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International Environmental Governance and the Paris Agreement on Climate Change: the adoption of the 'pledge and review' governance approach

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Abstract
This paper explains the emergence of the 'pledge and review' governance approach found in the Paris Agreement on Climate Change, in place of the 'obligatory targets and timetables' approach found in the Kyoto Protocol, from a neo-Gramscian perspective. The main argument is that the adoption of pledge and review was a response to both the pressure to agree a new international treaty and the simultaneous divergence of interests and fragmentation of negotiation groups within the UNFCCC regime. In explaining this pressure to agree a new treaty, particular attention is given to the US and China, being the two largest emitters of greenhouse gases, looking at the key interests involved in shaping the recent move away from their long-held core negotiating positions of reluctance in accepting emission reductions. Shifts in the world political economy – the decline of US hegemony, the shift of power towards China and the East, and the emergence of a new multipolarity – and the complex nature of climate change as a problem were given as causes of fragmentation of the global climate regime. These power shifts all occur within the overarching dynamic of fossil capitalism, where the overuse of global sinks and the exploitation of natural resources remains unquestioned. Any attempt to address climate change emerges within this ideological framework of economic growth and economic development. This is continually apparent throughout the analysis, often influencing the actions of different interest groups and changes in the world political economy. When taken together, the pledge and review approach can be seen to have reinforced cooperation between nations and strengthened consensus building, facilitating the search for an agreement under differentiated interests. Being less fixed than obligatory quantitative emission reduction targets, this degree of flexibility is key to the functioning and adoption of the system. This flexibility allowed many of the key contentions within the negotiations to be sidestepped, in order for an agreement to be reached.

Keywords: Climate change, environmental governance, neo-Gramscianism, world political economy

JEL Codes: F50, F53, Q54, Q58

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1. Introduction

Climate change is one of the most significant challenges facing modern society. With its unprecedented scale, severity, and complexity fuelling novel forms of societal disruption and crises, our previous decisions around how we collectively organise and conduct social and political life are being brought into question. The rise of industrial capitalism is intimately linked to the elevated concentrations of greenhouse gases (GHGs) in the atmosphere, which "are today fueled by globalized patterns of production, consumption and trade" (Bäckstrand & Lövbrand 2015:xvii). With the release of its Fifth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) stipulate that we are currently on the path to reach a 4-6°C warming of the globe on average by 2100 (IPCC 2014). In addition to confirming with 95 percent certainty the link between human activities and increases in global average temperature (van Asselt 2014; IPCC 2014).

Climate change operates across various spatial and temporal scales, making it particularly difficult to govern. While the biogeochemical drivers of a changing climate exist globally and operate according to long time periods, the causes and effects of human induced climate change are often driven by localised phenomena and are tied into everyday urban and rural lifestyles. The global nature of the issue often results in it being framed as a global problem, however, authors are more and more coming to the consideration that a multilevel perspective is required, "in which different levels of decision making – local, regional, national, and international – as well as new spheres and arenas of governance that cut across such boundaries are involved in both creating and addressing climate change" (Bulkeley & Newell 2015:3). The clear global aim of reducing the amount of GHG emissions released into the atmosphere is thus easily complicated by national, regional, and local societal differences and distributional conflicts. The challenge is clear, what is required next is the designing of an effective policy response.

The politics of climate change – covering and intertwined with the politics of governance, the politics of science, and the politics of cooperation between rich and poor – are central to the debate (Gupta 2014), with the necessary technocratic solutions to the problem having to take place within this context. International environmental governance is seen as one of the key elements in the attempt to tackle the problems posed by climate change. Shaping the contributions of nations in their reductions in GHG emissions, international accords can significantly influence national legislation on environmental regulation. Following a long line of international environmental negotiations, accords, protocols, and agreements, the Paris Agreement, signed in 2015, represents the most comprehensive international agreement on climate change. A truly global agreement, the focal point is the highly ambitious target to limit global average temperature rise to 2°C above the pre-industrial level by the year 2100 (UNFCCC 2015).

The Paris Agreement represents a distinct break in structure from its predecessor, the Kyoto Protocol, signed in 1997 (Tribett et al. 2017), with one key difference being a shift in the approach of governance. Moving away from the adoption of fixed emission reduction targets that must be negotiated on an individual basis with the rest of the signatories, such as those found within the Kyoto Protocol, the Paris Agreement relies on the submission of individual national plans for GHG emission reductions. Feeding into a 'pledge and review' system, the plans represent national pledges which are periodically reviewed and updated in accordance with global developments. Enforcement of adherence to the pledges will be carried out via a 'name and shame' system, whereby political international pressure should encourage underachieving countries to pull their weight. The pledge and

review governance approach goes hand in hand with a highly transparent system of measuring, reporting, and verification of emission reductions.

This new approach has both strengths (e.g. allows countries to begin implementation straight away and play to the strengths of existing governance structures) and limitations (e.g. creates the space for environmental policy but does not strictly hold countries to account, rather it is a method of shaming over time and offering help, but not forcing change). The discussion around this topic focuses heavily on the final outcome of the Paris Agreement in comparison to previous treaties, and less so on how this shift to the new governance mechanism came about, who was shaping this shift, and what were their specific interests. Therefore, this paper will seek to answer the research question; how and why did the Parties settle on the pledge and review style system found within the Paris Agreement as the governance approach for achieving sufficient GHG emission reductions? Answering this question will help contribute to a deeper understanding of the new climate agreement and the potential successes and failings of current international climate policy. Given the urgency of climate change, this is a very relevant question.

In order to conceptually understand the developments that led up to and shaped the Paris Agreement theoretical insights will be drawn from neo-Gramscianism and the writings of Levy & Newell (2002; 2005), who develop a theoretical framework for understanding international environmental governance that draws heavily on critical theory and the works of Robert Cox, Stephen Gill, and David Law (Cox 1983; 1986; Gill & Law 1988; 1989). Levy & Newell provide justification for the work of this paper, by stating that; "while the indeterminacy of complex negotiations makes it impossible to predict the precise form of an environmental regime, a detailed analysis of actors' strategies and the shifting balance of forces can help to provide insight into the reasons why specific mechanisms and structures evolve in the context of a particular environmental issue" (Levy & Newell 2002:97).

The structure of this paper is as follows; Chapter 2 reviews current literature on the topic, while Chapter 3 gives an in-depth outline of the theoretical perspective. Key aspects of the methodology are given in Chapter 4. Following this, Chapter 5 provides the contextual background and frames the main discussion, presenting an outline of the world political economy and its relation to the global climate. Matched by a depiction of current ideologies that further shape political process and climate change politics. In addition to the balance of world power and world order, which help to frame the dominant powers and their interests within climate negotiations, also their leverage within the negotiations. Chapter 6 looks at the 2015 negotiations in Paris, presenting the main arguments of the paper and an explanation for how and why the pledge and review approach was adopted. The discussion here makes use of the neo-Gramscian framework to help interpret and understand the information, literature, and arguments presented, focusing on the dynamics of societal interests and the power struggles at play that shape the outcomes of the international climate negotiations. Chapter 7 concludes.

2. Literature Review

2.1. The Paris Agreement and the Kyoto Protocol

The Paris Agreement was formulated during the 21st meeting of the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) and was eventually signed by the Parties (state signatories) on 13th December 2015 (UNFCCC 2015; Tribett et al. 2017). The agreement is intended to guide future climate change policy and action at the global scale, but also

across national, regional, and local scales (Robbins 2016). Countries, advocates, scientists, and investors were all drawn together during the negotiations, eventually reaching an historic global agreement, a great achievement in multilateral diplomacy (Robbins 2016; Rajamani 2016). As of the date of writing 174 of 197 Parties to the Convention have ratified the agreement, with the Paris Agreement entering into force on 4th November 2016 (UNFCCC 2018). The explicit goal of the Paris Agreement is to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C" (UNFCCC 2015:3 Art. 2).

This new global agreement represents a distinct break in structure from its predecessor, the Kyoto Protocol (Tribett et al. 2017). The Kyoto Protocol was approved in December 1997, at the third meeting of the COP of the UNFCCC, held in Kyoto, Japan (UNFCCC 1997). The Kyoto Protocol aimed at minimising the adverse effects of climate change due to rising levels of GHGs. Those countries negotiating the Kyoto Protocol were largely representative of the developed world in 1997, labelled Annex I nations, and as such the Protocol was solely focused on reductions made by developed nations – being the main historical contributors to climate change. Under the Kyoto Protocol, each Annex I signatory nation was left to negotiate their own emission reduction target with the rest of the group, with the 15 European nations agreeing to adopt a single, combined target (Tribett et al. 2017). These targets were then fixed and left to be adopted into national policy, producing targets and timetables for 38 nations to control their emissions of GHGs (Victor 2001). Some examples of the targets adopted include the 7% reduction in CO_2-eq emissions for the US and the 8% reduction target shared by the EU15 member states, with both targets set to be achieved in the average of the years 2008 to 2012 relative to 1990 levels (Tribett et al. 2017).

The Paris Agreement marks a clear departure from a number of the key features found within the Kyoto Protocol. For one, the Paris Agreement focuses on more than just GHG emission reductions, incorporating both mitigation *and* adaption. The targeting of anthropogenic GHG production, usually via the burning of carbon fuels, is seen as the main contributor to global warming and comes under climate change *mitigation* strategies (Robbins 2016). Furthermore, as the effects of global warming may be felt by populations distant from the GHG source, "in many parts of the world, *adaptation* is needed to cope with weather and protect people from the consequences of climate change" (Robbins 2016:130, emphasis added).Within adaption, financial and technical support will be supplied to developing countries and paid for by developed countries, setting a goal of US$100 billion per year in financial support by 2020 (UNFCCC 2015). While adaption is an entirely new consideration at this level of governance, on the mitigation side the Paris Agreement breaks from the Kyoto Protocol by focusing on reducing cumulative global emissions, which in turn relate to a tailing off of global temperature rise relative to the pre-industrial baseline (Tribett et al. 2017; Obergassel et al. 2016). The overall mitigation aim of the agreement is "to limit the future emission of GHGs such that the rise in global mean surface temperature will be no more than 1.5°C (target) or 2.0°C (upper limit) above the pre-industrial level" (Salawitch et al. 2017:vii). The inclusion of adaption measures and a goal of reducing global temperature rise via cumulative emission reductions represent a more nuanced understanding of the problem of climate change than that considered within the Kyoto Protocol. A second difference is the number of signatories to the agreement, now incorporating developing countries in addition to developed, and totalling 197 signatories. This represents a much broader coverage of the globe than in the Kyoto Protocol, moving from an international protocol to a truly global agreement. A third and perhaps most substantial difference is a shift in the governance approach (St.Clair & Aalbu 2016). The Paris Agreement relies on the submission of individual national plans for GHG emission reductions. Feeding into a 'pledge and review' system, the plans

represent national pledges which are periodically reviewed and updated in accordance with global developments[1].

Overall, the Paris Agreement is intended to operate in accordance with existing structures, working alongside measures and policies existing outside international treaties. The concerted international effort towards action can help support and push these outside initiatives further, in achieving a multifaceted approach to addressing the problem of climate change. In addition, it is hoped that the development of new technologies for mitigation and adaption will be encouraged, and both government and private investment in research will receive a boost (Robbins 2016).

2.2. Approaches to governance: obligatory targets and timetables verses pledge and review

As mentioned above, the successful implementation of the targets within the Paris Agreement relies on countries producing plans for national GHG emission reductions. These plans are termed Intended Nationally Determined Contributions (INDCs), "submitted by the world's nations, reflecting either a firm commitment (unconditional INDCs) or a plan contingent on financial and/or technological support (conditional INDCs)" (Salawitch et al. 2017:vii). After submission to the UNFCCC and ratification of the agreement by the country, they become binding Nationally Determined Contributions (NDCs) and are intended to guide national efforts to mitigate global warming (World Bank 2016). In 2018 the Parties have a chance to adjust their national commitments before the NDCs come into effect in 2020 and, "starting in 2023, countries will reevaluate their commitments every 5 years, to adjust to global changes" (Robbins 2016:131). The NDCs are unilateral pledges that will shape future emissions of GHGs. The specifics of the review system remain to be determined, however, this will be a key focus of the COP negotiations in the following years. Enforcement of adherence to the pledges will be carried out via a 'name and shame' system, whereby political international pressure should encourage underachieving countries to pull their weight. Tied into a highly transparent system of measuring, reporting, and verification of emission reductions, "all countries will use the same transparent system of measuring, reporting, and verification of emissions. Greenhouse gas emissions will be measured by good practice methodologies accepted by the Intergovernmental Panel on Climate Change" (Robbins 2016:131). However again, like the review process, the specifics of transparency are not finalised, but rather will be determined over the coming years.

Within the literature, a distinction is made between *top-down* and *bottom-up* governance strategies. Within the context of this paper, top-down refers to the obligatory targets and timetables system of the Kyoto Protocol, with binding internationally set emission reduction targets – decided upon and assigned at the international level. While bottom-up refers to the pledge and review system of the Paris Agreement, with nationally set targets that provide more flexibility – decided upon and assigned at the national level. Guided by a top-down target (of 2°C), the pledge and review system is ultimately shaped by bottom-up processes as it is conducted via unilateral INDCs (Tribett et al. 2017).

This key aspect of the new form of international governance, the move away from previously agreed and fixed nationally binding GHG reduction targets towards NDCs, will be the focus of this paper. Looking deeper at the NDCs of the Paris agreement and the legally binding emission reduction targets of the Kyoto Protocol, we can find distinct differences and a rich literature covering the subject. Most

[1] Within this paper, this new governance approach is referred to as *pledge and review*, in contrast to that of *obligatory targets and timetables* found within the Kyoto Protocol. These names are used for simplicity, while acknowledging that both systems ultimately utilise targets and timetables.

notably, a conceptual shift has occurred, where we are now considering contributions rather than commitments, bottom-up instead of top-down solutions, and non-obligatory over obligatory targets (Hansen 2016; St.Clair & Aalbu 2016).

Some authors consider the act of self-determination involved in the pledge and review approach to be too weak to achieve the huge reduction in GHG emissions required to reach 2°C. Karp & Zhao, when writing in 2010 on their thoughts of a successor to the Kyoto Protocol, argue for tougher action than what eventually emerged as the Paris Agreement, claiming for the necessity of "mandatory country-specific ceilings on GHG emissions to guarantee the environmental outcome of the agreement. The objective is to achieve meaningful reductions in these emissions, not to provide politicians with an opportunity for self-congratulation" (Karp & Zhao 2010:532). Externally setting targets will clearly result in more stringent measures than allowing countries to decide themselves, where the incentive to minimise their contribution is clear. In support of this point, many researches argue for "the misalignment between scientific predictions of temperature rise and impacts and the feasibility to achieve a target below 2 degrees C" (St.Clair & Aalbu 2016). If we are to consider the current NDCs from countries that have ratified the agreement and compare the total contributions to the overall 2°C goal of the agreement, a clear discrepancy emerges. One assessment by an international team of experts estimated that the existing INDCs would likely only limit temperature rises to between 2.6°C and 3.1°C by 2100 (Rogelj et al. 2016). Further estimations range from 2.7°C to 3.5°C warming (CAT 2015; WRI 2015; Obergassel et al. 2016). Not least, that these estimations assume full implementation of the targets by each country.

Of course, due to the novelty of the Paris Agreement, having not even entered into its implementation phase which starts in 2020, these claims can only be proven with time. Other authors argue that the slow build-up towards comprehensive emission reductions was always factored into the design, with the real progress being put off until past 2030. 99% of the required global temperature rise reductions to hit the 2°C target will come after 2030, with the current Paris Agreement stretching only until 2030. These bigger strides in terms of emission reductions will be adopted after 2030 with a look towards even stronger climate policies being adopted in the future. Although, again, some authors would argue that action is needed now instead of in 2030. To summarise these two points, "pessimists conclude that such a collective effort is doomed because of nations' inability to cooperate. Optimists think that a mandatory effort is unnecessary, either because the danger of climate change has been exaggerated, or because win-win alternatives will make it cheap to deal with the problem" (Karp & Zhao 2010:532).

While both governance approaches are legally binding in the sense that the end result is the production of national binding emission reductions, only the obligatory targets and timetables approach sets targets internationally that are quickly transformed into national law. The pledge and review system, on the other hand, allows much more flexibility within its legally binding nature, allowing for continual review and allowing countries more independence when legislating for the national targets. As the Paris Agreement "is based on contributions, not commitments" (Hansen 2016:67), some authors argue that there is no real compliance mechanism in reaching the overall global GHG emission reduction target (Torvanger 2016). In essence, that the non-binding nature of the Paris Agreement is weaker – if effective at all – in generating compliance when compared with the Kyoto Protocols governance approach, with no *requirement* for countries to take domestic legal action (Clémençon 2016; Obergassel et al. 2016).

Others argue against these claims, by stating that the naming and shaming system is sufficient to force compliance. Creating "a reputational risk through the establishment of mandatory transparency and

review provisions. This innovative review mechanism aims for Parties to enhance their contributions every five years. Starting in 2018, these 'stocktakes' will create moments of concentrated political attention every five years that may be used for fostering the dynamic of the process" (Obergassel et al. 2016:3). With a strong and emboldened review process, some authors argue that the Paris Agreement has all the tools needed to achieve its goals. Furthermore, there can be benefits to unforced compliance, where the rigidity of forced compliance is avoided. For example, one of the reasons for the withdrawal of the US from the Kyoto Protocol was the rigidity of its emission reduction targets and timetables. The flexible nature of the Paris Agreement allows it to play to the strengths of current governance systems and structures, and allowing for a range of actors – from businesses to communities and individuals – to push ahead without waiting for traditional governance structures" (Hansen 2016:67), making the most of the current situation. A further criticism of obligatory binding targets is that the incentive to ignore the rules is there, if it can provide a competitive advantage. This may be greater than the fear of failing publicly, which instead may result in the rules or obligations being followed.

If we turn our attention to the reviewing and transparency process that is essential for the successful implementation of the name and shame system (Torvanger 2016), we also come across points of debate. Currently, in terms of the reporting process for discussing progress in meeting plans – also known as 'stocktaking' – widely different measures and time lines are used between countries, causing difficulties when making comparisons (Obergassel et al. 2016; Mbeva & Pauw 2016; Torvanger 2016). Although, this criticism can easily be overcome during future negotiations, for example by implementing a core cross boarder reporting framework "consisting of the same time horizons, reference situation, emission reduction targets and coverage in terms of sectors and greenhouse gases" (Hansen 2016:67). On this point, Torvanger (2016) even acknowledges that this is a likely outcome for the negotiations to come in the following years. Again, the Paris Agreement was designed first and foremost to achieve a global consensus on climate action, with the specific details of this process left to be hashed out later. This was in effect achieved, and built into the Paris Agreement is room for a highly transparent system of measuring, reporting, and verification of emission reductions, and a review process that allows sufficient comparison across countries. The weight of this criticism therefore lies on whether the future negotiations succeed in producing a robust review system.

Bringing these discussions together, it appears that the main strand of argument surrounds the perceived *political will* of countries. Looking at this idea of self-elected commitments, it puts the impetus on individual countries to take the needed action on emission reductions. One question raised is where this kind of governance leaves us in a world with figures like Donald Trump and with the upswing of right-wing populism, where in both cases the dangers posed by climate change are disregarded. If the political leaders of a nation decide that they wish to take no action, or even roll back previous action, then the success of the Paris Agreement can be put into jeopardy. This potential downside to the Paris Agreement has somewhat come to fruition in the past month, where, at the time of writing, President Trump has decided to remove the US – the world's second largest emitter of GHGs – from the agreement, along with any commitments that came with it. Torvanger (2016:33) states that; "the Achilles heel is countries' willingness and ability to implement and over time strengthen their national climate policy plans". The arguments on either side surrounding the degree of political will can be brought back to the question of how the future is viewed, either with a positive outlook or one more critical or pessimistic, with only time showing the real result of these issues. However, if we are to take a more optimistic outlook, it would appear that the Paris Agreement puts everything in place to make a good start on curbing further future global warming. If we believe in the

willingness of countries and the increasing awareness of global warming as a global phenomenon, that also has national consequences, we can hope to see the best possible and most ambitious strides by the Parties to the Convention. Realistically, I would speculate that some form of middle ground will be taken, with the diversity of national interests and decision making causing some countries to flesh out ambitious targets and some putting forward weak ones.

Again it seems that the novelty of the Paris Agreement and its goals allows for only speculative considerations on what will come in the future in terms of limiting global temperature rise. Any writings on this topic – including this paper – are written with the goal of contributing insight towards the future negotiations. This is one explicit goal for the work presented here. The review of the literature around this topic focuses heavily on the final outcome of the Paris Agreement in comparison to previous treaties, and less so on how this shift to the new governance approach – the pledge and review system – came about, who was shaping this shift, and what were their specific interests. The rest of this paper attempts to address this research gap.

3. Theoretical approach

The theoretical framework adopted in this paper stems from critical theory and is that of neo-Gramscianism, which attempts to address questions of international governance. In particular, the works of Levy & Newell (2002; 2005), who apply neo-Gramscian theory to understanding the formation of the environmental regime. To start with, an understanding of the concept of the regime is required, upon which the theoretical framework builds.

3.1. International Relations and Regime Theory

Within International Relations (IR) literature there has been a progression in how we can conceptualise domination of the world stage when it comes to international relations and cooperation, and how to explain the presence of a hegemonic state within the world order. Early definitions of *hegemony* define a hegemonic group "as a powerful group that exercises its dominion over others against their will" (Bevir 2010:612). IR, being concerned with the interactions of nation states, argues for a highly specific definition of hegemony; the hegemon is the nation-state that dominates the world stage by exercising a disproportionate amount of economic, political, and military power over others (Bevir 2010).

Regime theory, first proposed by Keohane (1980; 1984) argues that the global hegemon helps to shape international regimes that will tend to persist in the system, even after hegemony has declined, thus introducing an historical element to hegemony. Stephen Krasner is often cited for his definition of a regime as "principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given issue area" (Krasner 1983:1), as such, regimes are the manifestation of cooperation among actors in the international system, and are issue-specific i.e. the climate regime – the focus of this paper. Gale (1998) outlines how international regime theory has during the 1970s and 1980s been applied within different theoretical frameworks, namely neorealism, neoliberalism, and institutionalism. Within IR, regime theory follows most closely neorealism, and can be categorised as a rationalist, positivist explanation of world order, maintaining the clear focus on the state as the key actor, with a relative degree of autonomy, and a structuralist functionalist approach (Hovden 1999). However, the concept of the regime itself is in essence non-positivist, taking on a different light depending on which institutional understanding of the world system it is situated within. The different applications highlight the flexibility of the concept, opening up the possibility for application within critical theory, which will be discussed in the following subchapters.

3.2. Gramsci's contribution

Before continuing on the theory of international governance, it is necessary to elucidate some key concepts developed by Antonio Gramsci – an Italian Marxist scholar – that feed into an explanation at the international level[2]. Perhaps the most significant outcome of Gramsci's work is his concept of hegemony, focusing on societal groups – in contrast to the nation-state focus of IR. Gramsci added to the concept by incorporating a cultural and institutional sensitivity, where the hegemonic domination of one social class over another sees persuasion and coercion – elements of consensus – take centre stage over economic, military, and technological power – elements of open force (Mukhtarov & Cherp 2014). For Gramsci, hegemonic stability is rooted in civil society, which he viewed as a complex of cultural and ideological institutions that provide legitimacy via asserting leadership and projecting a particular set of interests as being general societal interests (Mayo 2005; Schwarzmantel 2015; Levy & Newell 2005). The ideological realm of civil society is seen by Gramsci as both a site of existing hegemony reproduction and consolidation and a key site of political contestation, where the dominant hegemonic arrangements are open to renegotiation (Gramsci 1971; Hall 1996; Mayo 2005; Gale 1998).

A dominant class exercises hegemony via the creation of a *historical bloc*, referring "to the alliances among various social groupings and also to the specific alignment of material, organizational, and discursive formations that stabilize and reproduce relations of production and meaning" (Levy & Newell 2005:50). A historical bloc is achieved via state authority, economic dominance, and the consensual legitimacy of civil society (Gramsci 1971). The formation and maintenance of a historical bloc is intimately linked to class formation and the unification of particular interests into a broad grouping. Hegemony is multifaceted, manifesting itself across ideological, political, and economic realms (Bevir 2010). Thus, the formation of a historical bloc is a complex, differentiated, and historically specific process. Presented with this complexity, Gramsci identified a number of strategies that were commonly evidenced in social conflicts. One key concept that informs this paper is that of a *war of position*, being "a longer term strategy, coordinated across multiple bases of power, to gain influence in the cultural institutions of civil society, develop organizational capacity, and to win new allies (Levy & Newell 2005:51). A more frontal attack that aims to seize political power directly, engaging in a *war of manoeuvre*, was deemed by Gramsci as doomed to fail unless it acts as part of a broader restructuring along the lines of a war of position (Mayo 2015). Thus, a war of position is a dynamic process that acts to shape the configuration of powerful forces relative to each other, reconstructing civil society and opening up fresh possibilities for contestation against a dominant historical bloc, eventually incorporating war of manoeuvre as one of its moments (Levy & Newell 2005; Bevir 2010).

3.3. Neo-Gramscian theory

Situated within the school of critical theory, the main proponents of neo-Gramscianism – Robert Cox, Stephen Gill, and David Law – have taken a number of Gramsci's key notions and applied these to the international setting to provide an account of power and resistance in the formation of world order (Cox 1983; 1986; Gill & Law 1988; 1989).

Firstly, coming to the concept of hegemony; a hegemonic world order is defined as "when material capabilities, ideas and institutions combine in a particular configuration, or fit" (Gale 1998:272). This is to be distinguished from a nonhegemonic world order, within which the power relations that the

[2] It is important to note that Gramsci's theories were written in relation to the national setting.

hegemon rests upon recede into the background (Cox 1987). Periods of hegemony or nonhegemony generally represent periods of world system stability or instability. Clear emphasis is given to "the autonomous influence of ideas and institutions in the development of world orders" (Gale 1998:273). Furthermore, in line with Gramscian theory, this perspective identifies how "dominant states achieve hegemony not only by possessing a preponderance of military and economic power, but also by the legitimizing effects of a dominant ideology and the construction of international institutionalization" (Gale 1998:275). In comparison to the national level, "hegemony is even more difficult to achieve (and therefore much rarer if not theoretically impossible) at the international level, where there is no single world state or a fully developed international civil society, although it can be argued that there is both a substantial framework of international law, international organization (and thus a set of international norms, rules and values) which is partly interwoven with an internationalized structure of production and exchange (and thus a complex web of private and informal linkages, some of which involve state agents)" (Gill 2003:35). Rooted in these international institutions of civil society, the dominant ideology is reproduced via the projection of a certain set of interests as the general interest and the assertion of moral and intellectual leadership (Levy & Newell 2005; Mukhtarov & Cherp 2014). This definition moves away from a pure Gramscian definition of hegemonic dominance by the ruling class, rather looking at how a certain state is hegemonic at the international level. While simultaneously putting the ruling class definition back into the picture, arguing that you can't ignore phenomena at the subnational level if you want to understand hegemony at the international level. For example, the actions of the American capitalist class and the struggle with the working class shapes the specific materialisation of the US state. This then has implications for the international level, and international US hegemony, as it is in essence these subnational-level struggles that influence the national-level state and therefore the nation-state's interests and actions within international situations.

Following on from this understanding of a multi-scalar hegemony, occurring at subnational and international levels, the formation of an international historical bloc operates in a similar manner. Thus, Cox (1987:357) argues for class formation and the formation of historical blocs, as being "the crucial factor in the transformation of global political and social order". This produces a bottom-up understanding of the world political economy and state system that avoids economic determinism, such as that found within world systems theory (Levy & Newell 2005). Achieving the formation of a historical bloc at the international is decidedly difficult, not only due to the lack of a distinct international civil society, but also due to the complex variation between national-level historical blocs. Alliances must be formed across boundaries, and national institutions and states must be transformed in the image of the historical bloc, in terms of ideology and culture. Class interests can therefore be internationalised and occupy the world system, for example, via the formation of international institutions that persist over time. At the international level, "class formation and conflict mediates between the world economy of production and the interstate system" (Cox 1987:357). "The classes that participate in this mediation have their origins in national societies, but form links across the boundaries separating national societies" (Cox 1987:357).

Levy & Newell (2005) offer that, in attempting to form a historical bloc, actors engage in a war of position across three pillars of hegemony. On the *material level*, the achievement of material gains in capital or market position is used to further ones interests. On the *discursive level*, the frames with which we understand reality are shaped and maintained in order to preserve domination. And on the *organisational level*, coalitions are formed between actors in support of the material and ideational pillars, often as issue-specific consolidations of interests. The concept of a neo-Gramscian war of position follows closely Gramsci's definition, while appreciating the attempt at the international level.

Neo-Gramscianism borrows the concept of the international regime, however breaks from neorealist and neoliberal regime theory in understanding the formation of specific regimes. In critiquing regime theory, neo-Gramscianism defines itself and its own relation to the concept of the international regime. Firstly, the state-centrism of regime theory is corrected by the neo-Gramscian approach by looking deeper into the formation and influences upon the state at both national and transnational levels. Moving from a positivist understanding of governments easily and clearly representing their states' national interests within international negotiations, towards a non-positivist focus "on the complex, unequal struggle that occurs under capitalism between competing social forces at the domestic level over the composition of the state's historic bloc and on how a government's capacity for autonomous action is constrained by the configuration of social forces that constitute its historic bloc" (Gale 1998:276-277; Brand & Görg 2013). Gramsci's concept of hegemony highlights the role of social and class struggles, that exist at a subnational level, their importance for understanding state actions and the single state hegemony. Consideration of the different sites of hegemony produces a multi-sited hegemony, one that has different visions of what hegemony looks like based on different sites of production and coercion, consent, and resistance. The system of states is still relevant, but it is treated with an equivalence to other sites of hegemony and struggle that are both within and without social order.

Secondly, neo-Gramscianism "focuses on the importance of non-state actors at the national and international level" (Gale 1998:277) in shaping international regimes, clearly differentiated from regime theory's sole focus on state-actors and interstate politics. Regime theory is too restrictive in this sense. "While governments are the formal decision takers, they do not take their decisions in a vacuum, free from the pressures of domestic and international public opinion, the private lobbies of powerful national and global class interests, and the efforts of coalitions of international nongovernmental organizations" (Gale 1998:277). "A neo-Gramscian approach forces us to widen our focus beyond the diplomats who are formally engaged in negotiations to include the struggles taking place among competing social forces over the principles, norms, rules and procedures of the international regime" (Gale 1998:277).

Thirdly, neo-Gramscianism draws attention to the ideological dimension of international regimes, where certain interests are often favoured in regime construction/formulation, "particularly those of international and national capital, over the interests of workers, environmentalists, women and other dominated groups" (Gale 1998:277). An international regime that promotes unrestrained free trade is neither environmentally benign nor class-neutral. The obstacles to institutionalising progressive norms and principles within effective international regimes become demystified through taking this critical perspective, particularly when a progressive regime has potential "important and negative repercussions for powerful international and national commercial interests" (Gale 1998:277).

Finally, the neo-Gramscian approach includes political-economic struggle at both the domestic and international levels. "Without necessarily denying the importance of systemic effects in the form of a declining hegemonic power, or of interstate effects as a result of a significant alteration in the balance of states' material capabilities, the neo-Gramscian approach focuses on the way in which regimes are maintained and transformed as a result of the changing balance of social forces within, between and above states. Social forces forged out of the structure of production contest the operation of international regimes at the national and international level" (Gale 1998:277). Gramsci's analysis is sensitive "to the interplay of forces operating at multiple and intersecting levels; regional, national, and international" (Levy & Newell 2002:90).

Following a neo-Gramscian line of thought, we can view international regimes as instances of institutionalised hegemony, allowing a more clear analysis of the emerging social institutions in the world political economy (Gale 1998). This also highlights the significance of international institution formation, in terms of maintaining hegemony within world order. To summarise the factors that influence the formation of these regimes, this key quote from Levy & Newell (2002:85) is highly useful; "the development of each environmental regime is shaped by micro-processes of bottom-up bargaining and constrained by existing macro-structures of production relations and ideological formations. These structures, which themselves are the outcome of historical conflicts and compromises, ensure that the bargaining process is not a pluralistic contest among equals, but rather is embedded within broader relations of power".

4. Methodology

This paper is an investigation into the emergence of the new governance approach adopted as part of the Paris Agreement. The research question is as follows; *how* and *why* did the Parties settle on the pledge and review style system found within the Paris Agreement as the governance approach for achieving sufficient GHG emission reductions? In answering the research question, the neo-Gramscian framework presented by Levy & Newell (2002; 2005) is useful in two ways; firstly, by providing a conceptual structure with which to work through, organise, and present the information and literature related to the topic. And secondly, by providing a conceptual framework with which to interpret and understand the information, literature, and arguments presented.

The focal point for the shaping of international treaties such as the Paris Agreement is the UNFCCC process, which takes a central role in the overall global climate regime. In order to paint a picture on the specifics of the UN climate regime, "the challenge will be to connect empirically and account for theoretically, the ways in which 'macro' social and economic forces in the global economy configure the 'micro' practices of environmental politics in particular sites without losing a sense of what makes those sites unique" (Newell 2008:528). Thus, an analysis of the UNFCCC process can be conceptually divided between the *macro-structures of production relations and ideological formations* and the *micro-processes of bottom-up bargaining* (Levy & Newell 2002)[3]. The macro-structures represent changes in the global political economy overtime, up until 2015 and COP21 in Paris. The micro-processes represent the specific formation of the climate regime, the power struggles involved in shaping this, and the specific historical outcomes of historical bloc formation.

Looking at the specific actors involved in global climate governance and the UNFCCC negotiations, a number are important, for example; states, transnational organisations, businesses and industry associations, and environmental and labour groups. However, in this context, nation states are the most important actors, making the final decisions on the outcomes and signing them into law. Following the neo-Gramscian approach, one cannot of course understand state action, the interests of the state, and the way state interests are constituted, without taking into account societal interests, the economic structures, the social relations of forces within countries and on the transnational level. This paper will, therefore, focus solely on the interests of the national states when comparing bargaining positions. Following the neo-Gramscian approach, whereby national states themselves are shaped by subnational sites of political struggle, the interests of large corporations and NGOs will be incorporated into an explanation of the nation-state interest. This allows some degree of abstraction from the complexity of addressing the role of these actors at the world scale. In addition, the US,

[3] It is important to acknowledge that this conceptual divide is purely an operational tool, with the strict line between these two macro and micro perspectives being blurred, due to the intimate relationship between them.

China, and the EU are the three largest GHG emitters globally, therefore these three actors have particular weighting in the negotiations, and will therefore be given additional attention in the discussion.

The framework outlined by Levy & Newell (2002; 2005), which this paper follows, combines insights from neo-Gramscianism, global political economy, and bargaining theory of Multinational Corporations[4]. Due to time and space constraints, this paper chooses to focus on the neo-Gramscian insights, and omits the other theoretical positions taken by the authors, arguing that they lie outside the scope of the paper. However, the importance of these other elements in informing the situation should be acknowledged, and an expansion of the arguments presented in this paper to incorporate these additional perspectives is suggested for future work around this topic.

5. The world political economy and the climate

5.1. Fossil capitalism

From a critical political economy perspective, "capitalism is a mode of organising the economy that generates enormous growth and innovation but which is often very unstable, producing patterns of boom and bust, recurrent crises and socio-political conflict over the distribution of the gains of growth" (Bulkeley et al. 2014:54). Under capitalism, the social metabolism between man and nature, mediated via the labour process, is one of dominance and control of nature by man (Foster et al. 2010). These historically specific societal nature relations result in antagonisms both within and between the social and natural spheres, rather than emphasising their unity, with crises of overproduction and consumption playing out in the form of ecological crisis (Brand & Wissen 2015). Climate change is one such example.

The macro-structures of production relations and ideological formations of the world political economy are formed on the basis of fossil fuel extraction, with capitalism and fossil energy forming a tight symbiosis over the past 200 years (Wissen 2016). The close relationship between the rise of modern capitalism and the rise of this energy form is highly significant for international climate governance. Historically beginning with the industrial revolution, the large-scale exploitation and use of coal has since become integrated into the global energy regime, along with other fossil fuels such as oil and natural gas (Newell & Paterson 2010). So far, the link between economic growth and increases in energy use, and therefore fossil fuel combustion, has yet to be broken, with a continual conflict between the thirst for continued economic expansion and the desire for climate protection. The forms of governance that emerge are shaped by the imperatives and contradictions of capitalist development – with energy and the release of carbon into the atmosphere at the centre of this – in addition to the specific forms taken by capitalism at different times and places (Bulkeley et al. 2014).

By way of organising the following analysis of these more specific forms, the dominant ideological formations, and the changes to the world order and the global balance of power, the long-term shifts will be broken down into three main time periods: (1) post-war Keynesianism, then expanding (2) neoliberal globalisation and US hegemony, towards (3) post-neoliberal post-hegemonic disorder.

[4] For a more detailed expansion on global political economy and how it fits in with this type of analysis see Newell (2008), and for Bargaining theory of MNCs see Levy & Newell (2002).

5.2. Post-war Keynesian period

Following the devastation of the Great Depression and World War II, a period of sustained, high productivity growth emerged. With the spread of domestic mass production – as exemplified by the production methods championed by the Ford Motor Company that had emerged before and been implemented during the war – together with rising wages and mass consumption, a new form of rapid capitalist development set forth. A social contract was formed between labour and capital and the economy was organised following the lines of the economist John M. Keynes. Later termed the 'Golden Age' of capitalism, this post-war period was characterised by high levels of social redistribution and a strong welfare state, with relatively stable, expansive economic growth within the developed world. Tracking this growth, the use and dependence on fossil fuels increased steadily. With the increasing energy demand of the global North, global atmospheric CO_2 concentrations were beginning to rise. Although, during this time the scientific understanding of climate change was highly underdeveloped, and as such climate change politics were non-existent. However, the foundations for the coming scientific discoveries were lain, and the path of fossilist capitalist expansion was well underway without a hint of a need to limit itself. This period saw the beginning of the emergence of the United States as the global hegemon, gradually assuming leadership of the world system, rising from the ashes of World War II (Cox 1987).

5.3. Neoliberal globalisation period

In the 1970s, the relative stability of the post-war period was brought to an end with the slowdown of productivity growth, as the world economy began to experience a series of crises (Newell & Paterson 2010). The breakdown of the post-war Bretton Woods system and the removal of fixed exchange rates marked the beginning, with the post-war expansion of developed nations slowing down significantly (Harvey 2005). Keynesian management of the economy entered into a crisis of accumulation and stagflation – simultaneous increases in inflation and unemployment – became widespread (Harvey 2005). In addition, the oil crisis of 1973-74 shocked the global economy, and "a similar shock occurred at the end of the decade after the Iranian revolution of 1979" (Newell & Paterson 2010:19). Political factions competed to articulate an answer to the crises, understandings of it, and political solutions. The winners of this competition of sorts were represented by the figurers of Margaret Thatcher in the UK and Ronald Reagan in the US, clasping onto the foundational concepts of human dignity and individual freedom as *the* central values of human civilisation (Harvey 2005).

Orientating around this goal of freedom, the free market ideologies of Friedrich Hayek and Milton Friedman were adopted, business (and notably finance) was deregulated, unions were targeted, the power of labour movements was reduced, state intervention in the economy was cut to a minimum, and welfare retrenchment began, eventually forming into the dominant ideology of neoliberalism (Bulkeley et al. 2014; Ciplet et al. 2015; Harvey 2005). Splitting from the *ideal* of neoliberal ideology, in practice neoliberalism can be seen as more along the lines of a *privatised Keynesianism*, whereby budgets for social redistribution are reduced to a bare minimum, while military spending is increased dramatically (Crouch 2009).

Globalisation can be defined as; "the extension and deepening of flows, rules, and practices associated with capitalism" (Bevir 2010:555), and, more specifically in this context; "referring (among other things) to the increasing rapidity of movement of finance around the globe and the subsequent reshaping of relations between financiers and both states and other parts of the economy" (Bulkeley et al. 2014:55). With a continuing trend towards globalisation, and as countries experienced economic downturns, those indebted to key international financial institutions such as the World Bank and the

International Monetary Fund (IMF) – institutions heavily influenced by the US – were forced to adopt a series of economic reforms, collectively known as the Washington Consensus. Thus, neoliberal reform agendas were promoted in countries from the Global South, in addition to the former Soviet bloc after 1989 (Newell & Paterson 2010), and in this way, the economic ideas of neoliberalism were exported to other nations, producing, for example, the lost decade in Latin America (Ciplet et al. 2015). The ideas and ideology of neoliberalism came to dominate the world system. As part of this trend, this period saw a re-solidification of the US as the hegemonic world power, following the continued challenges against its dominant position from the Soviet Union. With the end of the cold war in 1991, the space emerged for the US to reassert itself as the dominant global power, with capitalism triumphant over communism. This paralleled the spread of neoliberalism and globalisation, finally giving full legitimacy to the process at the international level.

In terms of climate, eventually the correlation between the expansive use of fossil fuels and slowly increasing CO_2 concentrations in the atmosphere was noted, along with the gradual increase in average global temperatures (Newell & Paterson 2010). Both climate change itself, as scientific fact and political issue, and the governance over it emerged during neoliberalism. These prevailing patterns of political-economic organisation and practice thus strongly shaped the formation and nature of transnational climate change governance (Newell & Paterson 2010; Bulkeley et al. 2014). Expansion of energy use continued even as the science on climate change developed alongside, with "the railways, mechanised industrial and agricultural production, the internal combustion engine, fossil fuel electricity production, through to the jet engine – [continuing] to require and enable a constant expansion in the use of coal, oil and gas" (Newell & Paterson 2010:13). The growth of fossil fuel "consumption was strongly concentrated in the industrialised countries in the North, who still accounted for 70% of global emissions in 1990 (despite only having around 25% of world population)" (Newell & Paterson 2010:13). With the entrenchment of neoliberalism worldwide, so too was the model of growth based on fossil energy progressively globalised (Tellam 2000).

The ties between growth and fossil fuels and the knock on effect of political and social actions for the climate became clearer. For example, the 1973-74 oil crisis triggered a huge increase in oil prices. This led some countries to expand resource extraction in their own territories, for example the development of deep water drilling in the UK and Norway. And others focused on reducing dependence by increasing efficiency and energy conservation. Others focused on alternative energy sources, such as Denmark and Brazil. Here, changes in the world political economy triggered a shift in the sources of energy to the world system, with the dynamics of this shift being unpredictable. Thus, new sources of carbon were opened up, while the early forms of alternative sources emerged, with knock-on effects for climate. Furthermore, energy security slowly emerged as a key policy field to act upon. "The overall story, however, is of a close correlation between global energy use and global economic growth. The challenge for climate policy is how to decouple the two" (Newell & Paterson 2010:15).

Four key consequences of the rise of neoliberal globalisation can be observed; "the ideological fixation with *markets*, the dominance of *finance*, the widening global economic *inequalities*, and the focus on *networks* as means of organising" (Newell & Paterson 2010:23-24). These consequences have combined in shaping the character of the response to climate change. Of these four points, two are particularly relevant for this paper. Firstly, the dominance of finance represents a change in the ratio between the different types of capital; a dramatic shift occurred in the appropriation of surplus value, from huge manufacturing industries into financial industries. This change is important because oil companies and car manufacturers, previously the key corporations in the global economy, took second place behind finance and, less so, information technology (Newell & Paterson 2010; Ciplet et

al. 2015). Thus, the interests of capital change over time; previously there were only those deeply invested in fossil fuels or with a foundation on the fossil fuel industry. Shifts in the interests of different fractions of capital can have knock on effects in terms of the amount of fossil-fuel consumed and the amount of CO_2 produced. The second of these significant consequences is the accommodating shift in the organisation of government, business, and NGOs towards a network-orientation. Changes have occurred both in the way that organisations operate in addition to changing forms of organisation, moving from clear bureaucratic hierarchies that are organised through clear procedures and rules, to a predominance of networks and partnerships – from rigidity to fluidity. In response to the competitive pressure of globalisation, new forms of organisation were required. Governments traditional regulatory and bureaucratic solutions are seen as ill adapted to face new, more complex problems. As example, addressing the emerging field of climate politics from a point of ridged hierarchical structure was not possible due to the complexity of the problem. Internal reorganisation is required and the development of partnerships, as more modern solutions to governance, hence the emergence and proliferation of public-private partnerships such as the UN Global Compact.

The developments outlined within this period can be seen as an ongoing privatisation, marketisation, and liberalisation of climate governance. Clearly "the character of neoliberal capitalism has fundamentally shaped how we have responded to climate change" (Newell & Paterson 2010:23). However, in more recent times neoliberalism has come into crisis.

5.4. Crisis-prone post-neoliberal current period

The global financial crisis of 2008 and the weak recovery of the global economy since then represent a significant challenge to neoliberal economic organisation, with a general crisis of the economic and social organisation of society under neoliberalism emerging (Ciplet et al. 2015). The spread of financialisation resulted in antagonisms that eventually produced crisis. Crouch (2009:393) discusses the causes for the crisis of privatised Keynesianism, arguing that "financial entrepreneurs and accountancy firms developed forms of knowledge that encouraged eventually self-destructive decisions", and a mountain of bad debts emerged under their watch. Eventually these poorly comprised markets collapsed, sending ripples throughout financial systems worldwide. In addition, the promised gains in prosperity offered by neoliberalism had, for the majority of countries, not materialised. In response to neoliberal globalisation, there has been the emergence of globalised forms of resistance (Gill 2003). For example, developing countries that were able to pay off their debts early due to the commodity-price boom from 2002 then called for reform of the governance structures of the international financial institutions and the global distribution of power (Ciplet et al. 2015).

The world is in a state of flux, the neoliberal regime has become unstable and can no longer supress its inner contradictions, but the new constellation is also far from certain. With the contemporary global political economy "in a process of complex transition in which structural and agential power has become increasingly diffused", Strange (2014:3) describes the situation as the transition from hegemonic neoliberal globalisation to a post-neoliberal post-hegemony world order. The diffusion of power is taking place under the overarching context of globalisation underpinned by US dominance, to this new multipolar world political economy. The rise of China and other economies, such as India and Brazil, present a challenge to the hegemonic status of the US (Overholt 2010; Nye 2010). China is experiencing continued and rapid economic growth, in July 2017 beating analyst forecasts by reaching 6.9% annual GDP growth, even when faced with the global economic downturn (Guardian 2017). The crisis of neoliberal capitalism represents a weakening of US dominance, due to the infusion of the US with this ideology. There is insecurity in the US when faced with the rise of China and its own economic and political decline, where parallels can be drawn between other declining

hegemons (Arrighi & Silver 2001). This new phase of transition has begun, however the institutions of neoliberalism are still dominant, exhibiting a certain degree of path dependency (Cahill 2011; Roberts 2011). Plus, adding further contrast to the assessment, other authors argue that these suggestions of US hegemonic decline are premature (Pass 2016).

These power shifts all occur within the overarching dynamic of fossil capitalism, where the overuse of global sinks and the exploitation of natural resources remains unquestioned (Brand & Wissen 2012). Any attempt to address climate change emerges within this ideological framework of economic growth and economic development (Zia 2013). The interests of capital are shifting along with the changes in the structure of power. Different fractions of capital are emerging and influencing further changes to the system, for example those fractions that have moved towards investments in renewable and environmental technologies. The new emerging constellations of the world system thus have significant implications for energy use, carbon emissions, and climate politics. The global power shifts have dramatic influences on the powered positions within climate negotiations, with the link to the amount of carbon emitted, and the access to the right to future emissions being key. The fact that the US is no longer the hegemonic power means other countries have more power within the UN climate process. In particular, the economic rise of China, founded on the back of huge amounts of GHG emissions, gives it particular weight in the modern negotiations.

6. COP21 and the adoption of pledge and review

The formation of negotiation groups is key to the shaping and outcome of global climate politics, with countries rarely choosing to stand on their own, instead forming coalitions with one another that can range from rigid, formalised groups to less rigid, fluid constellations. The largest and perhaps most significant groupings are; the EU, which due to institutional congruity is more easily able to form a single common position of its members on a given topic; the so-called 'Umbrella Group' of Australia, Canada, Iceland, Japan, New Zealand, Norway, the Russian Federation, the Ukraine, and the US; and the 'Group of 77 and China', being the main negotiating bloc for developing nations (Roberts 2011; UNFCCC 2014). These groups can be further divided into smaller sub-coalitions, with membership of the overall group itself often being fluid overtime (UNFCCC 2014)[5]. Along with the EU, the US is of particular note, often wielding strength in negotiations due to its economic power and being the largest emitter of carbon emissions historically, and more recently, China has become significant for similar reasons. The collective or common interests of these negotiating blocs are represented on the world stage, and it is often the shifting power of these groups, or the shifting ability to voice their interests, that ultimately shapes the successes of negotiation outcomes. Coming to the analysis of COP21, this paper will argue that the two key factors for the adoption of the pledge and review system were the strong pressure to form an agreement and the simultaneous divergence of interests between individual nation states.

6.1. Pressure to form an agreement

In November 2014 the US and China signed a bilateral agreement to both reduce their emission of GHGs (Salawitch et al. 2017), moving away from their historical positions of inaction on climate and resistance to accepting emission reduction measures. In the same year, European leaders struck a pact obliging the EU as a whole to cut greenhouse gases by at least 40% by 2030 (European Council 2014). The pledges offered up by these three giants to all reduce their GHG emissions represented the

[5] For a more detailed elaboration of the many different groups of countries represented at the UNFCCC climate negotiations see the UNFCCC (2014).

coming together of the three largest emitters on the issue of climate change – combined, the EU (10%), the US (15%), and China (30%) represent over half of all global GHG emissions (PBL Netherlands Environmental Assessment Agency 2015). With the largest emitters at the table, any successful deal coming out of Paris was going to be significant. These announcements were instrumental to the framing of the Paris Agreement and created a strong foundation for global cooperation (Salawitch et al. 2017).

To explain this new move towards global cooperation, it is important to consider some more general trends towards action on climate that are occurring globally and that have emerged more recently, before looking more specifically at the interests of China and the US and the conflict played out between these two superpowers. Firstly, with the development of climate science and the continued publication of the IPCC reports (IPCC 1992; 1995; 2001; 2007; 2014), the link between anthropogenic GHG emissions and global warming is continually becoming clearer and clearer, in addition to a clearer defining of the consequences of climate change (Gupta 2014). Due in part to the increased understanding and awareness of the issue, civil society, as a semiautonomous arena of cultural and ideological struggle, has seen a gradual shift towards interest in progressive climate change policy. The media's adjustment to the issue has also seen wider coverage and acceptance of the causes and problems of climate change. Following the neo-Gramscian approach, civil society interests are the foundation of hegemonic stability, therefore any shifts in the interests of civil society must be catered to by hegemonic forces if they wish to maintain their dominant position under the new formation.

Secondly, certain capital fractions are moving their investments into renewable energies and environmental technologies, an expanding industry, in the search for investment security. The uncertainty of global financial markets since the global recession is causing investors to look for secure investments anywhere they can find them, with the future potential of environmental technologies seen as a safe bet by some. As companies engage in a Gramscian war of position, at the material level they seek to secure future market position by developing environmental products that will provide continued revenues as the market expands and evolves. This results in fractions of capital becoming interested in aspects of climate mitigation and protection for longer-term security. The early signs of a 'Green Capitalism' orientation are there, however this future development path is still not certain (Brand 2012).

Thirdly, and coupled with the previous point, at the discursive level the articulation of the economic benefits of climate change mitigation and adaption has only relatively recently taken off and been adopted by key actors in the UNFCCC process. To be specific, since 2007, with the publication of the Stern report and the EU voicing new ideas on the economics of climate change – particularly during the negotiations on the Bali mandate and at the 2009 Copenhagen summit – the notion of 'win-win' solutions and the promise of potential economic benefits from climate action has become more widespread (Stern 2007; Dimitrov 2015). While previously it was thought that economic growth must be sacrificed in order to achieve climate protection, now there has been a consolidation of the growth paradigm and climate change policy. From a neo-Gramscian perspective this tendency is viewed as an ideological movement that influences the formation of the international regime. This can go some way in explaining the shift of interests towards climate protection measures; the potential opportunity for market expansion, the creation of jobs, the boosting of technological innovation, and the chance at gaining a competitive advantage in a burgeoning field (Dimitrov 2015).

From a neo-Gramscian perspective, the relative decline in the domination of the US within the world order and the economic rise of China, challenging this hegemonic domination, are seen as elements of

the struggle to form a new international historical bloc, as both parties engage in a war of position across the three pillars of hegemony. The conflict between these two superpowers in the fight for global domination is fought out across various arenas of economic, technological, political, cultural, and ideological struggle, with the formation of the international climate regime being one stage of this contestation. A brief look at the development of the positions of China and the US in shaping both the Kyoto Protocol and the widely perceived failure of the Copenhagen COP15 in forming a new global treaty in 2009 will be given, identifying why these two key nations consistently rejected emission reductions. Then, looking at what changed in Paris that led to the acceptance of a global climate deal, agreeing on the shared goal of reaching an agreement, providing pressure towards finding an international agreement, by analysing the societal interests at play[6]. While the EU plays a significant role as the third largest emitter of GHGs, its consistent attempt to implement emission reductions commitments means that its position has not shifted significantly, and it has always applied international pressure to adopt climate policy and a global agreement, therefore it will not be discussed in detail here[7].

On the international stage, states pursue their "interests by assuring the benefits of international cooperation are greater than the costs" (Stalley 2015:202). China naturally also operates along these lines, in addition to its interests being defined in part through a lens of equity concerns. The primary driver of China's climate change diplomacy are domestic trends, as such "China's international initiatives on climate change take place within its ongoing need for economic development" (Stalley 2015:202). The maintenance of growth and the desire for strong economic performance, therefore, have considerable weight when it comes to other policy arenas. Pressure from the international community to reduce GHG emissions also has some influence, however "the causal arrow mainly runs from the domestic to the international realm" (Stalley 2015:202), and it is China's overriding goal of economic growth that ultimately drives its behaviour.

For the US, the federal governance system, the role of individual states, party politics, and climate scepticism are all important for understanding the outcomes and interests of the nation (Bang 2015). US governance on climate change is the result of both subnational and national policy formation and the play between these two levels of governance, with a highly decentralised system that leaves "enormous areas of jurisdiction to state governments, which have their own constitutions, political cultures, and governance structures" (Rabe 2015:57). Additionally, across states there is a huge variability in the availability of resources, economic structure, and responsibility for and vulnerability to the impacts of climate change, and a wide range of interest groups that exist both across and within states. With many states releasing more GHG emissions than some prominent countries in the UNFCCC process[8], policy enacted by state governments can directly impact national GHG emissions. With swings in power over time between the Republican and Democratic Parties, their different stances on climate policy influence the outcome of the US' international action. There is a polarisation between left and right, where the Democratic Party favours government intervention on climate change, while the Republican Party is more sceptical of climate action (Averchenkova et al. 2016). Due to the separation of power in the US political system between executive and legislative branches, whoever holds the Presidency, controls the House and the Senate can exercise their power

[6] It is difficult to present a comprehensive account of the factors influencing the diplomatic goals and negotiation positions taken by countries, however some key factors can be identified in relation to global climate politics.

[7] For more information on the causes and interests of the EU in taking its progressive position see Dupont & Oberthür (2015).

[8] For example, the state of Texas exceeds both France and the UK in annual emissions (Rabe 2004).

over federal policy formation. The US' economy is also, much like China, highly fossil-fuel dependent, meaning that economic factors significantly influence the shaping of climate policy.

Initially, in the formation of the Kyoto Protocol, China was grouped with other emerging developing economies in the Group of 77 (G77) and China coalition (Gupta 2014). Adopting an organisational level strategy of coalition formation, China aligned its interests with other developing economies in an unwillingness to commit to emission reductions, viewing it the responsibility of rich countries to reduce their emissions significantly and contribute financial assistance and technologies to developing countries to help with adaption and mitigation as a key first step before China commits (Wei 2016). Already moving along a fossil fuel-based growth path – coal being the fuel for China's economic engine – China actively avoided being subjected to emission reductions that would hinder development and economic expansion (Stalley 2015).

For the US, although it initially agreed to the Kyoto Protocol, it was never ratified (Gupta 2014). The rejection of the Kyoto Protocol can be seen as a rejection of binding emission reduction targets, where approval of any targets could not pass the Republican Senate's approval during Clinton's Democratic Presidency, and was outright rejected when Bush became president for the Republicans (Averchenkova 2016). Clinton presided over a significant economic expansion during his time in office, with a huge boom in the production of cars and the GHG emissions related to this expansion. Thus, arguments on capping emissions fell flat during this time in the face of the potential economic gains. Influencing this process, the diversity of the position of individual states on the issue of climate change added additional controversy around Kyoto, with a stark divide in states being openly for or against the Protocol (Rabe 2004). As a response to the inaction of the federal government in producing climate change policy, some US states had for many years already begun to acknowledge climate change as a problem and develop policy, framing the climate issue either as a "possibility of early action on climate change as an environmental necessity that could offer economic advantages", or viewing climate policy "as an economic development opportunity that warrants exploration" (Rabe 2004:4). At the same time, a significant number of states moved in a different direction, opposing action on climate, framing action as "an economic threat to be avoided at all costs" (Rabe 2004:4). With state governments and their elected leaders being intensively focused on economic development, there is significant pressure to respond to the interests of established firms, while also continually searching for ways to underwrite future development opportunities. As example, those states with one or more prominent industries that generate large quantities of GHGs opposed unilateral state GHG emission reduction efforts, such as Michigan, West Virginia, and Ohio, who focus on large auto-manufacturing capacity, major coal-mining operations, and massive coal-burning utility plants, respectively (Rabe 2004). With over half of the US' states being considered highly fossil-fuel dependent, significant pressure existed to drop the Kyoto Protocol. Due to party polarisation and the various constellations of individual states, no comprehensive domestic US climate change policy was adopted, therefore hindering participation in any international accord (Bang 2015).

In 2008 the formal global negotiations lain out in the 2007 Bali Action Plan began, revolving around post-2012 climate policy (Dimitrov 2015). In the run up to COP15 in Copenhagen in 2009 hopes were high that a new global climate treaty would be reached. However, by the end of the talks the draft text for a future treaty was rejected in a spectacular public disaster. In the lead up to COP15, and in the negotiations themselves, China maintained its link with the emerging economies, although by then it was clearly on a different development path, rising steadily in terms of GHG emissions and economic growth. Organising itself as part of the G77 coalition, China was able to align its interests with the developing nations, although it represented an outsider from this group (Wei 2016). This can in part explain the success of this strategy, the power of coalitions in the war of position. Here, China

acknowledged that its future economic growth would still be heavily dependent on coal; in addition to the amount of energy used there were year on year continual increases in energy consumption (Stalley 2015). Therefore it again did not want to commit to emission reductions that would hinder its economic progress, looking to developed countries to take action. Adopting a strong climate change regime was further avoided due to the belief of China's leaders that "the economic costs outweigh the environmental benefits" (Stalley 2015:203).

Generally, in the field of climate policy the US has pursued two interconnected strategies; "one has been gaining cooperation on action from China and India and the other has been targeting emissions from automobiles and power plants domestically" (Schreurs 2016:221). Between 1997 and 2009, significant progress was made in terms of state-level climate change policy, in part as a response to the lack of federal action, with more states beginning to consider the potential economic opportunities. Although many states continued to resist policy adoption, particularly those with industries heavily reliant on fossil fuels. California in particular began to emerge as a front runner on climate policy, among a host of other states taking steps, beginning the process of establishing carbon dioxide emission standards for vehicles in 2002 and enacting the Global Warming Solutions act in 2006, limiting California's GHG emissions by 2020 to their 1990 levels (Engel 2006). Although progress was made in terms of implementation of climate policy at the state level, with a moderate shift towards greater acknowledgement of the environmental threat and an increased response to economic development opportunities, a comprehensive country-wide policy on climate change was still lacking. This progress – in addition to the lack of any collective policy – was not enough to push the US as a whole towards cooperation within the international climate negotiations. At the Copenhagen talks, the US would not commit to emission reductions without the commitment of developing countries, predominantly China. The conflict between the interests of these two superpowers therefore contributed to the failure of the negotiations, with the US rejecting any deal in light of no concessions from China or India. Although the US wanted to see action from other countries, even "the money and concessions [made by developing countries] had remarkably little impact on negotiations: China, India and Brazil never reciprocated with any compromise, did not table their media-reported pledges and asserted their freedom of development regardless of environmental impacts" (Dimitrov 2010:20). Again, economic interests come into play, whereby the US, with its reliance on fossil fuels, does not want to reduce its economic growth, unless the other major emitters agree to do so also. A further factor compounding the tensions already present in the US' position was the poor economic performance of the country following the Great Recession, which was still being felt. This gave "the issue of economic recovery predominance over all other issues in American life and thereby marginalizing questions such as long-term climate change mitigation" (Rabe 2015:58). Here, the lack of pressure on coming to an agreement was palpable.

In the years following Copenhagen and preceding Paris, China's position on accepting emission reductions softened significantly, finally adding to the international pressure to find a global agreement. Perhaps the most significant development affecting this change has been "China's heavy investment in green technology coupled with its numerous policy initiatives to reduce energy and pollution" (Stalley 2015:207), policies that have been pursued over the past decade. Increasing the share of renewables in the energy mix has now been incorporated into China's five-year plans, and it has begun its embark towards a path of low-carbon development. China also now has an array of policy programs aimed at improving energy efficiency. China is the largest investor in renewable energy (Parker & Karlsson 2015) and, "in 2009, for the first time China exceeded the United States in total investments in clean energy. In that same year, China became the world's largest market for wind energy and the world's largest maker of winder turbines" (Stalley 2015:207). These moves

"have lowered China's cost of participation and heightened the cost of its obstructionism in international negotiations, and therefore altered China's climate change diplomacy" (Stalley 2015:207).

This shift in policy has been driven by three related interests among key segments of the Chinese leadership; to increase economic competitiveness, increase energy security, and reduce pollution (Stalley 2015). Technological innovation and the development of industry are key goals of China's economic reform programme, thus environmental technologies have been heavily integrated into China's vision of its future (Wei 2016). As China increases energy efficiency and reduces pollution intensity of the economy its own goals move to be more in line with those of international climate agreements, thus participation of China in the UN process becomes feasible (Schreurs 2016). To achieve further energy security the move towards renewables is given precedence. "Like the concerns regarding energy security, the push to combat air pollution provides China's leaders with a powerful impetus to improve the energy efficiency of its economy and ensures that China will continue to forge ahead with investment in clean energy and pollution control" (Stalley 2015:208). The role of the emerging middle and upper class in China is also important, as they suffer under bad environmental quality in Chinese cities, while supporting the Chinese economic model via consumption, thus their interests are important. This is an internal pressure or shift in the Chinese society that contributes to explaining the willingness of the Chinese government in adopting climate policy. Here the interests of the Chinese middle and upper class, and the interests of China's leaders operate at the domestic level, but have implications for the international-level outcomes in the field of climate policy. The softening of China's position on climate change policy since the Copenhagen talks in 2009 added to the global pressure to reach an agreement in Paris in 2015. China has been historically unwilling to commit to emission reductions, while now adopting a much stronger stance under mounting international pressure.

In the lead up to Paris, the US continued to pursue emission reduction commitments from the largest global emitters while targeting domestic emissions from automobiles and power plants. These two key goals of the Obama administration sought to overcome the "political barriers that were blocking a comprehensive domestic climate policy that could allow active participation in a new international climate treaty" (Bang 2015:214). Developments on the domestic policy front again played a significant role. Between 2009 and 2014 there was continued state-level progress, with even more states adopting climate policy. For example, in the field of vehicular fuel efficiency, where California and a number of allied states have pushed for higher air quality standards for vehicles than the existing federal standards, with the federal government following suit in 2009 by embracing the position as a national standard (Rabe 2015). Furthermore, although some states continued to resist, those who had previously acted were now "positioned to move into advanced stages of implementation, with potentially significant impacts on emissions" (Rabe 2015:63). The significant progression and success of these state-led policies, and the acceptance of the political infeasibility of a comprehensive federal climate policy, resulted in the federal US government leaning towards this state-centric constellation as its focus for US climate policy. Adopting the Presidential Climate Action Plan (Executive Office of the President 2013) and the Clean Power Plan (EPA 2014), in 2013 and 2014 respectively, these executive actions both represent significant portions of the US' climate policy, with a large focus on cutting emissions in the utility sector, seeking to aid state efforts on climate action by leaving states open to decide on how to implement the policy. The progression of these state and federal policies "have converged to give the United States a climate policy strategy, albeit a patchwork process at considerable variance from earlier proposals for a comprehensive national system" (Rabe 2015:73). At the international level, the desire of the US for commitments by

all countries to be included in any future agreement gained traction with most other developed countries (Bang 2015), appeasing this core demand. Boosted up by the developments in national climate policy strategy, with international climate action being generally supported by the interests of states, in addition to the developments within the Chinese position towards climate change, a bilateral statement with China was reached "in November 2014 specifying emissions reductions targets for 2025 for the United States and 2030 for China" (Bang 2015:214). A further factor, easing pressure on the Obama administration, was the relatively stable economic growth of the US during this time, allowing leeway for these political gains on the climate front.

Overall, the failure to adopt a comprehensive federal climate policy was balanced by the patchwork state-led coverage that has been on the rise, showing general state support for participation in a new climate treaty. With the Democratic control over the Presidency, the Obama administration has sought to progress in the field of climate policy, with prevailing economic conditions allowing room for action. These factors led to the bilateral commitment with China. And with other developed countries beginning to side with the US in wanting emission reduction commitments from all countries, the result was an outward pressure from the US on the international climate negotiations to reach a successful agreement.

With both countries breaking significantly with the past, the above societal interests have significantly contributed to the forming of the bilateral agreement between the US and China in 2014, committing to emission reductions (Schreurs 2016). And, this sign of commitment then played out in forming pressure towards reaching a global deal in Paris.

6.2. Divergent interests and fragmentation

With the collective signal that commitments were ready to be made, within both the Paris negotiations and those directly preceding, clear divides between the positions of the three main Parties could be seen in the actual nature of these commitments. As example, special attention will be given here to the different stances on the issue of legally binding targets and the choice between obligatory targets or a pledge and review style system, although it is acknowledged that many other issues split the discussions[9]. The EU has always maintained a progressive position, calling for binding emission reductions for years. In the lead up to Paris, "the EU, supported by a coalition of Latin American countries (AILAC) and most island states (AOSIS) strongly pushed for mandatory and quantified national mitigation policies, and a legal obligation to communicate them internationally upon ratification, in order to make treaty participation contingent on binding domestic action" (Dimitrov 2016:3). The US, in contrast to the EU, was strongly against legally binding commitments. Dimitrov (2016) provides an insider's account of the Paris climate negotiations, where he witnessed the surface-level positive constructivism of the US that in backroom negotiations and within private bilateral consultations became an adamant rejection of legally binding mitigation and finance. China took an altogether different stance, arguing for strong legally binding general obligations coupled with weak international transparency of national policies (Dimitrov 2016). For example, the resistance against transparency could be seen "during late night sessions behind closed doors, [where] they were strongly against a proposal for external expert review teams with access to developing countries, opposed regular policy stocktaking, and wanted to delete references to a global policy review"

[9] For example, "the global long-term goal of the agreement and level of policy ambition; the legally binding character of national policy actions; climate finance; and the evolution of the policy regime over time" (Dimitrov 2016:3). See Dimitrov (2016) or Rajamani (2015) for a more detailed elaboration of other key topics within recent UNFCCC climate change negotiations.

(Dimitrov 2016:3-4). China has previously always backed the common but differentiated responsibilities principle rather than binding targets for all (Stalley 2015).

Not only did the three main players within climate governance have varied interests that had to be overcome, an increasing fragmentation of the UNFCCC process itself has been occurring since its foundation, presenting further hurdles to success. With countries joining and exiting various negotiation groups over its history, the trend has been from more formally organised collectives of common interests, to disparate coalitions and more individualised stances towards key issues. Examples include; the disbandment of the Umbrella Group following the Kyoto Protocol, the EU's steady resolve around a single position weakening due to internal EU divergent interests, the varied groups joined and then again left by the US, and the slow breakup of the G77 via the emergence of various internal sub-groupings, such as the diverse and obstructive Like Minded Group of Developing Countries (LMDCs) that fuelled the split of the BASIC group (Brazil, South Africa, India, and China) (Gupta 2014). The distributional conflict between countries over the responsibility for and vulnerability to climate change has been a central factor influencing many of the debates and changes to negotiation coalitions. Particularly the accountancy of cumulative historic fossil carbon emissions relative to populations, and, relatedly, the North-South character of the climate issue and the distinction between industrialised and developing countries – a distinction that continues to shift and evolve over time (Krause et al. 1989). The changing negotiation landscape on this issue has made a significant contribution to the fragmentation of the UNFCCC process. Addressing this issue within Paris, the inclusion of obligations for developing countries in the new treaty widens up the space for what is sought after and what is feasible, as a much broader range of interests must be reconciled when compared with the smaller group of Annex I countries from the Kyoto Protocol.

A further continuing trend over the course of the history of international climate negotiations is a fragmentation of the global climate regime in general, as numerous diverse sites of climate governance were founded, both within and outside the existing UN climate regime, shifting and changing the predominance of the UNFCCC over time. Initially, the UN played a central role, being pivotal for global climate governance by kick-starting the international process, being the sole site of climate governance in the 1990s (Zelli & van Asselt 2015). This position was maintained during the formation of the Kyoto Protocol, at which time various other initiatives were being launched in parallel, showing the first signs of an expansion of climate governance outside of the UNFCCC context[10]. For example, existing international organisations, such as the World Bank, began to integrate climate change concerns into their operations. Another example is non-state actors, who also undertake relevant initiatives, such as the Carbon Disclosure Project founded in 2000 – a non-profit organisation that works with corporations, pushing and enabling them to publically disclose their GHG emissions (CDP 2017). Over time, the governance landscape became increasingly fragmented, with further initiatives forming outside the UNFCCC process, weakening the UNFCCC's central role within the overall climate regime. Further examples of these initiatives include; multi-stakeholder partnerships that can involve representatives from governments, non-governmental organisations, and/or corporations (van Asselt 2014). The goals of these partnerships can vary significantly, one example being the Carbon Sequestration Leadership Forum, founded in 2003, that takes a specific focus on the development of carbon sequestration technologies (CSLF 2017). Furthermore, various regulated and voluntary carbon markets have been established since the adoption of the Kyoto Protocol (van Asselt 2014). Overall, the fragmentation of global climate governance has been a continuous trend since the early days of climate politics. Now, the governance landscape is composed

[10] For a broad elaboration on the emergence of climate change initiatives exiting outside the UNFCCC regime see van Asselt (2014); Zelli & van Asselt (2015).

of a complex web of institutions, with various roles, networks of interaction, and areas of overlap. With the emergence of new initiatives that begin to take up more prominent roles, especially since the early 2000s, and with the disaster in Copenhagen, the legitimacy of the UNFCCC process as the main forum for formulating global climate policy has been brought into question.

Literature on the causes of fragmentation of the climate regime and the divergent interests within the UNFCCC negotiations is decidedly lacking. Two tentative arguments will be presented here, while it is identified that further research could look deeper into the causes of fragmentation.

Roberts (2011) argues that the restructuring of the global economic system is responsible for the fragmentation of the climate regime, in particular that of the UNFCCC regime. The author focuses on the hegemonic decline of the US and the shift of power towards other parts of the world, as outlined here in Chapter 5. The main argument is that the US – and the Global North in general – in withdrawing from action in the international climate negotiations, in addition to the new multipolarity of the world system, both led to a fragmentation of the global climate regime. This point is supported by van Asselt (2014), who argues that in part due to the exit of the US from the Kyoto Protocol initiatives were increasingly drawn outside of the UNFCCC context. Here, the exit of the hegemonic world power resulted in a loss of faith in the UN process. Roberts views the failure of the US to take a strong stance in the field of climate change and its lack of action in dealing with the looming general crisis of neoliberal governance as being symptomatic of the US's economic insecurity. This inability to act is described by Arrighi & Silver (2001) as being symptomatic of hegemons in the autumns of their decline. Roberts, therefore, argues that the fragmentation of the global climate regime is linked to the wider disintegration of US global hegemony and the new state of world disorder, "that the stalemate on climate is but one symptom of a wider change taking place in the world, as hegemonic power shifts to the East and South" (Roberts 2011:779). As the world political economy experiences significant transformations and power shifts, "coalitions that were (perhaps) once unified are now being fragmented by the wildly divergent circumstances facing their members. The bases on which many coalitions active in the UNFCCC were formed (e.g. regional coordination, institutional arrangements, common interests/priorities) are constantly tested as the global environment shifts and evolves and the potential impacts of climate change are better understood, including how they vary drastically across space and time" (Woods & Kristófersson 2016:15).

The fragmentation of UNFCCC groups can also be viewed as a result of the wider process of fragmentation occurring within the global climate regime. The internal fragmentation of the UNFCCC regime is thus a part of the same process, being an expression of this larger process, that is ultimately driven by changes in the global political economy. To explain this wider process of fragmentation, Woods & Kristófersson (2016) argue that the complexity of climate change results in a highly fragmented approach to tackling the problem. With a huge diversity in the causes and impacts of climate change, no one institution can solve the problem alone, thus the decentralisation of processes and the move towards bottom-up approaches are a natural response. Thus, "at the international level, this means that the problem is governed by a multitude of regimes with overlapping jurisdictions" (van Asselt 2014:4). Following this understanding of fragmentation, the UNFCCC regime and the wider climate regime both experience the pressure of climate complexity that causes a wide diversity of individualised situations and responses between nations, regions, and localities. The movement away from hierarchical organisational structures towards network-focused organisation is a further symptom of the complexity argument. The proliferation of partnerships and networks that emerged during the neoliberal globalisation period as a response to the pressures of globalisation and the new, more complex problems faced by society at the international level are a prime example of the complex nature of climate change forcing novel responses. With more and more diverse forms of

governance and organisation emerging, for example public-private partnerships, this pressing global trend existing both within and outside the climate regime only adds to further the trend of fragmentation.

6.3. Explaining the adoption of pledge and review

At COP21 the pledges of the largest three emitters to accept GHG emission reduction targets were carried out, the fragmentation of the UNFCCC regime was overcome, and the Paris Agreement was signed by the 195 Parties to the Convention. However, the question of how this was possible under the situation of fragmented, disparate interests remains, in particular what role the pledge and review system played.

When taking into account the historical situation under which COP21 took place, the move towards pledge and review is a natural step in achieving consensus between the Parties. The emergence and adoption of the pledge and review system can be seen as facilitating the search for an agreement under differentiated interests, due to its flexible nature. Being less fixed than obligatory quantitative emission reduction targets, this degree of flexibility is key to the system. It is heterachical, being linked with transparency, linked with a review process, and linked to accountability with, on the one hand, all of these elements incorporated into the design, while on the other hand, the specifics of each element remaining open to further negotiation and the degrees to which they operate remaining unfixed. In comparison to a target based system, we would see a much higher potentiality for failure when negotiating any single target. Therefore, pledge and review is a more easily agreed upon compromise due to its differentiated design. What the pledge and review system offers, in contrast to obligatory targets and timetables, is the pacification of potentially heated conflict points within the climate negotiations. Under the pledge and review approach the differentiation between developed and developing countries moved to the background of the negotiations, avoiding the distributional conflicts. This sidestepping of the distributional conflicts inherent in the post-Kyoto negotiations removes one of the largest barriers to international climate cooperation (Falkner 2016). The pledge and review system can be seen as appeasing this contentious issue. Not only along the lines of developed verses developing nations, the pledge and review approach appeases any potential differences between negotiators, such as the refusal of the US, India, China, and others who would "not support such top-down internationally determined commitments which would require these countries to move away from long-held core negotiating positions" (Clémençon 2016:18), and who would not be forced into drastic emissions cuts (Falkner 2016). With 195 members of the UNFCCC being party to the agreement, implementing obligatory targets and timetables would have been nigh on impossible. With the Kyoto Protocol covering only a small number of industrialised nations, this approach had much more success in this earlier international constellation.

This paper, therefore, posits that the adoption of pledge and review is a response to both the pressure to agree a new international treaty and the simultaneous divergence of interests and fragmentation of negotiation groups within the UNFCCC regime. The failure of Copenhagen can, therefore, in part be explained by the focus on obligatory targets and timetables, attempting to achieve consensus under a mechanism that does not allow room for manoeuvre, in addition to weaker overall pressure towards agreeing upon a treaty. In light of the failure of Copenhagen, due to the fractured lines of argument around key topics, and restricted by a tight formal negotiation process that sought binding targets, the targets and timetables form of governance lost power and instead the concept of pledge and review began to rise. Past 2009, the pledge and review style bottom-up approach was moved towards through the Copenhagen Accord and Cancún Agreements, where the loss of distinction between developed and developing nations emerged, being conducive to this bottom-up approach.

Not only in terms of the pledge and review style approach's fit to the UNFCCC fragmentation, if we take a look at the fragmentation of the climate regime in general, the pledge and review system is more suited to the varied forms of climate governance by seeking to strengthen pre-existing governance approaches. Some authors outline the development of a new paradigm in international environmental governance, moving away from the Kyoto era's enforcement style approach, towards a polycentric strategy of international environmental governance being the new formation (Jordan et al. 2015; Taminiau 2015). Following this line of argument, Taminiau (2015:313) outlines how the system of pledge and review and the strategy of polycentrism "both move away from a hierarchical chain of command and focus on heterarchical proposals for future climate change action". When faced with many different sites of climate governance, the pledge and review allows countries to boost the most successful aspects of their individual governance structures.

The specific interests of the US represent one final important aspect in the formation of the Paris agreement. Any US commitment agreed upon by President Obama would first have to pass through the US Senate or some kind of work around would have to be found to avoid the need for ratification (VOA News 2015). With great resistance from the then republican Senate towards any binding emission reduction targets it was unlikely that legally binding emission reduction obligations would have been accepted by the US delegation. Thus, it was not possible politically for the US to agree to binding commitments (Averchenkova et al. 2016). To circumvent the need for ratification, the Obama administration argued for and eventually adopted the position "that the legally binding aspects of the agreement are already covered by earlier agreements (like the UNFCCC) which the Senate has already ratified and thus, do not require renewed approval. The INDCs are non-binding, aspirational targets, and thus, as interpreted by the Obama administration, do not need Congressional approval" (Schreurs 2016:221). Being the largest CO_2 emitter, with the US having dropped out of the Kyoto Protocol, and also failing to cooperate during the Copenhagen negotiations, its role as the spoilt child of climate negotiations meant that other countries had to be wary of appeasing its demands. In particular, the stance of the Senate and the Obama administration's work around were obviously crucial to US participation. In this way, the US had most likely the greatest bargaining power of all actors in the Paris negotiations. Aligning with the other arguments presented above on why pledge and review was adopted, this naturally contributed further to the implementation of this system.

7. Conclusion

In conclusion, this paper sought to explain the emergence of the pledge and review governance approach found in the Paris Agreement, in place of the obligatory targets and timetables approach found in the Kyoto Protocol, from a neo-Gramscian perspective. The main argument was that the adoption of pledge and review was a response to both the pressure to agree a new international treaty and the simultaneous divergence of interests and fragmentation of negotiation groups within the UNFCCC regime.

Firstly, the bilateral agreement between the US and China, signed in November 2014, signified the commitment of the world's two largest economies to reduce their GHG emissions. Combined with the commitment of the EU, these three actors represent over half of all GHG emissions worldwide, applying strong pressure towards reaching an agreement during the Paris climate negotiations. Breaking from previous historical reluctance on the part of China and the US in the field of international climate policy, China's recent heavy investment in green technology and its numerous policy initiatives to increase energy efficiency and reduce pollution have lowered China's cost of participation and heightened the cost of its obstructionism within international negotiations, as it shifts

onto a path of low-carbon development in an attempt to increase economic competitiveness, increase energy security, and reduce domestic pollution levels. Within the US a patchwork of state-led climate policy has developed over time, showing general state support for participation in a new international climate treaty. Coupled with Obama's Democratic Presidency, which has sought to make fresh strides in the field of domestic and international climate policy, and with prevailing economic conditions allowing room for action, a much stronger form of domestic climate policy has emerged than was previously possible. With other countries conceding to a central negotiating position of the US – that of emission reduction contributions from all countries – the pressure to agree on a treaty built significantly in the years leading up to Paris.

And secondly, a continuous fragmentation of the international climate negotiation process has occurred since the early days of the UNFCCC, with an increasingly divergent set of interests being expressed within the negotiations, compounded by the recent addition of developing countries' emission reduction targets that resulted in a whole new set of interests being added to the table. This emerged as part of a broader fragmentation of the global climate regime in general, as numerous diverse sites of climate governance were founded, both within and outside the existing UN climate regime. The previous inaction of the US – and the Global North in general – in international climate negotiations, the decline of US hegemony and the shift of power towards China and the East, and the emergence of a new multipolarity in the world political economy were given as causes of fragmentation of the global climate regime. In addition to the complex nature of climate change as a problem, requiring an equally complex and differentiated response from a diverse set of actors, networks, and sites of governance.

These power shifts all occur within the overarching dynamic of fossil capitalism, where the overuse of global sinks and the exploitation of natural resources remains unquestioned. Any attempt to address climate change emerges within this ideological framework of economic growth and economic development. This is continually apparent throughout the analysis, often influencing the actions of different interest groups and changes in the world political economy.

When taken together, the pledge and review approach can be seen to have reinforced cooperation between nations and strengthened consensus building, facilitating the search for an agreement under differentiated interests. Being less fixed than obligatory quantitative emission reduction targets, this degree of flexibility is key to the functioning and adoption of the system. This flexibility allowed many of the key contentions within the negotiations to be sidestepped, in order for an agreement to be reached. Thus, the pressure to reach an international agreement and the divergence of interests and fragmentation of negotiation groups resulted in the adoption of the pledge and review governance approach found within the Paris Agreement.

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