiations suffered a major blow at Durban 2011. After two weeks of discussions, including three days of intense high-level talks between environment ministers, states decided to postpone a globally binding climate treaty for at least nine years. Only three countries openly supported this outcome (Australia, Canada, and the United States), while others accepted it in exchange for a continuation of the Kyoto Protocol. The EU privately considered boycotting the conference and island nations described the outcome as a form of hara-kiri that "places entire nations on death row." The collective decision is to continue negotiations with a new deadline of 2015 for finalizing an agreement for after 2020. This constituted an open admission that the Bali mandate had failed, and turned the famed "post-2012 policy" into a post-2020 possibility. A second major decision was to extend the Kyoto Protocol, with a second commitment period. Two stipulations weaken Kyoto 2: first, the duration of the new commitment period will be decided at a later, unspecified date (five or eight years, until 2017 or 2020). Second, Kyoto 2 relies on voluntary national commitments to be determined by countries domestically. The text merely "invites countries" to report internationally their policy goals. Thus, the original Kyoto Protocol with its binding absolute emissions reductions was replaced by a bottom-up approach and voluntary goals, without even obliging countries to communicate those goals internationally.

Today the global negotiations have been placed on hold, and prospects for change over the next several years are bleak. The climate case outcomes confirm the

pessimistic views of game theorists who argue that policy agreements tend to work only in situations of simple coordination and are likely to fail in real collaboration, where countries face strong incentives to defect from a collective agreement. The case also appears to obey the "law of the least ambitious program" formulated by Arild Underdal (1980) that remains foundational in mainstream scholarship on environmental diplomacy. Underdal observes that negotiations involving multiple actors tend to produce outcomes that reflect the lowest common denominator. Indeed, the large number of actors (194 to be more precise) makes effective climate agreements difficult. The requirement of global political consensus as a basis for decision-making at the UNFCCC creates major obstacles to effective multilateralism on climate change. Consensus weakens prospective international agreements by giving every actor veto power. If every single government must endorse a collective policy, the emerging agreement is likely to reflect the preferences of the most obstructionist player.

Future Prospects and Policy Recommendations

There is striking convergence of academic views on the poor prospects for climate talks. David Victor (2006) and Bruce Bueno de Mesquita (2009) state with certainty that failure of the current global approach to climate change is guaranteed, given the enormous issue complexity of climate policy combined with highly diverse national interests and conflicting country assessments of the climate danger. In a particularly thoughtful and extensively researched piece, Røgeberg *et al.* (2010) bring charts and numbers to prove that the international community of states cannot solve the climate problem. A veteran diplomat, Richard Smith (2009), considers the climate negotiations process as a manual for how not to negotiate agreements. He worries about the absence of domestic support and national policies in key countries as an important precondition for productive international negotiations.

Academic observers share skepticism on the prospects but disagree on how to improve them. The subject of a cottage industry of academics and think tanks, the proposals for international climate policy are numerous and diverse (Aldy *et al.* 2003; Bodansky 2004; Aldy and Stavins 2010; Vogler 2010; Victor 2011). Falkner and his colleagues stress the need for redesigning the current international approach to tackling the problem. They caution against the dangers of a decentralized bottom-up approach and advocate a "building-blocks" strategy of negotiating a broad global legal framework with firm binding commitments, in an incremental fashion (Falkner *et al.* 2010).

David Victor (2011) recommends the exact opposite: negotiating a narrow non-binding agreement on key issues among a few key players and a bottom-up approach to country commitments. He advocates abandoning the UNFCCC approach that relies on political consensus and seeks legally binding treaties (Victor 2011). The alternative approach he proposes involves: negotiating a non-binding climate agreement among a small group of major emitters, who retain freedom to determine their national policies (a bottom-up approach), and reciprocal country commitments that create the incentives for participation. Essentially, he advocates replacing the binding model of international law and creating a global oligarchy of powerful countries to provide global climate governance reflecting their national interests and abilities.

Promising Research Directions

Rethinking the Link between Institutions, Negotiations, and Governance

The failure of the UN talks to produce a climate treaty is clear, but scholars draw different conclusions and disagree on the implications of this outcome for governance theories. Some dismiss the intergovernmental realm as unimportant and focus on non-state initiatives (Hoffman 2011). Others draw a causal connection between inter-state negotiations and multilevel climate governance by both state and non-state actors (Dimitrov 2010). Still others expand academic definitions of regimes and argue that the climate regime encompasses multiple institutions and non-governmental initiatives (Keohane and Victor 2011).

The disappointment that climate negotiations have failed to produce a treaty is understandable but it need not create skepticism about the importance of international discussions. In my view, UN negotiations have affected state behavior and fostered the development of domestic policies in the absence of a formal treaty (Dimitrov 2010). The conversations have helped state and corporate actors alike to recalculate their interests in green policies. The last four years of formal negotiations have seen major policy shifts in China, India, Australia, Japan, Korea, and many other countries. These policy shifts converge in one direction: a low-carbon economy based on alternative energy and energy efficiency. The discourse has therefore changed the perception of national interests and today governments behave differently.

Negotiations scholars need to reconsider the meaning of "outcome" and recognize the diverse impacts of negotiations on state behavior apart from treaty-making. In a rich empirical study, for instance, Antto Vihma argues that India's domestic climate discourse as well as decision-making processes have changed as a result of the country's engagement in UN talks (2010). Peter Haas has argued that the most important effect of United Nations environmental conferences is the growth of global environmental norms (2002). Depledge and Yamin would agree: "The negotiating environment of a regime enmeshes delegations in a dense web of meetings, practices, processes, and rules, generating an inherent motivation among negotiators to advance the issue" (2009: 439; cited in Falkner *et al.* 2010: 255). Indeed, "the Kyoto Protocol" is now a household phrase in communities around the world and raises awareness of climate change.

Many diplomats describe China's new five-year plan (2011–2015) as the most progressive legislature toward a low-carbon economy in history. Influenced by European arguments about the economic benefits of green action, in 2008 South Korea officially embraced a "Green Growth" paradigm of economic development, committed to 30% cuts by 2020 below business-as-usual, and established a Global Green Growth Institute to systematize the green growth theory and spread it to developing countries. Countries are establishing new branches of government dedicated to climate policy such as Australia's Department of Climate Change and Energy. Norway plans to slash its emissions by 40% by 2020 and be carbon neutral by 2030. Japan's decision to cut its emission by 25% by 2020 is also remarkable.

Hence, international discussions have helped change the world despite their failure to produce a treaty. Global climate governance is dramatically different today compared to the 1990s, and is now a remarkably vibrant realm of policy development

and implementation. Aggregate climate governance comprising regional, national, sub-national, and local policies as well as non-state initiatives worldwide is thriving (Schreurs 2008; Selin and VanDeveer 2009; Hoffman 2011).

Changes in Policy Preferences

The academic discipline would benefit from research on the evolution of policy preferences. We know that governments change their mind in the course of negotiations. Germany dropped its opposition to international regulations in the acid rain case, a crucial breakthrough that turned the tide in constructing one of the most effective environmental regimes. The United States took a U-turn in forestry negotiations and became an active opponent of a forest treaty. In climate change negotiations of the 1990s, developing countries were adamant in refusing to take any action on emissions reductions; such a notion was taboo until the Bali Conference in 2007, when India led the G77 coalition to endorse the concept of "nationally appropriate mitigation actions" (NAMAs) in the South. China and others then refused to subject their NAMAs to international monitoring, reporting, and verification but later accepted this at Cancun 2010. Finally, a major historic milestone was marked in Durban in 2011 when China signaled a willingness to accept binding commitments under a future global treaty.

These changes in policy preferences are milestones in every story of negotiations and should constitute a key research topic. How do countries come to embrace policy options they previously opposed? When and why do changes in national positions occur over time? Domestic politics is an obvious influence that can explain policy changes. Elections sometimes lead to new country positions, as in Australia, when ratification of the Kyoto Protocol was the first act in office of Kevin Rudd, the new prime minister. Alternatively, constructivism is particularly well positioned to pursue this research, by virtue of its interest in the evolution of ideas and interest formation. Vogler suggests briefly that the British government made efforts to change other countries' perceptions of the climate problem as well as their national economic interests in mitigating it:

[Emission reductions] are now claimed to constitute an economic benefit and a necessary investment, rather than a burden to be borne. From a constructivist perspective, this is an audacious move to subvert accepted meanings and constructions of self-interest (Vogler 2010: 2685–2686).

Argumentation and Persuasion in Negotiations

There is now evidence that specific arguments made during negotiations help persuade countries and change their calculations of self-interest. The European argument regarding economic benefits of climate policy has persuaded countries to change domestic policies (Dimitrov 2012). Today 90 states have considerable domestic plans for clean energy and emission reductions. While establishing a strict causal connection between particular arguments and state behavior would be premature at this early stage, the extensive global discussions on climate change over the last 10 years correlate with a global pattern of national policy developments.

Further research on argumentation can make valuable contributions to theory and practice. First, it would enable conclusions on the effectiveness of negotiating strategies that can be useful to practitioners and policy-makers. Building an inventory of argumentative approaches can uncover the foundations of discursive strategies and allows us to compare the effectiveness of different approaches to persuasion. In the long run, such research can generate recommendations to policy-makers on designing effective negotiating strategies. Second, research on policy change and persuasion can facilitate the development of a future theory of interest formation. Political scientists of all theoretical stripes agree that social actors pursue their perceived interests. Yet, we know little about how interests and policy preferences emerge and change (Moravcsik 1997; Finnemore and Sikkink 1998). Argumentation studies can illuminate the role of dialogue in the evolution of policy preferences and help clarify sociological processes of interest creation, reconstitution, and change.

Acknowledgments

I am grateful to Robert Falkner for his excellent suggestions, which greatly improved this chapter, and to Carla Lee, for her dedicated research assistance.

Notes

- 1 Game theorists use the term "bargaining" while political scientists prefer "negotiation"; the two terms are often used synonymously.
- 2 Young (1991) offers an alternative typology and lists three leadership types: structural, entrepreneurial, and intellectual.

References

Adger, W. Neil, Jouni Paavola, Saleemul Huq, and M.J. Mace, eds. 2006. Fairness in Adaptation to Climate Change. Cambridge, MA: MIT Press.

Agrawala, Shardul and Steinar Andresen. 2001. "Two-Level Games and the Future of the Climate Regime." *Energy and Environment*, 12(2–3): 5–11.

Aldy, Joseph E., John Ashton, Richard Baron et al. 2003. Beyond Kyoto: Advancing the International Effort against Climate Change. Arlington, VA: Pew Center on Global Climate Change.

Aldy, Joseph E. and R.N. Stavins, eds. 2010. Post-Kyoto Climate International Climate Policy: Implementing Architectures for Agreements. Cambridge: Cambridge University Press.

Andresen, Steinar and Shardul Agrawala. 2002. "Leaders, Pushers and Laggards in the Making of the Climate Regime." *Global Climate Change*, 12: 41–51.

Asgeirsdottir, Aslaug. 2008. Who Gets What: Domestic Influences on International Negotiations Allocating Shared Resources. Albany, NY: State University of New York Press.

Avenhaus, Rudolf and I. William Zartman. 2007. "Formal Models of, in and for International Negotiations." In *Diplomacy Games: Formal Models and International Negotiations*, ed. Rudolf Avenhaus and I. William Zartman, 1–22. Berlin: Springer.

Barrett, Scott. 1997. "The Strategy of Trade Sanctions in International Environmental Agreements." *Resource and Energy Economics*, 19(4): 345–361.

Barrett, Scott. 1998. "On the Theory and Diplomacy of Environmental Treaty-Making." *Environmental and Resource Economics*, 11(3–4): 317–333.

- Barrett, Scott. 2003. Environment and Statecraft: The Strategy of Environmental Treaty-Making. Oxford: Oxford University Press.
- Benedick, Richard Elliot. 1998. Ozone Diplomacy: New Directions in Safeguarding the Planet. Cambridge, MA: Harvard University Press.
- Bernstein, Steven. 2001. The Compromise of Liberal Environmentalism. New York: Columbia University Press.
- Betsill, Michele. 2004. "Global Climate Change Policy: Making Progress or Spinning Wheels?" In *The Global Environment: Institutions, Law and Policy*, ed. Regina S. Axelrod, David L. Downie, and Norman J. Vig, 103–124. Washington, DC: CQ Press.
- Betzold, Carola. 2010. "Borrowing Power to Influence International Negotiations: AOSIS in the Climate Change Regime, 1990–1997." *Politics*, 30(3): 131–148.
- Bodansky, Daniel. 2001. "The History of the Global Climate Change Regime." In *International Relations and Global Climate Change*, ed. Urs Luterbacher and Detlef F. Sprinz, 23–40. Cambridge, MA: MIT Press.
- Bodansky, Daniel. 2004. *International Efforts on Climate Change beyond 2012: A Survey of Approaches*. Arlington, VA: Pew Center on Global Climate Change.
- Bodansky, Daniel. 2010. "The Copenhagen Climate Change Conference: A Postmortem." *American Journal of International Law*, 104(2): 230–240.
- Carraro, Carlo. 1997. International Environmental Negotiations: Strategic Policy Issues. Cheltenham: Edward Elgar.
- Chasek, Pamela S. 2001. Earth Negotiations: Analyzing Thirty Years of Environmental Diplomacy. Tokyo: United Nations University Press.
- Chasek, Pamela S. and Lynn M. Wagner, eds. 2012. The Roads from Rio: Lessons Learned from Twenty Years of Multilateral Environmental Negotiations. New York: Routledge.
- Clémençon, Raymond. 2008. "The Bali Road Map: A First Step on the Difficult Journey to a Post-Kyoto Protocol Agreement." *Journal of Environment & Development*, 17(1): 70–94.
- Davenport, Deborah. 2005. "An Alternative Explanation of the Failure of the UNCED Forestry Negotiations." *Global Environmental Politics*, 5(1): 105–130.
- Deitelhoff, Nicole and Harald Müller. 2005. "Theoretical Paradise Empirically Lost? Arguing with Habermas." *Review of International Studies*, 31: 167–179.
- de Mesquita, Bruce Bueno. 2009. "Recipe for Failure." Foreign Policy, 175, November/December: 76–88.
- Depledge, Joanna. 2005. The Organization of Global Negotiations: Constructing the Climate Change Regime. London: Earthscan.
- Depledge, Joanna. 2006. "The Opposite of Learning: Ossification in the Climate Change Regime." Global Environmental Politics, 6(1): 1–22.
- DeSombre, Elizabeth R. 2000. Domestic Sources of International Environmental Policy: Industry, Environmentalists, and U.S. Power. Cambridge, MA: MIT Press.
- Dimitrov, Radoslav S. 2005. "Hostage to Norms: States, Institutions and Global Forest Politics." *Global Environmental Politics*, 5(4): 1–24.
- Dimitrov, Radoslav S. 2010. "Inside UN Climate Change Negotiations." *Review of Policy Research*, 27(6): 795–821.
- Dimitrov, Radoslav S. 2012. "Persuasion in World Politics: The UN Climate Change Negotiations." In *Handbook of Global Environmental Politics*, 2nd edn, ed. Peter Dauvergne, 72–86. Cheltenham: Edward Elgar.
- Dupont, Christophe. 1996. "Negotiation as Coalition Building." *International Negotiation*, 1(1): 47–64.
- Earnest, David. 2008. "Coordination in Large Numbers: An Agent-Based Model of International Negotiations." *International Studies Quarterly*, 52: 363–382.
- Falkner, Robert. 2000. "Regulating Biotech Trade: The Cartagena Protocol on Biosafety." *International Affairs*, 76(2): 299–313.
- Falkner, Robert. 2005. "American Hegemony and the Global Environment." *International Studies Review*, 7(4): 585–599.

- Falkner, Robert. 2007. "The Political Economy of 'Normative Power' Europe: EU Environmental Leadership in International Biotechnology Regulation." *Journal of European Public Policy*, 14(4): 507–526.
- Falkner, Robert, Hannes Stephan, and John Vogler. 2010. "International Climate Policy after Copenhagen: Towards a 'Building Blocks' Strategy." *Global Policy*, 1(3): 252–262.
- Finnemore, Martha and Kathryn Sikkink. 1998. "International Norms Dynamics and Political Change." *International Organization*, 52(4): 887–917.
- Fry, Ian. 2008. "Reducing Emissions from Deforestation and Forest Degradation: Opportunities and Pitfalls in Developing a New Legal Regime." *Review of European Community & International Environmental Law*, 17(2): 166–182.
- Goldstein, Judith, Miles Kahler, Robert O. Keohane, and Ann-Marie Slaughter. 2000. "Legalization and World Politics." *International Organization*, 54(3): 385–399
- Grobe, Christian. 2010. "The Power of Words: Argumentative Persuasion in International Negotiations." *European Journal of International Relations*, 16(1): 5–29.
- Grundig, Frank. 2009. "Political Strategy and Climate Policy: A Rational Choice Perspective." *Environmental Politics*, 18(5): 747–764.
- Gupta, Joyeeta and Michael Grubb. 2000. Climate Change and European Leadership: A Sustainable Role for Europe? Berlin: Springer.
- Haas, Peter M. 2002. "UN Conferences and Constructivist Governance of the Environment." *Global Governance*, 8(1): 73–91.
- Haas, Peter M., Robert O. Keohane, and Marc Levy, eds. 1993. *Institutions for the Earth: Sources of Effective International Environmental Protection*. Cambridge, MA: MIT Press.
- Hampson, Fen Osler. 1995. Multilateral Negotiations: Lessons from Arms Control, Trade, and the Environment. Baltimore, MD: Johns Hopkins University Press.
- Hare, William, Claire Stockwell, Christian Flachsland, and Sebastian Oberthür. 2010. "The Architecture of the Global Climate Regime: A Top-Down Perspective." *Climate Policy*, 10: 600–614.
- Harris, Paul G., ed. 2007. Europe and Global Climate Change: Politics, Foreign Policy and Regional Cooperation. Cheltenham: Edward Edgar.
- Harrison, Kathryn and Lisa M. Sundstrom, eds. 2010. *Global Commons, Domestic Decisions: The Comparative Politics of Climate Change*. Cambridge, MA: MIT Press.
- Hasenclever, Andreas, Peter Mayer, and Volker Rittberger. 1997. *Theories of International Regimes*. Cambridge: Cambridge University Press.
- Hoffman, Matthew J. 2011. Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto. New York: Oxford University Press.
- Hopmann, P. Terrence. 1996. The Negotiation Process and the Resolution of International Conflict. Columbia, SC: University of South Carolina Press.
- Hovi, Jon, Tora Skodvin, and Steinar Andresen. 2003. "The Persistence of the Kyoto Protocol: Why Annex I Countries Move On without the United States." *Global Environmental Politics*, 3(4): 1–23.
- Jinnah, Sikkina. 2011. "Climate Change Bandwaggoning: The Impacts of Strategic Linkages on Regime Design, Maintenance, and Death." *Global Environmental Politics* (special issue), 11(3): 1–9.
- Jönsson, Christer. 2002. "Diplomacy, Bargaining and Negotiation." In *Handbook of International Relations*, ed. Walter Carlsnaes, Thomas Risse, and Beth A. Simmons, 212–234. London: Sage.
- Kaitala, V. and M. Pohjola. 1995. "Sustainable International Agreements on Greenhouse Warming: A Game Theoretic Study." In Control and Game Theoretic Models of the Environment, ed. Carlo Carraro and J.A. Filar, 67–87. Basel: Birkhäuser.
- Kanie, Norichika. 2003. "Leadership in Multilateral Negotiation and Domestic Policy: The Netherlands at the Kyoto Protocol." *International Negotiation*, 8(2): 339–365.
- Keohane, Robert O. and David G. Victor. 2011. "The Regime Complex for Climate Change." Perspectives on Politics, 9(1): 7–23.

- Krämer, L. 2004. "The Roots of Divergence: A European Perspective." In *Green Giants? Environmental Policies of the United States and the European Union*, ed. Norman J. Vig and Michael G. Faure, 53–72. Cambridge, MA: MIT Press.
- Kulovesi, Kati and Maria Gutiérrez. 2009. "Climate Change Negotiations Update: Process and Prospects for a Copenhagen Agreed Outcome." Review of European Community & International Environmental Law, 18(3): 229–243.
- Levy, Marc A., Oran R. Young, and Michael Zürn. 1995. "The Study of International Regimes." *European Journal of International Relations*, 1: 267–330.
- Litfin, Karen T. 1994. Ozone Discourses: Science and Politics in Global Environmental Cooperation. New York: Columbia University Press.
- Manners, I. 2002. "Normative Power Europe: A Contradiction in Terms?" *Journal of Common Market Studies*, 40(2): 235–258.
- McCright, Aaron M. and Riley E. Dunlap. 2008. "Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy." *Social Problems*, 50(3): 348–373.
- McLean, Elena V. and Randall W. Stone. 2012. "The Kyoto Protocol: Two-Level Bargaining and European Integration." *International Studies Quarterly*, 56: 1–15.
- Mitchell, Ronald. 2003. "International Environmental Agreements: A Survey of Their Features, Formation and Effects." *Annual Review of Environment and Resources*, 28: 429–461
- Moravcsik, Andrew. 1997. "Taking Preferences Seriously: A Liberal Theory of International Politics." *International Organization*, 51(4): 513–553.
- Morgera, Elisa, Kati Kulovesi, and Miquel Muños. 2010. *The EU's Climate and Energy Package: Environmental Integration and International Dimensions*. Edinburgh Europa Paper Series 2010/07; University of Edinburgh School of Law Working Paper No. 2010/38, http://ssrn.com/abstract=1711395 (accessed April 15, 2011).
- Müller, Benito. 2011. *UNFCCC: The Future of the Process*. Climate Strategies Paper. Cambridge: Climate Strategies, http://www.oxfordclimatepolicy.org/publications/documents/UNFCCC-TheFutureoftheProcess.pdf (accessed April 15, 2011).
- Müller, Harald. 2004. "Arguing, Bargaining and All That: Communicative Action, Rationalist Theory and the Logic of Appropriateness in International Relations." *European Journal of International Relations*, 10(3): 395–435.
- Muñoz, Miquel, Rachel Thrasher, and Adil Najam. 2009. "Measuring the Negotiation Burden of Multilateral Environmental Agreements." *Global Environmental Politics*, 9(4): 1–13.
- Najam, Adil. 2005. "Developing Countries and Global Environmental Governance: From Contestation to Participation to Engagement." *International Environmental Agreements: Politics, Law and Economics*, 5: 303–321.
- Najam, Adil, Saleemul Huq, and Youba Sokona. 2003. "Climate Negotiations beyond Kyoto: Developing Countries Concerns and Interests." *Climate Policy*, 3: 221–231.
- Oberthür, Sebastian. 2011. "Global Climate Governance after Cancun: Options for EU Leadership." *International Spectator*, 46(1): 5–13.
- Oberthür, Sebastian and Claire Roche Kelly. 2008. "EU Leadership in International Climate Policy: Achievements and Challenges." *International Spectator*, 43(3): 35–50.
- Oberthür, Sebastian and Marc Pallemaerts. 2010. The New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy. Brussels: Brussels University Press.
- Okada, A. 1999. A Cooperative Game Analysis of CO₂ Emission Permits Trading: Evaluating Initial Allocation Rules. Discussion Paper No. 495, Institute of Economic Research, Kyoto University, Japan.
- Ott, Herman E. 2001. "Climate Change: An Important Foreign Policy Issue." *International Affairs*, 7(2): 277–296.
- Ott, Herman E., Wolfgang Sterk, and Rie Watanabe. 2008. "The Bali Roadmap: New Horizons for Global Climate Policy." *Climate Policy*, 8: 91–95.
- Paterson, Matthew. 1996. Global Warming and Global Politics. New York: Routledge.
- Pettenger, Mary E., ed. 2007. The Social Construction of Climate Change. Toronto: Ashgate.

- Putnam, Robert D. 1988. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization*, 42(3): 427–460.
- Raiffa, Howard. 1982. The Art and Science of Negotiation. Cambridge, MA: Harvard University Press.
- Raiffa, Howard. 2002. Negotiation Analysis: The Art and Science of Collaborative Decision Making. Cambridge, MA: Harvard University Press.
- Rajamani, Lavanya. 2008. "From Berlin to Bali: Killing Kyoto Softly." *International and Comparative Law Quarterly*, 57(4): 909–939.
- Rajamani, Lavanya. 2010. "The Making and Unmaking of the Copenhagen Accord." *International and Comparative Law Quarterly*, 59(3): 824–843.
- Ramsay, Kristopher W. 2011. "Cheap Talk Diplomacy, Voluntary Negotiations, and Variable Bargaining Power." *International Studies Quarterly*, 55: 1003–1023.
- Risse, Thomas. 2000. "Let's Argue! Communicative Action in World Politics." *International Organization*, 54(1): 1–39.
- Rittberger, V. 1998. "International Conference Diplomacy: A Conspectus." In *Multilateral Diplomacy: The United Nations System at Geneva*, ed. M.A. Boisard and E.M. Chossudovsky, 15–28. The Hague: Kluwer.
- Roberts, J. Timmons and Bradley C. Parks. 2007. A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy. Cambridge, MA: MIT Press.
- Røgeberg, Ole, Steinar Andresen, and Bjart Holtsmark. 2010. "International Climate Treaties: The Case for Pessimism." *Climate Law*, 1(1): 177–197.
- Schreurs, Miranda A. 2008. "From the Bottom Up: Local and Subnational Climate Change Politics." *Journal of Environment & Development*, 17(4): 343–355.
- Selin, Henrik and Stacy D. VanDeveer. 2009. *Changing Climates in North American Politics: Institutions, Policymaking, and Multilevel Governance*. Cambridge, MA: MIT Press.
- Smith, Richard J. 2009. Negotiating Environment and Science: An Insider's View of International Agreements, from Driftnets to the Space Station. Washington, DC: Resources for the Future.
- Spector, Bertram I. 2003. "Deconstructing the Negotiations of Regime Dynamics." In Getting it Done: Post-agreement Negotiation and International Regimes, ed. B.I. Spector and I. William Zartman, 51–88. Washington, DC: United States Institute of Peace Press.
- Sprinz, Detlef, and Tapani Vaahtoranta. 1994. "The Interest-Based Explanation of International Environmental Policy." *International Organization*, 48(1): 77–105.
- Stein, Janice Gross. 1988. "International Negotiation: A Multidisciplinary Perspective." *Negotiation Journal*, 4(3): 221–231.
- Sterk, Wolfgang, Christof Arens, Sylvia Borbonus et al. 2010. Something was Rotten in the State of Denmark: Cop-out in Copenhagen. Munich: Wuppertal Institute for Climate, Environment and Energy.
- Underdal, Arild. 1980. The Politics of International Fisheries Management: The Case of the Northeast Atlantic. New York: Columbia University Press.
- Underdal, Arild. 1994. "Leadership Theory: Rediscovering the Art of Management." In International Multilateral Negotiations: Approaches to the Management of Complexity, ed. I. William Zartman, 178–200. San Francisco: Jossey-Bass.
- Victor, David G. 2001. The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming. Princeton, NJ: Princeton University Press.
- Victor, David G. 2004. Climate Change: Debating America's Policy Options. New York: Council on Foreign Relations.
- Victor, David. 2006. "Toward Effective International Cooperation on Climate Change: Numbers, Interests and Institutions." *Global Environmental Politics*, 6(3): 90–103.
- Victor, David. 2011. Global Warming Gridlock: Creating More Effective Strategies for Protecting the Planet. Cambridge: Cambridge University Press.
- Vihma, Antto. 2010. Elephant in the Room: The New G77 and China Dynamics in Climate Talks. Finnish Institute of International Affairs Briefing Paper 62. Helsinki: Finnish

- Institute of International Affairs, www.upi-fiia.fi/en/publication/118/elephant_in_the_room (accessed April 15, 2011).
- Vogler, John. 2005. "The European Contribution to Global Environmental Governance." International Affairs, 81: 835–850.
- Vogler, John. 2010. "The Institutionalisation of Trust in the International Climate Regime." Energy Policy, 38: 2681–2687.
- Vogler, John and Charlotte Bretherton. 2006. "The European Union as a Protagonist to the United States on Climate Change." *International Studies Perspectives*, 7(1): 1–22.
- Ward, Hugh. 1993. "Game Theory and the Politics of the Global Commons." *Journal of Conflict Resolution*, 37(2): 203–235.
- Ward, Hugh. 1996. "Game Theory and the Politics of Global Warming: The State of Play and Beyond." *Political Studies*, 44(5): 850–871.
- Ward, Hugh, Frank Grundig, and Ethan R. Zorick. 2001. "Marching at the Pace of the Slowest: A Model of International Climate-Change Negotiations." *Political Studies*, 49(3): 438–461.
- Watanabe, Rie, Christof Arens, Florian Mersmann *et al.* 2008. "The Bali Roadmap for Global Climate Policy: New Horizons and Old Pitfalls." *Journal of European Environmental and Planning Law*, 5(2): 139–158.
- Yamin, Farhana and Joanna Depledge. 2004. *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures*. Cambridge: Cambridge University Press.
- Young, Oran R. 1991. "Political Leadership and Regime Formation: On the Development of Institutions in International Society." *International Organization*, 45(3): 281–308.
- Young, Oran R. 1994. International Governance. Protecting the Environment in a Stateless Society. Ithaca, NY: Cornell University Press.
- Young, Oran R. 1998. Creating Regimes: Arctic Accords and International Governance. Ithaca, NY: Cornell University Press.
- Young, Oran R. 2002. The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale. Cambridge, MA: MIT Press.
- Young, Oran R. and Gail Osherenko, eds. 1993. *Polar Politics: Creating International Environmental Regimes*. Ithaca, NY: Cornell University Press.
- Zartman, I. William, ed. 1994. International Multilateral Negotiations: Approaches to the Management of Complexity. San Francisco: Jossey-Bass.
- Zartman, I. William. 2002. "What I Want to Know about Negotiations." *International Negotiation*, 7(1): 5–15.