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Liberal Institutionalism or Realism?

A document analysis of international climate change agreements

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Abstract

What are we doing to solve the global climate change crisis? This paper will look at two international climate treaties and how their mechanisms generates international cooperation amongst the member nations. First the paper will disclose for the theories: liberal institutionalism and realism, and a game theory: Prisoners' Dilemma. Then paper will analyze the Kyoto Protocol and the Paris Agreement mechanisms in relations to liberal institutionalism. The Kyoto Protocol had little effect on global greenhouse gas mitigation; what difference will the Paris Agreement make?

Realism, as a political theory, is the counterpart to liberal institutionalism. Therefore, the paper will use a realistic perspective to discuss why the United States left the two climate change treaties. The conclusion is liberal institutionalism fails to explain why nations leave international agreements, but realism can. And last, the UNFCCC continues to develop international climate change treaties to resolve earlier deficiencies.

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Introduction

Since the end of World War II international cooperation amongst advanced industrialized countries has tangled into a web of political relations. The political theory, liberal institutionalism, explains the increasing international political relations in the world. Realism is an old classic political theory. It explains why nations leave international treaties and refuse to participate in international cooperation. How will realism explain international cooperation regarding climate change agreements? How will liberal institutionalism explain the United States resigning from multiple international agreements? Climate change agreements are a new phenomenon in international politics. The UN held their first conference on climate change in 1992 in Rio de Janeiro establishing the United Nations Framework Convention on Climate Change (UNFCCC). How has the UNFCCC developed their frameworks and international treaties for the best possible greenhouse gas mitigation?

The thesis statement in this research paper is:

How can we best explain the nature of international climate treaties and why some nations commit and others not? Why do the UNFCCC keep creating new treaties when earlier ones have had little success?

Using the ideals of liberal institutionalism, I assume international assume international organizations and institutions are contributing factors in creating more international cooperation. This research paper is divided into five main sections. First, I will describe the political theories relevant in this paper: realism, liberal institutionalism and Prisoner's Dilemma. Secondly, in methodology, I will highlight the aspects in qualitative method relevant to this political research paper. Third, the empirical evidence is the two climate change treaties. The treaties and the political theories will be the only definitions in my paper. Other terms will be explained in the text. Fourth, I will analyze the Kyoto Protocol and the Paris Agreement using liberal institutionalism. Fifth I will discuss international cooperation through realism and Prisoner's Dilemma. The conclusion will show the theories limitation to explain international cooperation regarding climate change agreements. The theories complement each other, and together will give the reader a better understanding of international cooperation. The UNFCCC is learning from previous climate treaties deficiencies but has yet to accomplish committing the United States to a treaty.

Theory

Realism

John Mearsheimer, doctor and professor in political science at the University of Chicago (University of Chicago, 2019), suggests realism has five assumptions about the international political system. Also, the authors of the book; “Introduction to International Relations”, have the same assumptions as Mearsheimer.

First, the international system is anarchic, but not chaotic or riven by disorder. However, the anarchical international system is consistent of smaller independent states with no central authority over them (Mearsheimer, 1994, p. 10). Power is the currency states do business with in international relations. States achieve security to the extent of their power. In an anarchic world with only realists, the weak submit and the powerful prevail. Anarchy creates insecurity causing citizens to rely on their governments for protection. Realism looks at the long history of international relations and sees competition and the struggle for power including war. Realists see the struggle for security and power as the theme in relations among states (Grieco, Ikenberry, & Mastanduno, 2015, p. 72).

The second realism assumption is states can be dangerous to each other when states in the international system possess some offensive military capability to hurt and possibly destroy each other (Mearsheimer, 1994, p. 10). Possessing great military power is one version of wealth, which is one step closer to a hegemonic nation. Realism expects all nations to work towards the goal of being a hegemon¹ because a hegemon is guaranteed survival (Mearsheimer, 1994, pp. 11-12).

The third assumption is a state cannot be certain or trust the intentions of other states. Even though a state is relatively benign, its intentions can change quickly. There is a large uncertainty amongst states' intentions and future actions in the international system (Mearsheimer, 1994, p. 10). States are expected to always act rational. However, states consider different actions rational (Grieco et al., 2015, pp. 72-73).

Realism's fourth assumption, according to Mearsheimer, the most basic motive driving states is survival. States actions will always be in accordance with a will to survive, be secure and maintain their sovereignty (Mearsheimer, 1994, p. 10). States' foreign policy is an exercise in national security

¹ A hegemon is the nation possessing all power in a unipolar world order (Kissinger, 2014, p. 9).

in order to not be exploited or attacked by other states. States cannot allow themselves to initiate open trading systems or other direct international relations (Grieco et al., 2015, p. 73).

The fifth assumption is states will always think strategically about how to survive in the international system (Mearsheimer, 1994, p. 10). The search for security is a competitive endeavor; states expect competition and conflict. To be a rich state is equal with being a more secure and prosperous state. This is why realists expect competition to be a natural and continuous feature in the international system (Grieco et al., 2015, p. 74). Kenneth Waltz thinks states operate in a “self-help” system, where potential alliances are only temporary. Today’s alliance partner may be tomorrow’s enemy. States operating in a self-help system should always act according to their own interest and aim to maximize their relative power positions over other states (Mearsheimer, 1994, p. 11). This is called the zero-sum game, a game where gaining power for one state necessitates loss of power for another (Johnson & Heiss, 2013, p. 2).

Liberal institutionalism

One of the distinctions between realism and liberal institutionalism is realism anticipates war, while liberalism (in this case liberal institutionalism) anticipates war but strives for peace. Liberal institutionalism is one of today’s predecessors of classical liberalism, influenced by realism and Marxism. The theoretical tradition expanded in the 1970’s and considers international organizations and institution main actors (Johnson & Heiss, 2013, p. 7). Liberal institutionalism explains international relations by looking at global governance. The theory values the role international organizations and international society plays in world affairs, sometimes as international governors. In addition, liberal institutionalism values common goals as an important factor in the international system and as a means of states cooperating. When states cooperate, they will achieve maximum gains, however cheating states are the greatest obstacles to cooperation. (Devitt, 2011). Hedley Bull, Professor of International Relations at the Australian National University, LSE and Oxford (Dunne, 2019), explains an international society as a group of states with common interests and values who establish a society where they conceive themselves to be bound by a common set of rules and institutions (Bull, 1977, p. 13; Devitt, 2011).

Liberal institutionalism does not aim to deal with cheaters and victims by changing fundamental norms of state behavior but concentrates on showing how rules can work to counter cheating. The theory also argues if institutions can change a state’s calculations about how to maximize gain it can in the long run achieve cooperation (Mearsheimer, 1994, p. 17; Milner, 1992, p. 475). Liberal institutionalism

values peaceful cooperation between states who are willing to resign some of their sovereignty to contribute to the so-called international society where economic growth and security is promoted (Baylis, Smith, & Owens, 2005, p. 213; Devitt, 2011). One of the founders of this political theoretical tradition is Robert Keohane. He made his appearance in liberal institutionalism with his book, “After Hegemony”. Keohane argues the very fact that international cooperation exists, disproves the realist presumption of international relations being dominated by a state of war with anarchy (Keohane, 1984, p. 5). He also looks to the theoretical tradition, functionalism, for inspiration when insisting international politics is not a zero-sum quest for power. Keohane insists institutions can exist when they provide information, coordination, enforcement or other benefits states could not provide on their own (Johnson & Heiss, 2013, p. 10; Keohane, 1984). Functionalism challenges realist notions, and argues authority is not necessarily monopolized by nation-states within their territories. Governance is a set of functions that can be carried out across national borders by a mix of state and non-state actors. International institutions and organizations are means where this transfer of authority takes place in practice. In line with liberal institutionalism, such connectedness disincentivizes war (Johnson & Heiss, 2013, p. 7).

Prisoners’ Dilemma

Cheating is the principal obstacle to cooperation amongst states with mutual interests. The game theory, Prisoners’ Dilemma, addresses this situation and proposes two different outcomes. In this text the participants are states who can either cheat or cooperate with each other. However, the game theory described in Jinny Bang’s (at the New York University) summary regards the participants as two people;

“Two men are arrested after committing a crime. Only a confession by one or both of them can lead to a conviction for the crime. If both of them remain silent, each will be charged with a lesser offense and serve a light sentence. If one confesses while the other remains silent, the one who confesses will be set free in exchange for his testimony against the other, and the one who remains silent will be convicted of the crime and receive a full sentence. If both confess, both of them will be convicted of the crime but will receive a reduced sentence. The dilemma here is that regardless of what the other chooses to do, it will be better for each of them to confess. However, if they both confess, they will be worse off than they would have been if both of them had remained silent (Bang, 2011)”.

Typically, each side wants to maximize own gains and does not care about what the other participants gains or loses. The two participants, which in this case are states, receive different levels of reward or

punishment based on their decision either to cooperate or defect (Pothos, Perry, Corr, Matthew, & Busemeyer, 2011). However, according to Mearsheimer the most attractive strategy for each state is to cheat and hope the other state pursues a cooperative strategy. A state's ideal outcome is to "sucker" the other side into thinking it is going to cooperate; and cheat (Mearsheimer, 1994, p. 17). Here, it is important to keep in mind John Mearsheimer is a hardcore realist which probably has affected his interpretation of the Prisoners' Dilemma. Jervis (political science professor at UCLA) also thinks if the game is played only once, the only rational response is to defect. There is no solution that is in the best interest of all the participants in this game theory (Jervis, 1978). Furthermore, the possibility needs to be addressed that a state might not always act to maximize self-gain if it is at another states' expense. If that is the case, another possible outcome can be for both states to choose to cooperate wanting to minimize the negative consequences for oneself and the other participant. If both states choose to cooperate they will be certain the second best/the second worst outcome will take place (in relation to maximize self-gain), they will not be cheated by the other participant and end up with the absolute worst outcome; the other participant has left you all the consequences. This possible outcome of the game theory is suspected in relations to liberal institutionalism ideals.

Theoretical allocation

In this text I have chosen to analyze my thesis statement with liberal institutionalism. Later, the view on international cooperation will be challenged by realism and Prisoners' Dilemma. Liberal institutionalism and realism are complete opposites political theories; the game theory, Prisoners' Dilemma, is the perfect centerpiece. It captures the essence of the problem states must solve to achieve cooperation instead of announcing victims and cheaters. Realism explains why some nations do not commit to international cooperation, and liberal institutionalism explains the origins of international cooperation and why most nations choose to commit. Realism is based on realistic assumptions; where liberal institutionalism is designed to explain why nations choose to cooperate. My analytical strategy is to choose two theories with the ability to explain different aspects of the same phenomenon. Prisoners' Dilemma has two different outcomes which both take place in my case study. One outcome is in line with realism assumptions and the other in line with liberal institutionalism assumptions.

Method

I will utilize a document analysis in this paper. My style of analysis is a qualitative – abduction method that relies on a typical inductive study. Aksel Tjora, researcher in sociology and political science at NTNU, defines an abductive methodological approach as an approach who relies on empirical evidence, but at the same time accepts the importance of theories and different perspectives accumulated beforehand and/or during the research process (Tjora, 2017, p. 255). He continues to describe an inductive research process as explorative and founded in empirical evidence (Tjora, 2017, p. 259). I will analyze my empirical evidence, the two international treaties, using theory and then draw my conclusion.

A case study is a research of a situation or a phenomenon which naturally is limited by the nature of the research topic, usually an event, institution or organization (Tjora, 2017, p. 256). This research paper is a case study. A qualitative research method will look for certain mechanisms or processes and what kind of outcome they generate (Tjora, 2017, p. 29). I will utilize a qualitative research mechanism and analyze different mechanisms in the Kyoto Protocol and the Paris Agreement, in addition to look at the level of international cooperation they generate. I will generate my analysis on one theory and my discussion on several theories, including a game theory. Tjora insist including several theories in your work is typical for the qualitative methodological way of writing a research paper (Tjora, 2017, p. 32).

Document Analysis

Both the Paris Agreement and the Kyoto Protocol are official international agreement documents on how the nations who signed the treaties are to mitigate global GHG emissions. Taking that into consideration means this analysis will be a so-called “primary document analysis”. Both documents are original sources I will study first hand. My document analysis is not an “archival analysis”, but rather an internet retrieved document analysis. They are not produced for the sole purpose of being subject of research (Tjora, 2017, p. 182), but rather their purpose is to commit parties to limit their contributions of GHG. Sydney and Beatrice Webb, the founders of London school of Economics offer a distinction between “documents” and “literature”.

A “document” is; “an instrument in language which has, as its origin and for its deliberate and express purpose to become the basis of, or to assist, the activities of an individual, and organization or a community”(Webb & Webb, 1932, p. 100).

Webb and Webb describe documents as secreted exclusively for the purpose of action and that documents are facts in themselves (Burnham, Gilland, Grant, & Layton-Henry, 2008, p. 188). Bowen defines document analysis as a systematic procedure for reviewing or evaluating documents. This form of analysis requires data to be examined and interpreted in order to elicit meaning, to gain understandings and develop empirical knowledge (Bowen, 2009, p. 27).

Research limitations and reliability

Daly *et al.* determines case studies to be the least generalizable of all types of studies. Although, the authors continue to argue that a well-conducted single case study can generate hypotheses for later studies (Daly et al., 2007, p. 46). Daly *et al.* defines a generalizable study:

“... uses conceptual frameworks to derive an appropriately diversified sample with analysis accounting for all data” (Daly et al., 2007, p. 43).

Generalization in this context relates to different concepts and theories that are compiled in one paper and generalizable to other research papers (Tjora, 2013, p. 209). Furthermore, another measure of a quality text is its reliability. Carmines and Zeller defines reliability as:

“... reliability concerns the extent to which an experiment, test or any measuring procedure yields the same result on repeated trials” (Carmines & Zeller, 1979, p. 11).

It is always a chance of error in any research, and it is rarely a goal to create an error-free measurement. The level of reliability is seen in relation to the amounts of errors (Carmines & Zeller, 1979).

Empirical evidence

Kyoto Protocol

The Protocol to the United Nations Framework Convention on Climate Change was adopted at the third session of the Conference of the Parties (COP3) in Kyoto, Japan, on 11 December 1997, hence the name “the Kyoto Protocol”. The UN established the Convention on Climate Change in Rio de Janeiro in 1992, further known as the “UNFCCC”. The Kyoto Protocol is the framework to the Convention and operationalizes the goals by committing industrialized countries to limit their GHG emissions in accordance with the goals governments and diplomats have been working on since 1992 (Victor, 2001, p. viii). The industrialized and officially developed countries hereby belongs to the

“Annex 1” category of the member parties, where the alternative category is “Non-Annex 1” parties which concerns developing nations (UNFCCC, 2019g). The framework mandates 37 nations plus the European Union commits to limit their GHG emissions (CNN, 2018). The Protocol was open for signature from March 1998-1999, and parties that have not signed the Kyoto Protocol may adopt to it at any time. The Kyoto Protocol entered into force on 16 February 2005 in accordance with Article 23 which said the treaty could not go into effect until at least 55 countries, accounting for 55% of the total carbon dioxide emissions for the parties included in Annex 1 in 1990, ratified it (UNFCCC, 2019c).

Since the first UN conference at the beginning of the 1990’s until Kyoto took place, emissions had already increased significantly in the majority of the member countries.

One of the solutions to limit greenhouse gas emissions the Kyoto Protocol proposed was “emissions trading”. Which allows governments and firms to trade emission credit and debit. The system was a crucial factor for deficit nations such as the US to agree to stringent emissions targets in Kyoto. However, the United Nations ended up finding the Kyoto Protocol standards unachievable, they never ratified the treaty and abandoned it in 2001. Canada renounces the protocol in 2011, and the action became effective a year later December 2012 (UNFCCC, 2019d). Eventually, at the 21st Conference of the Parties, the sustainable development summit held in Paris 18 years later, all UNFCCC participants signed the “Paris Agreement” which then effectively replaced the Kyoto Protocol (CNN, 2018).

Paris Agreement

The Paris Agreement is the result of the international meeting initiated and hosted by the United Nations that took place in Paris in December 2015. This was the 21st session of the Conference of the Parties (COP21). The Paris Agreement was ratified by 185 parties and put into force on 4th November 2016 (UNFCCC, 2019f). The countries adopted the first ever legally binding global climate deal. The agreement sets out a global action plan to put the world on track to stop climate change. The deal also targets to limit global warming below 2 Celsius increase and encourages efforts to limit warming to 1.5 Celsius. In addition, the agreement wishes to strengthen the global response to the threat of climate change. The agreement takes developing countries into consideration when setting optimistic goals on greenhouse gases reduction and realize most developing countries has yet to reach a peak in their emissions. However, the deal wants to achieve a so-called emission peak globally as soon as possible (European Commission, 2019).

The meeting brought together a large number of countries unlike any climate agreement has ever done before. The agreement is argued to represent a new course in the global climate actions. The agreement requires all Parties to put forward their best efforts through nationally determined contributions, known as NDC's. Every country has to report regularly on their emissions and on their implementation efforts, which also is open for the public to read. The Paris Agreement is unique because the 195 countries who signed the agreement vowed to meet every five years through a global stock take to adjust and update their common goals on emission reduction and share their experiences and achievements (UNFCCC, 2019e).

Analysis

The analysis will analyze the two international climate agreements through a liberal institutionalist perspective How are the agreements in accordance with the theory? Also, what kind of mechanisms distinguish the two climate deals?

Kyoto Protocol

The Kyoto Protocol to the UNFCCC introduces a couple market-based mechanism known as the Kyoto mechanisms. One of the mechanisms is called “the Clean Development Mechanism” (CDM). The CDM defined in Article 12 of the treaty was established for the purpose of assisting the countries not included in Annex I in achieving sustainable development. Annex 1 consists of 43 parties, where the EU is considered as one party and the US another. But not all parties in Annex 1 ratified the treaty. The CDM allows Annex 1 countries to implement GHG mitigation projects in Non-Annex 1 countries to acquire certified emission reductions units for meeting part of their quantified emission limitation or reduction objectives (Shrestha & Timilsina, 2002). The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emissions reduction (UNFCCC, 2019a). At the same time the mechanism allows Annex 1 countries to cut less of their own GHG emissions, while they are still able to meet the protocols standards in reducing global emissions by simply helping other countries to do their share and then some. It is said the overall envision with the clean development mechanism is for it to function as a vehicle to encourage developing countries to participate in GHG mitigation efforts. However, the CDM gives the Annex 1 countries, which we must not forget are the industrialized countries, more slack.

Another mechanism unique for the Kyoto Protocol is the emission trading system which allows nations to buy and sell emissions units amongst each other (Victor, 2001, pp. x-xii). The parties known as the

Annex B parties have accepted the commitments under the Kyoto Protocol, including the emission trading system. The treaty has specific target for emission reduction that are expressed as levels of allowed emissions or assigned amounts to each party. The emission trading mechanism is stated in Article 17 of the treaty and allows countries who have emission units to spare to sell them to countries that are over their targets and willing to buy. This mechanism together with the CDM and a joint implementation mechanism, established a new international market; “the carbon market” where the principal greenhouse gas, carbon dioxide, is traded like any other commodity. The emission trading system has a reserve system, to prevent parties from overselling their units (UNFCCC, 2019b). However, there is no system for the consequences a party would face if they by any chance sell more emission units than they have. In theory, this mechanism initiates international cooperation between committed parties to the treaty, while it at the same time allows the countries to meet the commitments in their own way.

Paris Agreement

The Paris Agreement is a newer version of the Kyoto Protocol. One of the most distinct differences is the 2 degrees Celsius goal. Parties who signed the Paris Agreement agreed to try to limit GHG emissions to heat the globe with less than 2 degrees Celsius. Like most international agreements, the language and results of the agreement is fairly vague. Each country must determine and make their own plan on how to reduce their contribution to global warming. The only specific action in the agreement is each country should try to set targets beyond previous environmental targets.

The most distinct mechanisms in the Paris Agreement is the Warsaw International Mechanism for Loss and Damage and the Technology mechanism. The mechanism was established in Warsaw, Poland 2013 on the 19th yearly session of the Conference of the Parties to the 1992 UNFCCC. This was at the same time the 9th session of the Meeting of the Parties to the 1997 Kyoto Protocol. The mechanism addresses loss and damage associated with impacts of climate change, strengthened dialogue and coordination, enhancing action and support and so much more (UNFCCC, 2019h). This is a complete intricate mechanism that has been developed by the UNFCCC over the years. Moreover, the technology mechanism in Article 10.2 in the agreement was originally created under the UN Convention in 1992. It recognizes existing technology deployment and dissemination effort, while at the same time will strengthen cooperative action on technology development and transfer (Secretary Committee, 2015, p. 14).

The mechanisms in the Paris Agreement are all examples of international cooperation. They specifically describe how the party countries are to cooperate on the matter. The Warsaw mechanism vows for international action and support to limit loss and damage caused by climate change in the most vulnerable countries. The parties are to cooperate in areas of; early warning systems, emergency preparedness, comprehensive risk assessment and management. In addition, the Warsaw mechanism incentivizes for international cooperation where it is written in Article 8.4 in the Paris Agreement that;

“The Warsaw International Mechanism shall collaborate with existing bodies and expert groups under the Agreement, as well as relevant organizations and expert bodies outside the Agreement (Secretary Committee, 2015, p. 17)”.

The Warsaw mechanism, under the Paris Agreement, aims to cooperate internationally on all levels including smaller international and local organizations that are already operating in the area of focus. The mechanism relies on technology and research from organizations and corporations worldwide to develop the best preventative Loss and Damage mechanism. In addition of being the ultimate example of international cooperation, the Warsaw mechanism is a clear improvement from the Kyoto Protocol. The Kyoto framework was created after only a couple of years of research on the matter. In 2016 the UNFCCC had significantly more information on the climate change and chose to take that into consideration when drafting the treaty. The 2 degree Celsius goal is a result of close collaboration with scientists.

The technology mechanism in the Paris Agreement, mentioned in Article 10, is also evidence of strong international cooperation liberal institutionalism explains. The mechanism is established to promote and facilitate enhanced action on technology development and transfer in order to support the implementation of the Paris Agreement. The technology mechanism shall support collaborative approaches to research and development and facilitate access to technology through the Financial mechanism (Secretary Committee, 2015, p. 15). The Paris Agreement use words such as “collaborate”, “cooperate”, “financial support” and these are all mentioned in Article 10 which regards to the technology mechanism. Goals to cooperate on developing and transfer technology, in addition to distribute financial support to certain parties are easy to understand through liberal institutionalism.

Lastly, the Paris Agreement has infiltrated a third mechanism called the financial mechanism. It is mainly created for the purpose of financially aiding developing countries to help them reach their climate goals. All together the mechanism and goals set in the Paris Agreements can be explained

through liberal institutionalism. It is an agreement where no country “wins”, but rather an agreement where all parties have to give up certain benefits in order to fight climate change. The only problem is all the party-countries have the freedom to choose for themselves specifically what kind of changes they want to make and how they ought to do it. Governments have put forward proposals about how much they intend to reduce their GHG emissions, but the majority of them are not reaching the 2 degrees Celsius global goal set in the Paris Agreement (ClimateActionTracker, 2019).

In conclusion, the Kyoto Protocol (COP3) and the Paris Agreement (COP21) are different versions of the international climate change framework and agreements. A liberal institutionalist will look at the two treaties and the countries committed and argue that international cooperation is manageable as long as all the parties involved wishes to be. Tana Johnson and Andrew Heiss, authors of the book; “International Organization and Global Governance”, insist international institutions are today's evidence that liberal institutionalism works somewhere in the international sphere. In their creation they constitute the foundation of today's liberal world order (Johnson & Heiss, 2013, p. 5). That said, there is no doubt there is a significant difference in the two treaties. The Paris Agreement introduces a new set of mechanisms since to Kyoto. The Paris Agreement has considered the results of the implementation of the Kyoto Protocol and learned from them. This time the Paris Agreements mechanisms are in a greater sense relying on a broad field of research and scientific data from the whole world. In addition, the Paris Agreement is also utilizing the skills and knowledge from corporations already working on issues related to climate change. It is safe to say that the Kyoto Protocol was not the success one hoped it to be.

“Kyoto has had virtually no effect on GHG emissions. It has not even produced a detectable slowing in the rate of emissions growth” (McKibbin & Wilcoxon, 2002, p. 7).

However, the establishment of Kyoto Protocol taught the UNFCCC how to improve their next international framework on climate change mitigation. There is significantly less research on the effects and implementations of the recent Paris Agreement. Consequently, the world has to wait a couple of decades to evaluate if the latter treaty is more effective.

Discussion

Is liberal institutionalism the only logic tool to analyze international climate treaties? What about realism? How will international cooperation at this level play out compared to the theory of Prisoners' Dilemma? We know realism is the complete counterpart of liberal institutionalism. It denies a beneficial outcome for both states cooperating internationally. The following part will discuss international cooperation on climate agreements from a realistic perspective.

Why do nations leave international treaties?

As this paper earlier addressed, several nation parties have left international treaties, never signed or ratified them. The United States never committed to the Kyoto Protocol, and handed in an official notation that they intend to leave the Paris Agreement in June 2017. In accordance with Article 28, as the agreement activated in the United States on November 4th 2016, the earliest possible effective withdrawal date for the United States is November 4th 2019 (Secretary Committee, 2015, p. 25).

So why do nations leave international climate agreements; or choose to never commit? This paper argues that liberal institutionalism fails to explain the issue, which is one of the biggest challenges to international cooperation. On the same side, realism as a theoretical tradition will give us an insight in why governments refuse to cooperate internationally. We have to consider realisms' assumptions about international relations and cooperation to understand our global world. The theory provides a good starting point for the analysis of cooperation and discord. Realisms' concise logical structure and its pessimistic assumptions about individual state behavior serve as barriers against wishful thinking. In addition, realism is an older theory that provides an insight and helps us interpret the evolution of world politics of the last century and a half.

Hovi, Sprinz and Bang, climate change researchers, have drafted a couple of explanations for why the United States never joined the Kyoto Protocol. I have chosen to focus on "explanation three" which goes; the Clinton-Gore administration gave up on Senate ratification, and essentially pushed for an agreement that would provide them a climate-friendly face (Hovi, Sprinz, & Bang, 2012, p. 129).

Only five months before the Kyoto negotiations started, the Senate passed the Byrd-Hagel resolution stating essentially the United States should not sign any protocol which would mandate commitments to limit or reduce greenhouse gas emissions if developing countries did not make the same commitment, or if it would result in serious harm to the economy of the United States. The Byrd-Hagel resolution was not binding, but rather revealed the position of the Senate at the time (Hovi et al., 2012,

p. 130). However, during the Kyoto negotiations, it was reasonably clear that the climate framework caused conflicting positions in the Senate. Not only because of partisan politics, but also because of deep regional differences. Senators who represented states at risk of suffer big economic loss due to fewer jobs and higher energy prices; increasingly perceived the Kyoto Protocol as difficult to support when it would result in domestic federal legislation to price carbon emissions. The senators who were negative to carbon pricing and the Kyoto Protocol represented states big in coal, oil, agriculture and manufacturing (Hovi et al., 2012, pp. 135-136).

Explanation three suggests, due to strong Senate opposition to carbon pricing, the Clinton-Gore administration had no faith on reaching an agreement acceptable to the Senate. The administration still signed the agreement with ambitious emissions reduction targets, and never ratified it. Resulting in the United States looking climate-friendly, while never committing to costly emissions reduction (Hovi et al., 2012, p. 136).

The Kyoto Protocol overestimated its targets and timetables, which ended up being economically flawed and politically unrealistic. A developed country who ratified the protocol must be willing to reduce its GHG emissions by around 5 percent in ten to fourteen years (McKibbin & Wilcoxon, 2002, p. 8). The fear of costs being to huge prevented the United States and Canada to ratify the treaty.

Prisoners' Dilemma will explain the United States' action with "outcome one" of the game theory: the first person or state to leave the treaty will not serve any consequences, but the nations remaining (or the other prisoner) will have to pay larger consequences (in this case; climate change mitigation). The first prisoner to give in or the first state to not ratify the treaty are acting in self-interest. As Guri Bang, the author of the "third explanation" states, the reason why countries leave or refuse to commit to international climate deals is that they do not want to reduce their own GHG emissions and limit economic growth related to fossil fuels. Mearsheimer, mentions in his text; "False Promise of International Institutions" that liberal institutionalism's largest obstacle is the outbreak of Prisoners' Dilemma and convincing states to accept the second-best outcome, which is mutual collaboration (Mearsheimer, 1994, p. 17). Looking to United States who has chosen the first and best outcome for themselves several times in a row, one can draw the conclusion that liberal institutionalism has yet to accomplish their biggest obstacle.

Eighteen years later, individuals in the legislative and executive branch of the American political system act in line with realisms assumptions about international cooperation and depart from the Paris Agreement. It is difficult to analyze the actions of the United Nations as a state without considering

who is in office, and what political party holds the majority of the Congress. When leaving or not committing to both treaties, the Congress of the United States had a majority of republican representatives. It is known that passing bills through the Senate is a difficult action, especially if it is a bill not of interest to the majority. Realism argues states are the most important actors in the political picture. Regardless, we still have to consider the individuals dominating and deciding the states' political actions at the time. Before Donald Trump served as a president of the United States, the former president, Barack Obama, happily committed his nation to the terms of the Paris Climate Change Agreement. I will like to challenge realisms' assumptions about states being the main actor to consider the individuals governing the states when evaluating states actions. If we expand realisms' assumptions to regard the individual level of analysis, their actions are still in line with realisms' other assumptions. The Congress, and in 2017 also the President, did not want to limit their nations sovereignty by committing to international agreements. They did not trust other states to cooperate. Similarly, committing to climate change agreements would limit their current coal and other not renewable energy productions. As the theory-section states the richer a state is the more secure and protected it is from actions of war initiated by other states. In addition, having a strong and continuous growing economy gets you a step closer to be a hegemon, which would guarantee a states survival.

If a realist explanation of the United States withdrawal from the treaties include the actions of individuals governing the state, it is more than adequate. But what about all the states who did not leave any international treaties and are still working on achieving their commitments?

Prisoners' Dilemmas can also explain why states commit and stays committed to international agreement, with its "second outcome". The theory's core is about a cooperation between two or several parts where the parties can either cheat and take advantage of each other to maximize their own gain or choose to cooperate and with the potential of a less advantageous gain for you, but a bigger one for the total. More nations than not choose the latter outcome of Prisoners' Dilemma in international climate change agreements. They understand and are willing to reduce their production and consumption, which results in a less advantageous gain to the nation state but a bigger total outcome for the whole world. Continuing, liberal institutionalism is well equipped to explain why states choose to give up some of their economic growth and sovereignty to cooperate with other nations in reducing GHG emissions worldwide. International institutions and cooperation dominate world politics and are decisive contributors to international peace amongst states. The theory values the importance of states having common goals to be able and interested in cooperating and maintaining peace. Reducing climate

change effects are obviously the common goal amongst the nations who have committed to the Kyoto Protocol and Paris Agreement.

On one side we have realism who explains why the United States left the Paris Agreement and never ratified Kyoto. On the other side liberal institutionalism explains why nations choose to commit to international agreements and are willing to limit their own advantageous gain in exchange for a bigger total gain. Neither theory can explain the whole picture, because the whole picture is divided. Lastly, the game theory, Prisoners' Dilemma, is able to explain why states either commit or leave the agreements. It depends on the states' values and priorities at the time, which depends on the elected government. Furthermore, it is important not to just accept liberal institutionalisms success in explaining international cooperation on climate change as the end of the debate. Kyoto has received enormous amount of critique and negative feedback. Early troubles came with the failure to include the major developed countries along with lack of an agreed-upon mechanism to include new countries and extend the agreement to new periods. By 2002, after the US withdrew from the treaty, the protocol covered only 30 percent of global emissions, while the emission trading mechanism accounted for only about 8 percent of global emissions. Models also indicate the protocol would have little impact on global temperature change if renewed. The Kyoto Protocol can be viewed as a monument to institutional overreach (Nordhaus, 2006, p. 31). History has shown that the Paris Agreement on climate change, more or less, has taken over the role as the world's leading climate agreement, committing its member countries to mitigate their GHG emissions. The COP21 learned from the result of the COP3. However, the United States still fails to commit to any of the international climate change treaties, which tells us the Paris Agreement have yet to master the challenge of including the world's leading superpower.

Conclusion

International institutions are today's evidence that liberal institutionalism works in the international society. The institutions create the foundation of today's liberal world order. Liberal institutionalism is a useful theory to consider when explaining today's international politics, however it has several flaws. It fails to explain why the United States withdrew from the Paris Agreement and never committed to the Kyoto Protocol, but realism provides an explanation. The thesis statement in this paper is;

How can we best explain the nature of international climate treaties and why some nations commit and others not? Why do the UNFCCC keep creating new treaties when earlier ones have had little success?

Neither liberal institutionalism nor realism can fully explain today's international environment, but they explain isolated events to the same phenomenon. Liberal institutionalism explains the nature of international cooperation. Realism explains why some nations withdraw. This paper has analyzed both treaties mechanisms effect on international cooperation plays out under international climate change agreements. The mechanisms are used to strengthen cooperation on climate change issues, where they partially succeed. The mechanisms ability to increase international cooperation is damaged when powerful nations, such as the United States, withdraw from the treaties and resign from their responsibilities. The essential problem with international treaties is countries who signs them can resign their commitments with a couple of years notice. Moreover, the debate is raging on whether or not climate change treaties will improve the global crisis. I conclude the Kyoto Protocol made little difference in global GHG emissions reduction. However, I believe the world needed Kyoto Protocol as a prototype on global climate change framework as a guideline for future improvements. The theories and concepts highlighted and utilized in this paper can be a generalization. Few theories are capable of explaining the complete nature and development of a political or historic event. Yet, liberal institutionalism is the most adequate political theory to explain the functional aspects of international cooperation. Where realism is the counter theory, able to explain flaws. Last, Prisoners' Dilemma is the most capable game theory to explain international politics because it takes two different outcomes into account.

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