Climate Change Politics Through a Constructivist Prism

'We must acknowledge that the debate over climate change, like almost all environmental issues, is a debate over culture, worldviews, and ideology' (Hoffman, 2012: 32).

Introduction

Climate change is an inherently political issue. At its core, it revolves around the themes of power, morality and interests. Even though current technology would likely provide for a technical solution to the climate change problem, a big question remains: who bears the short- and medium-term financial costs associated with significant action on climate change? Since this is a phenomenon which is global in nature, International Relations theory offers the tools to unwrap some of the difficulties associated with global climate change politics.

This essay argues that a constructivist perspective on international relations can unlock some of the aspects shaping global climate politics that are left unexplored by conventional IR theories. In particular, it focuses on identity and interest construction and how these features relate to states' conduct at global climate negotiations. Following a review of the relevant literature, this paper highlights a number of the key factors shaping climate change politics. First, the ideological nature of the contemporary climate change discourse is underlined. Second, gross domestic product as a socially constructed fact will be explored with regard to its relation to climate change politics. Lastly, developing countries' understanding of climate change will be considered in light of their historical experience with rich-country domination. These features illustrate how countries' interests with regard to climate change can be socially constructed.

Literature Review

Global environmental politics as a field of enquiry within International Relations is a relatively recent phenomenon. By comparison to fundamental issues such as war and peace and the global economic order, the environment—and more specifically climate change—has only come to be studied systematically since the late 1980s, although authors such as Hardin (1968) had earlier tried to explain environmental problems within the explanatory context of politics and economics. In fact, environmental problems have often served as analogies through which issues of conflict and cooperation could be elucidated, reflected by David Hume's illustration of the meadow-draining problem (Dougherty, 2003).

Since solving the global climate change problem is essentially a problem of conflict and cooperation, realism and liberalism as well as their distant cousins neorealism and neoliberal institutionalism have been applied in order to explain climate politics. With regard to climate change, these theories are helpful in the sense that they try to identify the extent to which cooperation is possible and which type of gains actors are pursuing. Hence, what are the perspectives that these conventional theories of International Relations take on the issue of climate change negotiations?

Realist and neorealist perspectives

Realism is based on the view that states reign supreme in international relations. Their power—in the realist view

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

generally defined relatively narrowly in terms of military and economic power—defines the shape of international relations. For example, Frederick (1941: 261) Schuman claimed that 'all politics is a struggle for power', while Hans Morgenthau (1948: 17) emphasized that 'the desire to dominate […] is a constitutive element of all human associations'. Hence, if necessary, more powerful states can act in coercive manners to realize their interests, while weaker states have to accept their inferiority. Neorealism as an extension of the realist theory of International Relations focuses on the structural imperatives established by the international system. Thus, Waltz (1990: 30) points out that it is the systemic structure which defines the nature of international politics. Importantly, the international system is governed by the existence of anarchy. There is no political hierarchy between states and therefore no monopoly on the legitimate use of force analogous to the laws that shape domestic politics (Lipson, 1984: 22).

There are several realist vantage points from which global climate negotiations can be approached. Clearly, the issues of power and interests are at the center of the problem presented by climate change. Realists argue that states are not necessarily predisposed to cooperation. In many ways, this is reflected by the frequent lack of cooperative behavior among the parties to global climate change negotiations. Furthermore, realist theory highlights that states are looking for relative gains compared with other states (Powell, 1991). This means that even when cooperation would lead to absolute gains for all participants involved, its occurrence might be impeded by the uneven distribution of such gains. Purdon (2013: 4) emphasizes that realism's concern with relative gains is thus one of the central explanatory features within a Realist approach to climate change. Therefore, realism provides for a theoretical framework which may explain one fundamental reason why climate negotiations often fail.

From a neorealist perspective, the international system is the primary unit of analysis. With regard to climate change, it is therefore important how the international system is configured at any given time. In the post-Cold War world, the international system has been dominated by the United States. According to the hegemonic stability theory advocated by Kindleberger (1973: 302-304), stability is provided through the presence of a dominant power assuming responsibility for the maintenance of institutional structures through the mechanisms of coordination and disciplinary measures. This would suggest that the dominance of the United States post-1990 would have represented a positive environment, given that the US has been in a position to ensure the participation of actors in climate negotiations, acting as a hegemon.

However, both realism and neorealism are problematic as theoretical frameworks in a discussion of climate change. One major conceptual difficulty is that of power. Both versions of the realist framework subscribe to rather simple notions of power, with military and economic power representing the dominant manifestations of a given state's power. In essence, realism and neorealism focus on the coercive and material nature of power. Mearsheimer (2001: 12) understands the concept of power in terms of property-relations, claiming that '[p]ower is the currency of great-power politics, and states compete for it among themselves'. It is difficult to apply such a conception of power within the context of climate change politics.

Although climate clearly has security implications (Gleick, 1993), it is not immediately clear how security threats as traditionally understood within a realist or neorealist framework are evident in the realm of climate change. Beyond the truism that states seek to protect their interests, realism and neorealism fail to identify how these interests are generated vis-à-vis climate change. Even though the United States and European states may have an overlapping concern over protecting national access to resources, their policy positions with respect to climate change differ considerably. Moreover, Kindleberger's hegemonic stability theory does not seem to have much currency within the field of climate politics. The US has shown little interest in advancing climate negotiations. Snidal (1985) points out that a hegemon can act benevolently or malevolently. In the case of the United States, a neorealist perspective does not explain fully the reasons why it acts malevolently while other states do not. Hence, a framework based on realist theories fails to account for some of the dynamics inherent within climate change politics.

The neoliberal institutionalist perspective

Neoliberal institutionalism is relevant to a discussion of climate change because it focuses on the role played by institutions within interstate cooperation. To a large extent, much of the interstate exchange within climate change

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

politics is based on institutions such as the United Nations Framework Convention on Climate Change (UNFCCC) or institutionalized frameworks such as the regular Conferences of the Parties (COP). Since institutions thus make up a considerable part of climate change politics, the integration of a neoliberal institutionalist framework is indispensable.

Keohane and Nye (1989: 55) argue that institutions within the international system establish a network of interactions which 'will be difficult either to eradicate or drastically rearrange'. Hence, once a treaty governing states' responsibilities vis-à-vis climate change has been set up and institutionalized, actors party to the treaty will be bound to a certain extent by the treaty's content, delimiting the range of legitimate courses of action. This set of institutions is complemented by a plethora of international regimes, which are defined by Martin and Simmons as 'rules, norms, principles, and procedures that focus expectations regarding international behaviour' (1998: 737). This can lead to a level of policy convergence. To some extent, a neoliberal framework is thus able to explain how environmental politics has come to represent an area of concern for states, given that it is governed by a range of such institutionalized treaties and regimes.

Keohane (2005: 82) emphasizes that institutions develop independently of the states that created them, and therefore they take on a permanent character. In the context of climate change, this seems to be an important feature, since global climate negotiations also take place outside of the exclusive realm of interstate relations. In fact, international organizations and nongovernmental organizations can play a particularly crucial role in framing the climate change discussion and putting pressure on state actors (Corell and Betsill, 2001). Hence, neoliberal institutionalism captures the transnational element of climate change politics in a way that realism is incapable of doing.

Moreover, an institutionalist conception of International Relations builds on an analysis of the conditions under which cooperation takes place. This is helpful to explain the basic features of climate change negotiations. For instance, Axelrod and Keohane (1985) emphasize that institutions act as enforcement mechanisms. While neoliberalism acknowledges anarchy—and some argue takes it for granted (Wendt, 1992)—it highlights the role played by institutions in fostering interstate cooperation by reducing transaction costs and uncertainty. This is, to a certain degree, analogous to the role being played by the hegemon in a realist analysis of International Relations. Hence, since institutions such as the United Nations and the Intergovernmental Panel on Climate Change (IPCC) are crucial actors within global climate change negotiations, neoliberal institutionalism is useful as a theoretical perspective in analyzing how cooperation is facilitated.

Yet a neoliberal perspective also entails a number of problems. Cutler (2002: 181) highlights the lack of historical awareness. Given that neoliberal institutionalism as a theory is broadly based on game theoretical approaches and a positivist methodology, it fails to capture the historical dimensions of climate change, and can therefore not account for certain actors' idiosyncratic behavior. Its ahistorical nature prevents neoliberal institutionalism from analyzing the dynamics within negotiations which may stray from the models predicted by positivist approaches. Moreover, much like realism, it takes actors' identities as given. Neoliberal institutionalism subscribes to the notion that states react to the state of anarchy in similar, predictable ways, based on rational analysis. As a rationalist theory, neoliberalism takes utility-maximization as the underlying motivation behind most state-based action (Sterling-Folker, 2010: 118). A Neoliberal analysis therefore struggles with normative concepts such as fairness or responsibility, which have been invoked successfully during the course of previous climate negotiations by less powerful states. It is incapable of determining whether state actors understand issues differently or have divergent biases vis-à-vis climate change politics, and can thus lead to misunderstandings over the extent of possible prospects for cooperation. Hence, what are the aspects left uninvestigated by rationalist IR theories?

The constructivist perspective

The role of identity construction and discourse within global climate change politics has remained relatively underexplored. This is significant, since Constructivism has emerged as a challenge to conventional International Relations theory in many other aspects of enquiry, such as international security and regional integration. Given the permeation of constructivist theories within International Relations scholarship, what does a constructivist analysis have to say about the nature and shape of global climate change negotiations?

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

As an IR theory, constructivism acknowledges the importance of both material as well as normative features of the international system. According to Colin Hay (quoted in Pettenger, 2013: 6), constructivism argues that 'the material and ideational are complexly interwoven and interdependent'. This constitutes a major difference between constructivism and more positivist theories of International Relations, which give primacy to material factors. Moreover, a further distinction introduced by constructivism is that it does not treat structure in the same way that conventional IR theories do. In contrast to neorealism and neoliberal institutionalism, which analyze International Relations through the structural parameters set by the international system, constructivists allow for a more dynamic notion of structure. Hence, a number of studies highlight the interrelationship between structure and agency (Kratochwil, 1991; Wendt, 1999). Thus, Wendt (1992) argues that states do not necessarily react to a predetermined structure as suggested by neorealists and neoliberals, but rather identify the nature of that structure based on socially-defined and intersubjective meanings. Moreover, Adler (1997) points out that human agency creates a social context in which the meaning of structure is continuously defined and redefined. Lastly, Finnemore (1996: 24) underlines the interplay between structure and agency, stating that Constructivism 'emphasize[s] the construction of social structures by agents as well as the ways in which those structures, in turn, influence and reconstruct agents'.

Hence, constructivist analysis inherently includes two important departures from conventional IR approaches: a recognition of both material and ideational factors, and an understanding of structure and agency as being mutually constituted. Having established this, how does constructivism enhance the study of global climate change politics? For one, it helps scholars of International Relations to understand climate change as a social process. As Pettenger (2007: 11) points out, constructivism can 'lead us to understand how certain meanings have emerged and been framed, while others have been obscured'. For instance, important contested concepts such as sustainable development or historical responsibility may be understood differently by different actors, which then manifests itself within negotiations over climate change policy. Moreover, it provides for scope to analyze the influence of non-state actors, referred to by Fogel as 'climate policy entrepreneurs' (2007: 99), which have become increasingly crucial within the formulation of climate change policy, particularly at the domestic level.

Furthermore, constructivism is able to investigate why states have come to regard climate policy as a national interest in the first place. Why is it that 'governments have added the inspirational norm of ecological integrity to the traditional goals of wealth and power' (Haas, 2002: 75)? Due to constructivism's acknowledgement of both ideational and material factors, it provides the foundation necessary to question some of the assumptions underlying state behavior in climate negotiations. For example, Bernstein et al. (2010) have highlighted the role of a normative consensus on carbon markets and its effect on the structure of the global climate governance architecture as a crucial element shaping climate politics.

Constructivism asks the questions that are left unaddressed by rationalist theories of International Relations. It captures the very political nature of climate change as an issue and is able to put it in the respective historical and social context.

Climate Change as Political Discourse

It is tempting to view climate change from the perspective of scientific analysis. After all, scientific enquiry is the main source of the knowledge that currently exists about climate change. Both the causes as well as the likely impacts of climate change have been modeled by researchers in the natural sciences (Trapp et al., 2007; Pall et al., 2011). Thus, it is immediately clear that discussions about climate change are dominated by references to scholarship in the natural science community.

Scientific research on climate change has become steadily more reliable, with a large majority of climate scientists numbering up to 97 percent identifying anthropogenic causes as the drivers behind climate change (Cook et al., 2013). Hence, even though there is as of yet no definitive scientific proof in the strictest sense of the term, scientific enquiry overwhelmingly indicates both the existence of climate change as well as its nature as a phenomenon caused by human activities. However, the central paradox generated by this relative wealth of knowledge about climate change is elaborated by Haas (2004), who scrutinizes why such overwhelming knowledge has not led to power within the context of global environmental governance.

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

Haas discusses three possible reasons for this lack of translation of scientific evidence into adequate policy responses (2004: 571). For one, even though science can point out a problem, in the context of environmental governance—and climate change in particular—it is insufficient in providing a solution. This is due to the circumstance that solutions have to be arrived at through a political process. Moreover, science does not necessarily take place in an objective setting. In analogy to Robert Cox's reminder that 'theory is always for someone, and for some purpose' (1981: 128), science has a purpose as well as a designated audience. In many cases, that audience is comprised of other scientists. In this sense, one has to be aware of the sociology of science in addition to the actual findings indicating close to unanimous consensus. Moreover, Lidskog and Sundqvist (2002) point out that the use of science as a legitimizing instrument may often be regarded by those who are affected by the distributional consequences it entails as illegitimate, or even as an exploitative set of discursive practices. Lastly, Haas highlights that political considerations generally play into the evaluation of scientific findings, which influences the eventual translation of science into policy.

The divide between the natural science side of climate change and the social and political context in which it is embedded is illustrated by the discourse about climate change in the United States. Even though the scientific consensus on climate change is overwhelming, that has not led to similar political consensus on the issue. In fact, both public discourse as well as the political climate may be deteriorating. How can one explain this development?

Here, conventional theories of International Relations are not adequate in identifying the underlying issues because they largely disregard the domestic political setting in which the state and its policy-makers are embedded. Neorealism and neoliberal institutionalism in particular are focused almost exclusively on the implications of the international system. However, the principal actors within the global climate change negotiations—national governments—are rooted within a particular context in terms of ideology, public opinion and historical and cultural predispositions. While neorealism would predict non-cooperation on the basis of the protection of national interests and neoliberalism would identify institutions as driving forces behind incremental progress in enforcing cooperation, constructivism is able to offer a more nuanced account of the plethora of ways in which global climate politics may be influenced.

Hoffman (2012) highlights that in the United States, climate change has become an issue that is associated with a particular political ideology in the same way that abortion, gun ownership and gay marriage are. That is to say, being skeptical of climate change is not so much a matter of scientific knowledge, but rather an expression of a political affiliation. In fact, Hoffman maintains that political affiliation is 'one of the strongest correlates with individual uncertainty about climate change, not scientific knowledge' (2012: 32). Large parts of the public disregard the scientific basis of climate change and instead view the issue from an ideological perspective. Within this context, climate change has come to be associated with big government, supposedly intending to interfere in the private market through climate-related regulations and additional taxation. This framing of climate change has been cultivated with the aid of a number of opinion-makers. Jacques et al. (2008) have found that conservative think tanks have successfully promoted environmental skepticism and thereby weakened US commitment to climate change solutions, while Boykoff and Boykoff (2005) identify the coverage of climate change in the US media as one of the key drivers behind the weakness in support for climate change regimes in the United States.

Bearing the domestic political context in the United States in mind, its negotiating position vis-à-vis climate change in the international arena has to be re-evaluated. Although the US is defending its interests against other states, identifying how it conceives of these interests in the first place is important. The process of interest generation works on two levels. For one, the policymakers and negotiators who are involved in climate change talks may themselves be drawn towards a climate change skeptic perspective. Hence, there are direct implications for the prospects for cooperation given that climate change may not be perceived as a global environmental threat but rather as a contrived attack on national sovereignty and one's own lifestyle. The second influence is generated by the general discourse in which climate change discussions are embedded, as illustrated above. Thus, with the political role assumed by climate change domestically and public opinion on the issue as divided as it is in the United States, the pressure on the government to show cooperative behavior in negotiations is low.

Thus, a constructivist perspective captures both the elements of agency and structure as well as their interplay within

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

global climate change politics. While climate change is an objective phenomenon that exists in the world, it matters how subjects perceive it. This perception is partly shaped by the domestic political context in which subjects—for instance, US citizens—have been socialized. Socially constructed perceptions then filter down into the actual negotiating process, which may partly account for the frequent impasses precipitated by US intransigence on climate change issues.

GDP as a Social Fact in Climate Politics

Collective ideas about what constitutes progress play a big role in the context of climate change. If one accepts that climate change is generated by anthropogenic causes, the corollary is that the social and economic relations within society have a direct impact on the extent to which the climate is changing. Thus, how societies measure well-being is central to any understanding of the connection between the economic and social system and global climate change. Within modern rich countries, that measurement usually takes the form of gross domestic product (GDP).

Given that the constructivism approach values both material and ideational features of international relations, GDP is a construct which can be analyzed through a constructivist prism. GDP is a good example of what Constructivists refer to as social facts. Ruggie defines social facts as 'those facts that are produced by virtue of all the relevant actors agreeing that they exist' (1998: 13). GDP is not a fact in the same way that gravity is, but it nevertheless can be treated as such as long as relevant social institutions and collective beliefs maintain its role within society. As such, it is a constructed fact in the sense that there is no inevitability to it.

This constructed fact—GDP as the paramount indicator of society's well-being—contributes to countries' assessments of their interests vis-à-vis climate change. Even though reviews of possible climate change developments and their social and economic costs, such as those conducted by Stern (2007) and Garnaut (2011), have indicated that the potential losses deriving from climate change may surpass the current mitigation costs by considerable margins, a collective belief in the importance of GDP juxtaposes economic development with action on climate change. Thus, GDP has assumed an important normative role within climate change politics because of its significant political function. Due to GDP's short-term nature as an indicator calculated most frequently on a yearly or even quarterly basis, the financial costs associated with current mitigation strategies appear more threatening than they might otherwise be. Short election cycles add to the imperative to produce tangible results, expressed in GDP figures, hampering efforts to show cooperative behavior at climate negotiations.

A constructivist analysis indicates the importance of both material and ideational aspects. GDP as an indicator is based on material facts. However, what is equally important is the way it is interpreted—in this case, as something which plays a role above and beyond that which it is actually suitable for. As Boarini et al. (2006) point out, GDP does have a function to play, but is usually mistaken for a comprehensive indicator of well-being. With expanding production based on the intent to grow GDP, climate change mitigation becomes anathema to well-being in the sense that it may decrease short-term GDP growth. Thus, the construction of GDP as a social fact plays a crucial role within climate politics.

Developing Countries and the History of Climate Change

While discourse and ideology have been demonstrated to have significance in an analysis of climate change politics in the United States, historically generated understandings of fairness and responsibility are important when looking at those actors who are often perceived as the United States' antagonists. Institutionally, these countries have organized themselves into the Group of 77 and China (G77 + China). This is a bloc of former and current developing countries whose shared identity consists of a rejection of primary responsibility for climate change mitigation. Since the threat of climate change has been engendered mostly by emissions of early industrializers such as the UK, Germany and the US, these countries should assume the responsibility for remedying the implications of a changing climate and to shoulder most of the burden of mitigating emissions. Parks and Roberts (2008: 624) estimate that the richest 20 percent of the world's population is responsible for up to 80 percent of historical emissions. Moreover, many low and middle-income countries express concerns over the possible conflicts between climate change prevention and mitigation matters and the prospects of development.

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

This opinion is maintained in a statement made by Bolivia:

'[r]especting a right to development would imply that the developing countries should be allocated the environmental space necessary to satisfy their development and poverty eradication needs, given the amount of financial and technological support that is made available' (Republic of Bolivia, 2009: 8).

Thus, from the perspective of the majority of developing countries, fairness as a norm assumes a central role within their understanding of climate change as an issue. There is a fundamental divide between an understanding of fairness based on historical responsibility and fairness based on capacity. While a consensus exists that the poorest countries should not be burdened with the costs of climate change mitigation measures, divergent perceptions of the responsibilities of the big emerging economies have clouded climate negotiations. Countries such as China, Brazil and India are crucial because they have become big emitters while also emerging as more politically active and confident players.

Empirical research has indeed indicated that developing countries can be burdened significantly by their inclusion in climate change mitigation schemes (Hirazawa et al., 2011). On the other hand, developing and middle-income countries are also likely to suffer disproportionally from the consequences of climate change because of their lower social and economic capacity to generate resilience. Within this given context, normative framings of climate change as a political issue have become increasingly important. The G77 + China understand themselves not only as a group of countries organized under the umbrella of climate change policy, but also more broadly as formerly colonized states. As such, their self-identities are collectively shaped by the historical experience of colonialism. Therefore, climate change takes on a dimension that cannot sufficiently be explained by rational-actor models as advocated by neorealist and neoliberal theorists. Rather, climate change should be understood within this broader historical context of a global political economy whose nature has largely been shaped by countries with the highest historical emissions.

The framework developed to circumvent this impasse has been referred to as 'Common but Differentiated Responsibilities' (CBDR). This notion has roots that do not necessarily lie within climate change discourse. However, its application to sustainable development in general and climate change in particular was affirmed at the 1992 United Nations Conference on Environment and Development. The final report included a statement highlighting that, '[i]n view of the different contributions to global environmental degradation, [s]tates have common but differentiated responsibilities' (UN General Assembly, 1992). While Bossley (2012: 354) has referred to CBDR as the cornerstone of global climate negotiations, the notion still remains subject to national interpretation. Hence, even though CBDR was meant as a device to assuage the antagonism accompanying climate negotiations, it has run into the same conceptual problems.

States have framed climate change as an issue that goes beyond the immediate environmental dimension. What is lacking within climate negotiations is therefore a shared understanding of what constitutes basic normative notions such as fairness and responsibility. As Ringius et al. (2000: 9) point out, '[n]orms of fairness can be a source of conflict as well as a platform for agreement'. Thus, even though European states and the US display vast differences in terms of actual climate policy, they share a common understanding of what climate change reflects as an issue. Within much of this discourse, climate change still remains largely as an environmental issue which is to be solved by market mechanisms and technology investment. This understanding of climate change exacerbates the chasm between industrialized countries and the G77 + China, which look at climate change through a more historical lens, and are therefore more inclined to view it as an issue requiring primarily rich-country action.

This historical dimension of climate change can be analyzed from a constructivist perspective, given the attention that constructivist theories pay to the interplay between structure and agency. From this constructivist perspective on climate change, what is important is not necessarily the structure of the international system as such, but rather how that structure has come about and what states think about climate change in light of past collective experiences involving colonialism, economic and social exploitation and the historical responsibility for climate change incurred by rich countries. These aspects all factor into a general disposition that clearly affects states' interests with regard to climate negotiations. This is different from the view of interests as calculated gains and losses. This view of the

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

nature of climate change negotiations does not preclude the more conventional conception of interests, but rather embeds it into a wider framework explaining the juxtaposition between rich countries and developing countries.

Conclusion

This essay has aimed to offer a constructivist perspective on contemporary climate change politics. In order to do so, it has explored a particular climate change discourse and its ideological construction, the socially constructed nature of GDP, as well as developing countries' historically generated understanding of climate change as an issue which transcends environmental considerations. The aim has been to demonstrate that actors' identities and interests vis-à-vis climate change are not necessarily given, but instead have an historical origin and evolve subject to factors which cannot be solely accounted for based on rational-actor expectations.

To claim that countries are not pursuing their interests in global climate change negotiations would be fallacious. This is not what this paper seeks to suggest. Rather, the point of emphasis is that the narrative constructed by actors around climate change and the particular ideological and cultural perspective taken by actors serve as instruments of legitimization. Without such an issue construction, countries would perhaps act more closely in accordance with the expectations for cooperation outlined by neorealist or neoliberal institutionalist theories. However, climate change—like a number of other issues—has been significantly politicized. Given this insight, a constructivist perspective on climate change can add significantly to the debate.

References

Adler, E., 'Seizing the Middle Ground: Constructivism in World Politics', *European Journal of International Relations* 3/3 (1997), pp. 319-363.

Axelrod, R. Keohane, R. O., 'Achieving Cooperation Under Anarchy: Strategies and Institutions', *World Politics* 38/1 (1985), pp. 226-254.

Bernstein, S., Betsill, M. M., Hoffmann, M., Patterson, M., 'A Tale of Two Copenhagens: Carbon Markets and Climate Governance', *Millenium: Journal of International Studies* 39/1 (2010), pp. 161-173.

Boarini, R., Johansson, A., Mira d'Ercole, M., 'Alternative Measures of Well-Being', *Organisation for Economic Cooperation and Development*, OECD Economics Department Working Papers 476 (February 2006), http://www.oecd.org/els/soc/36165332.pdf.

Bossley, L., 'Dealing with Reality', *Journal of World Energy Law & Business* 5/4 (2012), pp. 345-365.

Boykoff, M. T., Boykoff, J. M., 'Climate Change and Journalistic Norms: A Case-Study of US Mass-Media Coverage', *Geoforum* 38 (2007), pp. 1190-1204.

Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., Skuce, A., 'Quantifying the Consensus on Anthropogenic Global Warming in the Scientific Literature', *Environmental Research Letters* 8/2 (2013), pp. 1-7.

Corell, E., Betsill, M. M., 'A Comparative Look at NGO Influence in International Environmental Negotiations: Desertification and Climate Change', *Global Environmental Politics* 1/4 (2001), pp. 86-107.

Cox, R., 'Social Forces, States, and World Orders: Beyond International Relations Theory. *Millennium: Journal of International Studies*, 10/2 (1981), pp. 126-155.

Cutler, A. C., 'Critical Historical Materialism and International Law: Imagining International Law As Praxis', in: Hobden, S., Hobson, J. M., (eds.), *Historical Sociology of International Relations* (Cambridge: Cambridge University Press, 2002), pp. 181-199.

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

Dougherty, K. L., 'Public Goods Theory from Eighteenth Century Political Philosophy to Twentieth Century Economics', *Public Choice* 117 (2003), pp. 239-253.

Finnemore, M., *National Interests in International Society* (Ithaca: Cornell University Press, 1996).

Fogel, C., 'Constructing Progressive Climate Change Norms: The US in the Early 2000s', in: Pettenger, M. E., (ed.), *The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses* (Hampshire: Ashgate Publishing, 2007), pp. 99-120.

Garnaut, R., *The Garnaut Review 2011 – Australia in the Global Response to Climate Change* (Cambridge: Cambridge University Press, 2011).

Gleick, P. H., 'Water and Conflict: Fresh Water Resources and International Security', *International Security* 18/1 (1993), pp 79-112.

Haas, P. M., 'UN Conferences and Constructivist Governance of the Environment', *Global Governance* 8/1 (2002), pp. 73-91.

Haas, P. M., 'When Does Power Listen to Truth? A Constructivist Approach to the Policy Process',*Journal of European Public Policy* 11/4 (2004), pp. 569-592.

Hardin, G., 'The Tragedy of the Commons', *Science* 162 (1968), pp. 1243-1248.

Hirazawa, M., Saito, K., Yakita, A., 'Effects of International Sharing of Pollution Abatement Burdens on Income Inequality Among Countries', *Journal of Economic Dynamics & Control* 35/1 (2011), pp. 1615-1625.

Hoffman, A. J., 'Climate Science as Culture War', *Stanford Social Innovation Review* (Fall 2012), pp. 30-37.

Jacques, P. J., Dunlap, R. E., Freeman, M., 'The Organisation of Denial: Conservative Think Tanks and Environmental Skepticism', *Environmental Politics* 17/3 (2008), pp. 349-385.

Keohane, R. O., *After Hegemony: Cooperation and Discord in the World Political Economy* (New Jersey: Princeton University Press, 2005).

Keohane, R. O., Nye, J. S., *Power and Interdependence* (New York: Harper Collins, 1989).

Kindleberger, C. P., *The World in Depression, 1929-1939* (Berkeley: University of California Press, 1973).

Kratochwil, F. V., *Rules, Norms and Decisions: On the Conditions of Practical and Legal Reasoning in International Relations and Domestic Affairs* (Cambridge: Cambridge University Press, 1991).

Lipson, C., 'International Cooperation in Economic and Security Affairs', *World Politics* 37/1 (1984), pp. 1-23.

Lidskog, R., Sundqvist, G., 'The Role of Science in Environmental Regimes: The Case of LRTAP',*European Journal of International Relations* 8/1 (2002), pp. 77-101.

Martin, L.L., Simmons, B., 'Theories and Empirical Studies of International Institutions', *International Organization*, 52/4 (1998), pp. 729-757.

Mearsheimer, J., *The Tragedy of Great Power Politics* (New York: W. W. Norton, 2001).

Morgenthau, H. J., *Politics Among Nations: The Struggle for Power and Peace* (New York: Alfred A. Knopf, 1948).

Climate Change Politics Through a Constructivist Prism
Written by Tim Pfefferle

Pall, P., Aina, T., Stone, D., Stott, P., Nozawa, T., Hilberts, A. G. J., Lohmann, D., Allen, M.R., 'Anthropogenic Greenhouse Gas Contribution to Flood Risk in England and Wales in Autumn 2000', *Nature* 470 (2011), pp. 382-385.

Parks, B. C., Roberts, J. T., 'Inequality and the Global Climate Regime: Breaking the North-South Impasse', *Cambridge Review of International Affairs* 21/4 (2008), pp. 321-648.

Pettenger, M. E., 'Introduction : Power, Knowledge and the Social Construction of Climate Change', in: Pettenger, M. E., (ed.), *The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses* (Hampshire: Ashgate Publishing, 2007), pp. 1-20.

Powell, R., 'Absolute and Relative Gains in International Relations Theory', *The American Political Science Review* 85/4 (1991), pp. 1303-1320.

Purdon, M., 'Neoclassical Realism and International Climate Change Politics: Moral Imperative and Political Constraint in International Climate Finance', *Journal of International Relations and Development* (2013), published online, pp. 1-38, www.dx.doi.org/10.1057/jird.2013.5.

Republic of Bolivia, *Commitments for Annex I Parties under paragraph 1(b)(i) of the Bali Action Plan: Evaluating developed countries' historical climate debt to developing countries* (2009), www.climate-debt.org/wp-content/uploads/2009/11/Bolivia-Climate-Debt-Proposal.pdf .

Ringius, L., Torvanger, A., Underdal, A., 'Burden Differentiation: Fairness Principles and Proposals', *Cicero-ECN Working Paper 1999: 13* (February 2000), www.cicero.uio.no/media/198.pdf.

Ruggie, J. G., *Constructing the World Polity: Essays on International Institutionalization* (London: Routledge, 1998).

Schuman, F. L., *International Politics: The Western State System in Transition* (New York: McGraw Hill, 1941).

Snidal, D., 'The Limits of Hegemonic Stability Theory', *International Organization* 39/4 (1985), pp. 579-614.

Sterling-Folker, J., 'Neoliberalism', in: Dunne, T., Kurki, M., Smith, S., (eds.), *International Relations Theories: Discipline and Diversity*. (Oxford: Oxford University Press, 2010).

Stern, N., *The Economics of Climate Change: The Stern Review* (Cambridge: Cambridge University Press, 2007).

Trapp, R. J., Diffenbaugh, N. S., Brooks, H. E., Baldwin, M. E., Robinson, E. D., Pal, J. S., 'Changes in Severe Thunderstorm Environment Frequency During the 21st Century Caused by Anthropogenically Enhanced Global Radiative Forcing', *Proceedings of the National Academy of Sciences* 104/50 (2007), pp. 19719-19723.

United Nations General Assembly, *Report of the United Nations Conference on Environment and Development* (28 September 1992), www.un.org/documents/ga/conf151/aconf15126-4.htm.

Waltz, K., 'Realist Thought and Neorealist Theory', *Journal of International Affairs* 44/1 (1990), pp. 21-37.

Wendt, A., *Social Theory of International Politics* (Cambridge: Cambridge University Press, 1999).

Wendt, A., 'Anarchy Is What States Make of It: The Social Construction of Power Politics', *International Organization* 46/2 (1992), pp. 395-421.

—
Written by: Tim Pfefferle
Written at: Queen Mary, University of London

Climate Change Politics Through a Constructivist Prism

Written by Tim Pfefferle

Written for: Richard Saull
Date written: April 2014