What do realists think about climate change?

EXECUTIVE SUMMARY

Realism is one of the oldest theories of international relations (IR) that has done much to explain why states go to war, and how states respond to potential threats. The threat of climate change, however, is relatively new. Climate change has become a major talking point on the international political agenda. Scientists have agreed that the burning of fossil fuels into the atmosphere and global deforestation, are causing the earth to warm at an alarming rate. An increase of the earth’s temperature in excess of 2°C above pre-industrial levels, will have a dangerous impact across the globe. Such a shift would cause additional and more abrupt changes in weather patterns, affecting the security of millions.

This paper examines what realist think about climate change, and whether realism can stay relevant to the discussion on climate change. Whilst many sub-strands of realism do not offer solutions to combat climate change, a defensive realist approach can be used to rationalise state action to balance against this threat. Critiques of realism are offered in order to highlight how the theory can develop a dialogue about climate change.
ANALYSIS

Introduction

Over the past century the international system has witnessed two world wars, a cold war between two superpowers, interstate war, and increasingly intrastate war. Today, the possibility of war is a constant threat for states in the international system. In international relations (IR) theory realism has provided a solid discussion of states behaviour and rationale for going to war. For realists, states exist in an international system of anarchy, and in order to survive states must rely on their own might and ability to exert power. Power can translate into the ability to influence other states or into having large scale military capabilities. In an environment where the intentions of other actors are never known, states are locked in an insecure world and must choose the most rational options to survive.

However, there is a global threat that does not discriminate between states and state borders. Climate change is a global issue that affects the way ordinary people live and the way states operate in the international system. It has caught the attention of citizens, businesses and policymakers alike. There is a global movement to convince states to change their 20th century behaviours and significantly reduce their carbon emissions. If global temperatures are allowed to rise 2°C above pre-industrial levels the world will witness rising sea levels, severe drought, massive floods, melting polar ice caps, agricultural crises, water depletion, and potential interstate conflict over dwindling resources (Carter 2010, pp.52-53). This summer United States (US) President Barack Obama revealed the new Clean Energy Plan, which will move the country towards renewable energy and away from coal energy, by proposing to cut carbon emissions from power plants by 32% by 2030 (Vaughan 2015). Similarly, the European Union (EU) has vowed to cut its carbon emissions by 40% by 2030 (Nelsen 2014). These commitments precede the Conference of the Parties (COP21) meeting in Paris this December, to be attended by all United Nations (UN) member states to try and agree on a set of international climate goals.

Since the 1970s, climate change has gradually scaled the international political agenda, starting with the establishment of the United Nations Environmental Programme (UNEP) in 1972, and the 1992 signature of the first treaty on climate change, the United Nations Framework Convention on Climate Change (UNFCCC) in Rio de Janeiro. This is largely due to nations across the globe beginning to feel the effects of climate change, from extreme weather events such as large scale flooding and droughts, to agricultural crises and dangerously polluted air, warming oceans, and ocean acidification. The climate change threat is unlike the security threats that states have faced in the past. This paper will analyse whether realism can help address the threat of climate change, and if so, how? Climate change is part of a new agenda of international relations, whilst realism deals with the traditional agenda. Can realism help tackle the threat of climate change? Or, will the theory have to be modified in order to stay relevant to the discussion on climate change? This paper first will define realism and climate change, then discuss how realists
view climate change. Whilst the majority of realist thought does not offer solutions to combat climate change, a defensive realist approach can be used to rationalise state alliances to balance against the threat.

**What is realism?**

In order to understand what realists think about climate change, we first must understand what realists think about international political society. Realism, or realpolitiks, is one of the most longstanding and popular theoretical traditions in international relations. At its core, realism holds assumptions about human nature, power, and morality. Despite the different branches of realism – classical realism, structural realism, rise and fall realism, and neoclassical realism – all realists share three core assumptions about the international system.

First, realists affirm that sovereign states are the principal actors in the international system. The legitimacy and autonomy of the state enables it to exercise authority within its internal borders (Dunne and Schmidt 2014, p.101). Second, states exist and interact within an anarchic system. The international system is defined as anarchic due to the lack of a world government with authority over sovereign states. Various international, supranational and transnational institutions and non-state actors, such as the UN, EU, and World Trade Organization (WTO), create norms and rules within the international system for states to abide by. However, these international actors “do not possess the legitimacy or military capabilities that states do” (Pearson 2015, p.2). In an anarchic system states are compelled to secure their own survival. There is no global emergency number that a state can call if it is invaded by another, more powerful, state. This leads to the third and final assumption inherent in realism, that all states within the anarchic system seek power. Here power can be narrowly defined as military capabilities. Realist scholars disagree on why states seek power (Morgenthau 1954, Waltz 1979, Mearsheimer 2013, Schweller 2004). However, all realists agree that states strive for power as a means of survival. This collective struggle for power, combined with the limited distribution of power in the anarchic international system, cause great power politics, regional arms races, and endless security competition.

For realists, a prudent foreign policy is one that aims to secure the national interest, protect a state’s survival, and obtain more power. Conversely, an imprudent foreign policy entrusts the well-being and survival of the state to international institutions, such as the UN. Nor is it prudent policymaking to sacrifice the national interest in an effort to adhere to “some indeterminate notion of ‘ethical’ conduct” (Dunne and Schmidt, p.100). Thus, a realist would argue that a moral foreign policy could leave a state more vulnerable to external threats. However, the ability to maneuver and avoid external threats to a state is “an iron law of necessity” (Dunne and Schmidt, p.101).

Whilst the three core assumptions discussed above are accepted by all realists, several strands of realist thought diverge on issues such as; why states seek power, and how states respond to threats. These various realist perspectives will be outlined briefly in order
to fully assess a realist interpretation of climate change.

Classical realism
Classical realism stems from the historical and political writings of Thucydides (1972), Niccolò Machiavelli (1532) and Thomas Hobbes (1651). However, it was Hans Morgenthau’s Politics Among Nations (1954) that became the modern standard bearer for political realism. Writing in the aftermath of World War II, Morgenthau (1954) argues that states are doomed to conflict and tragedy due to humans’ natural will to survive and will to power. In this view, states are motivated to accumulate power and secure the national interest because these are naturally human motives. State behaviour thus can be found in the rational fears and natural inclinations of state officials, as they attempt to balance the costs and benefits of every external event before making foreign policy decisions.

Structural realism
Structural realism differs from the classical version in its answer to one very important question: why do states seek power? Classical realists argue that power politics among states is the projection of human nature. Structural realists give less importance to the will of humans, and instead focus on the actual structure of the international system (Mearsheimer 2013, p.78). The core text of structural realism is Kenneth Waltz’s Theory of International Politics (1979), which outlines the structure of the international system and the interaction of the units (states) within that system. Waltz (1979, pp.88-99) argues that in a system which lacks a global authority (anarchy), states inevitably will seek power to survive. For classical realists, it is human nature to seek power; for structural realists, power is the currency to ensure the survival of the state within an anarchic international system.

Defensive realism
Structural realists are divided into two groups: defensive realists and offensive realists. The two branches of structural realism diverge on the question of ‘how much power is enough?’ Kenneth Waltz (1979, p.126) is considered a defensive realist because he argues that states should not aim to “maximize their power”, but rather should accumulate enough power to “maintain their positions in the system” (Waltz, p.126). If a single state becomes too powerful, it will be perceived by neighbouring states as a direct threat to their survival. This will cause the weaker states to increase their own capabilities, and form coalitions to balance against the rival state. States, advises Waltz (1979), therefore should not max out their power capabilities, because they will be punished by the system if they amass too much power (As cited in Mearsheimer, 2014).

Expanding on Kenneth Waltz’s structural theory, defensive realist Stephen Walt (1985) examines how states form alliances to counter the rise of power and threats.

Balance of threat
In his essay Alliance Formation and the Balance of World Power, Stephen Walt (1985) argues that when faced with the threat of a powerful revisionist state, weaker states will form alliances to diffuse the threat. States may enter into two forms of alliance. The first is an alliance to balance (ally against a danger); the second is an alliance to bandwagon (ally with the state that poses a danger) (Walt, p.4). However, Walt discards the premise that balancing is forming alliances between weaker
states, and bandwagoning is choosing the stronger side. There are instances when strong states ally together to balance against a weaker threat. Walt (p.9) gives the example of the coalitions that balanced against Germany in World Wars I and II. In both cases the coalitions were superior and stronger in terms of their overall resources, yet formed alliances to balance against the threat posed by an expansionist German state.

Walt (pp.9-13) continues to hypothesize four factors that may prompt states to balance against potential threats. Firstly, a state will be recognised as a potential threat if its total resources and “aggregate power” (Walt, p.9) outweigh and outnumber those of rival states. Resources include; population, industry, military, and technology. Secondly, states will align to balance against threats which are in close proximity to their borders. A state will feel more threatened by a neighbouring powerful state than by a state on another continent with the same amount of power. Thirdly, a state with great offensive military capabilities will be deemed a threat by others, and will be more likely to provoke a balancing alliance. Finally, aggressive states most likely will cause other states to balance against them. Ultimately, Walt (pp.15-18) concludes that when states perceive a threat, they will tend to balance rather than bandwagon.

These assumptions, Mearsheimer (2014) argues, explain why states attempt to maximise their power at the expense of other states. The first assumption is that great powers are the principal actors in global politics and operate in a system of anarchy. The second assumption is that all states have offensive military capabilities, albeit some greater than others, and this can change over time. Assumption number three is that states can never be sure of the intentions of other states. A state may appear to be a status quo state, but in reality may be a revisionist state. Furthermore, whilst it is difficult to detect a state’s present intentions, it is near impossible to predict its intentions in the future. The fourth assumption is that survival is the ultimate goal of all states. The final assumption is that states are rational actors and make calculated decisions (Mearsheimer 2014). Singly, none of these assumptions can explain why states seek power. However, when combined, Mearsheimer (p.80) argues that states will seek power proactively, and will “look for opportunities to shift the balance of power in their favour”.

Neoclassical Realism
Shifting from traditional realism that focuses heavily on how external factors affect a state’s foreign policy, neoclassical realism highlights the importance of the internal workings of states. For neoclassical realists, the way states behave is not defined only by motivations of power and security in a self-help realm. The international system is difficult to predict, threats and opportunities are not easy to identify, and the different decisions available to statesmen when responding to external events are endless (Elman and Jensen 2013, p.26).
Whilst these are important elements, for neoclassical realists, it is the internal structure of states that ultimately will affect how they react to threats. In his theory of ‘under-balancing’, Randall Schweller (2004, pp.159-160) describes how the internal capabilities of states ultimately will propel or hinder decisions and response to external threats and opportunities. States with unified governmental and societal structures will be better positioned to counter external threats. Fragmented states, however, will find it difficult to implement a single response that could counter or capitalise on external events. As Elman and Jensen (2013, pp.26-27) summarise, states that are unable to “tap society for the resources needed to restore a balance of power” likely will under-expand when faced with such an opportunity, take risks when a more secure option is available, and make poor alliance decisions.

Conclusion
Diverging realist theories offer different explanations for how states act in the international system. One of the key differences is how states react to external threats to its borders. Thus, it will be interesting to detail how each theory will view the global threat of climate change. However, before conducting that analysis, a brief overview of the threat of climate change and how states have reacted thus far must be offered.

What is Climate Change?
During the past two centuries existential security threats to national governments have come from revisionist, warmongering states, hostile neighbours, intrastate warfare, and economic recession. However, since the 1970s more attention has been given to the threat of climate change. In the recent decade it has become one of the main talking points on the international political agenda. From floods in Bangladesh and Brazil, severe drought in Syria and California, and agricultural crises in southern Italy, to dangerously polluted air in Beijing, the oceans’ fishing stocks nearing the brink of collapse, and the melting of ice caps in the Arctic and Antarctic, climate change is undeniable, and it is a threat to all states in the international system.

The majority of the scientific community has clearly stated that the earth’s climate is rapidly changing as a direct result of human activity (Stern 2009, p.3). The burning of fossil fuels into the atmosphere and global deforestation, are causing an increased concentration of greenhouse gas (GHG) emissions. Termed the ‘greenhouse effect’, the phenomenon is causing the earth’s temperature to rise steadily. Scientists have concluded that the earth has witnessed natural climate change and temperature increases in the past. However, the current trends are alarming and suggest that the rising temperature is man-induced. Briefly, recently the earth’s temperature has been rising “at a rate that is unprecedented in the past 1,300 years” (NASA 2015). Since 1900 the earth’s average temperature has increased by 0.7°C, a figure which is predicted to keep rising based on current trends (Carter 2010, p.53). July 2015 was the hottest month in history since record-keepings began in 1880 (Orwig, 2015). Further, scientists, environmental groups, and international institutions agree that an increase in the earth’s temperature in excess
of 2°C above pre-industrial levels, will have a
dangerous impact across the globe. Such a
shift would cause further and more abrupt
changes in weather patterns, affecting the
security of millions.

Far from being a matter of “low politics”
(Carter 2010, p.52) a phrase Mearsheimer
coined in 2001, climate change has become a
major challenge for international institutions
and states. The UN is leading negotiations
among states to reach a universal agreement
to address the causes of climate change. In
December 2015, officials from over 190
governments will meet in UN-led talks in
Paris (COP21) to discuss such a document.
Without an accord, states may continue to
consume the world’s natural resources at a
rate that will result in severe adverse effects
on the environment. With an agreement,
however, there is a greater chance that states
will work to reduce their carbon emissions,
and use renewable methods to generate
energy. As Carter (2010, p.54) asserts, climate
change is a transboundary problem that
requires transboundary solutions. Global
climate change does not discriminate between
peoples or national borders, and can be
addressed only through international
cooperation between institutions,
governments, businesses, and citizens
worldwide. The common goal should be to
reduce GHG emissions (Carter 2010, p.54).

Furthermore, the consequences of inaction
on climate change not only could threaten the
natural environment of states, it also could
have a massive impact on the global
concludes that the overall costs and risks of
inaction on climate change “will be equivalent
to losing at least 5 per cent of global gross
domestic product (GDP) each year, forever”. For
example, severe droughts and devastating
floods will jeopardise peoples’ and business’
ability to grow food which will cause great
insecurities to millions of people as well as
affect the GDP of states around the world.

The symptoms of climate change already
threaten peoples and states across the globe.
This will only worsen if states fail to cut their
carbon emissions. Faced with one of the
greatest threat of the 21st century, can realism
offer insights into dealing with climate
change?

A realist response to Climate
Change

Realism does have perspectives on
environmental security and climate change.
However, these are not as convincing as its
views on war, security competitions, and great
power rivalries in international politics. An
analysis of realist responses to climate change
will illustrate that there is a vacuum in existing
realist theory of environmental change.
Further, the theory needs to develop
additional explanations to include a changing
world, not just one focused on inter-state
rivalries.

Transcending the realist security paradigm

All realist theories, irrespective of the sub
strand, view international relations as
composed of states existing in anarchy. A
state’s main concern is to ensure its own
survival within the system. In order to do so,
a state must exercise power and effectively
repel external threats from other states,
predominately by enhancing its military
capabilities. The lingering threat of war and in
extreme cases invasion requires states to prioritize their own national security strategy, and to secure their own survival in a world where there is no global emergency number to call. This realist security paradigm is the traditional agenda of states. However, the threat of climate change is part of a new agenda of international politics and security threats. The effects of climate change do not discriminate between state borders, and if allowed to continue at the present increased rate, will inflict severe environmental catastrophes on people across the globe. This is not a typical threat confronting states. Thus improved military capabilities will not render states secure from climate change, although these may assist in responding to emergency situations caused by severe floods or storms, for example.

The traditional security agenda so closely aligned with realism is in need of a new dialogue to assist states and politicians to combat climate change. Dalby (2013, p.312) goes as far to argue that the realist security agendas that drove foreign policies during the Cold War are “now no longer an appropriate conceptualization or a useful policy framework for the new circumstances where threats were from global changes rather than superpower rivalries.” In describing threats as emanating from superpowers, rising states, and expansionist states the realist paradigm does not take into account threats originating in nature. Realism does not offer a security agenda that aims to tackle climate change effectively. One of the main reasons for this is that climate change is a global problem, the solution of which requires extensive global cooperation and action. In a realist world of international relations, however, cooperation with other states is always viewed as a last resort, and even then a decision which requires a great deal of scrutiny. Recalling one of Mearsheimer’s principles of structural realism, it is impossible to know the intentions of other states, and so states, particularly rival or great power states, view cooperation as a last resort at best.

Whilst realism was an extremely important and relevant international relations theory throughout the last century, now the globe is facing new threats, for which realists do not yet have answers. Realists claim that states will seek to gain power at the expense of other states, and that self-interest is the most prudent foreign policy. However, it is impossible to ignore the multilateral environmental agreements, protocols and domestic environmental legislation, as well as the growth of international environmental organisations and institutions, in bringing together states to cooperate against climate change.

The latest round of international talks on the subject is set to take place next month in Paris. A consensus already exists that key states will commit to reducing their carbon emissions, and potentially sign an agreement (Harvey 2015). The EU has announced its support for a global climate agreement. Brussels has stated that an ambitious agreement will be needed to “put the world on track to reduce global emissions by at least 60% below 2010 levels by 2050” (European Commission 2015). During Chinese President Xi Jinping’s recent visit to the United States, he and his American counterpart issued a joint statement on climate change with “new domestic policy commitments and a common
vision for an ambitious global climate agreement in Paris” (White House 2015). This joint commitment not only aims to support a global agreement in Paris, but complements recent domestic announcements from both the US and China. The US Clean Power Plan will aim to “reduce emissions in the US power sector by 32% by 2030” (White House 2015). Beijing has just announced its “plans to launch in 2017 a national emission trading system covering power generation, steel, cement, and carbon sources in the electric grid” (White House 2015). This initiative seeks to limit the country’s yearly carbon emissions by rewarding companies that do not exceed their carbon quotas. It is thus necessary for realism to develop a language and rhetoric on climate change, especially to explain why states are cooperating to avoid further global warming.

Offensive realist and the tragedy of the commons

A closer look at the divergences between certain strands of realism reveals some differences in the theory’s approach to climate change. One key divergence is the approaches of offensive and defensive realism to the climate change threat. Offensive realism views the threat of climate change as an opportunity for a state to bolster its defence capabilities and to better prepare itself for potential changes in the climate. Offensive realism argues that one of the inevitable outcomes of states existing in a self-dependent and anarchic world is the “tragedy of the commons”, a term coined by the American ecologist Garrett Hardin (1968, p.422). The global commons are “areas and resources that do not fall under sovereign jurisdiction” such as the high seas, deep ocean floor and global atmosphere” (Volger 2014, p.347).

According to an offensive realist approach to climate change, when you combine the fact that states seek to gain power at the expense of other states, with the knowledge that an infinite amount of resources are available around the globe, you are left with a world where states will use up as much easy and cheap energy as possible (for example, oil, gas, and coal) to maximise their gains. Rather than cooperating to protect the planet and to avoid potential catastrophic climate change, states will seek to maximise their energy security at the expense of other states and the environment. The tragedy of the global commons is the outcome. Thus, climate change issues are condemned “to the periphery of international relations” (Eckersley 2012, p.164).

Furthermore, states may get ready for climate change in a bid to prepare themselves better than rival states. State A’s loss is state B’s gain. In this view one state suffering from drought or floods, and an economic downturn, is seen as an advantage to other states. An offensive realist approach suggests that in a world where all states are seeking to become more powerful and secure than their rivals, climate change would be viewed as an external factor that could allow for the gap between secure states and insecure states to widen. As the stronger and richer states better secure themselves, the weaker and poorer states are left more vulnerable. For example, if the United States pours money and resources into tackling the effects of severe droughts, floods and storms, and as a result spends less on its military capabilities, China
would see this as opportunity to bolster its offensive military capabilities. However, this approach offers no real framework to tackle the causes of climate change. Instead, its symptoms are used as opportunities for states to gain advantages over other states.

Environmental organisations and institutions advocate for the green and renewable path going forward as a way for states to become sustainable and energy secure. By becoming sustainable, a state can rely less on buying energy from other states and companies, and reduce its spending on extracting fossil fuels on its territory. However, Heywood (2014) highlights an important reason why realists, especially offensive realists, will argue for states to continue plunging the earth’s fossil fuel resources. According to Heywood (2014, p.417), the reason why states prize energy from oil and gas, for example, so highly is because it furnishes them “with a means of gaining from, and exercising influence over, other countries”. Offensive realists view a state’s ability to exert influence over other states and regions as a key strategy in increasing its own power and security. So, even if a state can run itself sustainably, being able to use fossil fuel reserves as a tool to exert power and influence on other states is still viewed as an advantage. Thus, offensive realism offers very little in terms of an explanation of how climate change can be avoided.

The danger of carbon bandwagoning
Offensive realists also will argue against states committing to reducing carbon emissions due to the dangers this may entail. If a state reduces its reliance on cheap and easy dirty energy resources, and shifts to renewable energy in a bid to reduce carbon emissions, some states may bandwagon off the back of these efforts and burn more fossil fuels into the atmosphere for their own gain. If one state is reducing its carbon emissions by 25% and another state has increased its carbon emissions by 20%, the latter will deem the policy a success as emissions have been reduced yet it has been able to burn more cheap energy. For example, if the US were to reduce carbon emissions and begin investing in renewable energy, it would allow China to free-ride off the back of the resultant cut in global emissions, and continue using fossil fuels to feed its demanding economy. An offensive realist would see this in terms of absolute gains for China, and critical losses for the US. This is one of the reasons why many states are reluctant to commit to high levels of carbon reduction, especially without knowing the intentions of other states.

Climate wars
There is great potential for climate change to cause severe food shortages and water depletion. Conflict could erupt between intrastate parties and groups, including governments, and in extreme cases between states. In the latter cases, where conflict breaks out between states over resources such as water and food, that realism could provide a useful explanation of why conflicts happen and how to avoid them. Dalby (2013, p.316) asserts that climate change is “now a matter of geopolitics”, and so will need a realist explanation when it spurs conflict between states. However, as mentioned above, this type of realist response to the links between climate change and conflict only analyses the symptoms and not the actual causes of the problem.
Furthermore, as Paterson (2000, p.20) argues, for realism the referent of security is the nation-state. Even when the causes of insecurity have changed, from other states’ militaries to environmental change, Paterson asserts that states will continue to use the military to defend themselves. This refers both to conflict resulting from climate change, or climate wars, and to the military being used to ameliorate the impacts of climate change, such as rescue assistance after extreme weather events. In both instances we witness the militarisation of climate change responses, without targeting the root causes of the threat.

**Neoclassical realism: state leaders and their legacies**

Brushing aside the numbers and figures surrounding climate change, the answer to mitigating this threat is quite simple. The current method of energy consumption is releasing tons of carbon into the air and the atmosphere, causing massive change to the climate. The answer to reducing carbon emissions and the effects of climate change lies with renewable energy. This method does not cause carbon emissions and does not damage the environment, yet provides the requisite energy. Thus, organising a response to climate change requires states and policymakers to begin funding a transition of the energy sector from fossil fuels to renewable energy. Although this may incur initial costs, the policy would be more sustainable and profitable in the long-term. A neoclassical realist analysis of the internal structures of states will reveal that democratic states will continue to focus on the immediate advantages of fossil fuel energy, whilst socialist states will be better positioned to implement climate change mitigation policies.

Neoclassical realists ascribe importance to the internal structures of states when analysing how a state will react to threats. Decisions about domestic and foreign policy come from state leaders, and so decisions on mitigating climate change also will originate from state leaders. However, the majority of democratically elected state leaders only have a relatively short time in office before they either lose an election or finish their terms. If a democratic leader who has recently been elected into office has only 4-5 years before the next election, the leader will want to do everything they can to remain in power. In order to do this they must provide jobs for citizens, improve living standards, and make sure the economy is running well. To be re-elected a democratic leader must provide solid proof to businesses, institutions, and citizens, that their policies are effective. The effects of climate change will not be felt until after any present leader’s full term in office. Furthermore, every state leader wants to leave a legacy of growth and prosperity, rather than a potentially tough transition to a low-carbon economy.

Since United Kingdom (UK) Prime Minister (PM) David Cameron’s election in 2010 the country has witnessed a sharp shift towards increased use of fossil fuel and nuclear energy, whilst the renewable energy sector has been subject to massive budget cuts. PM Cameron assumed office in the midst of the global financial crisis and eventual euro zone crisis. Between his first electoral victory in 2010 his re-election in 2015, Cameron managed to spur economic growth in the UK,
via massive public spending cuts and controversial cuts to the National Health Service (NHS). In an effort to cement his legacy of revitalizing the economy and generating immediate growth, Cameron has implemented additional budget cuts in the renewable energy sector. Since 2010, the Tory government has “killed off” (Vaughan & Macalister 2015) several green policies. The government has stopped new subsidies to onshore wind farms, cut subsidies to large solar installations, halted the green homes scheme, sold off the majority of the green investment bank, and watered down incentives for British citizens to buy a greener car. Whilst the renewable sector has taken a hit, the government plans to open the first nuclear power plant in over 25 years. The problem with relying on a nuclear energy, as opposed to renewable energy, is that the former produces carbon emissions into the atmosphere. Although nuclear energy does not produce as much carbon as coal or oil, if containment fails then nuclear plants can massive amounts of radiation to the local environment. Furthermore, large onshore gas reserves throughout the country are due to be fracked by shale companies, which is supported by the Tories. Thus, in an effort to, firstly, appease British voters by keeping the economy on track for growth, secondly, to keep the Conservatives in power, and thirdly, to leave a legacy of turning the country from recession to growth and prosperity, PM Cameron is cutting long-term policies such as renewable energy and focusing on short-term gains.

Thus, democratic leaders most likely will focus on immediate gains in order to be re-elected, rather than transition away from the fossil fuel energy sector that helps drive the economy, and ultimately help mitigate a change in the environment that will not be felt during their short time in office. Neoclassical realism suggests that democratic state leaders will be too concerned with their legacies and driven by their desire to remain in power (that is, to please the majority of citizens) instead of taking major steps to transition the economy from a high-carbon to a low-carbon one.

However, in socialist countries where a single individual or political party remains in power over a long period of time, and where there is less need to gear policy towards the next election, climate change mitigation policies can be implemented more easily. Furthermore, if a socialist party wants to push through legislation or policies on protecting the climate and limiting the amount of fossil fuel consumption of the country, it can do so without any major opposition. For example, the Executive Secretary of the United Nations Convention of Climate Change (UNFCC), Christiana Figueres, stated that “democracy is a poor political system for fighting global warming” (Moran 2014). In this statement she was referring to the partisan divide in the US Congress that is proving to be detrimental in passing legislation on fighting climate change. Figueres (Moron 2014) then highlighted the fact that the Chinese Communist Party (CCP) “can push key policies and reforms all on its own”. It is important to note that whilst China is the world’s second largest carbon emitter, it is “the world’s largest investor in renewable energy and has put in place tough new air pollution laws and other regulations” (Geall, 2015, p.18). This demonstrates socialist
leaders’ ability and freedom to take direct action on climate change, if they so choose. That is not to say that all socialist states are taking more action to mitigate climate change. A socialist leader may want to use the country’s oil reserves to maximise its ability to influence international trade agreements. For example, in Venezuela oil generates about 80% of the country’s total export revenue and a third of total gross domestic product (GDP) (Alvarez & Hanson 2009). However, a neoclassical realist approach highlights the constraints on certain state leaders compared to others, when it comes to implementing climate change mitigation policies.

**Climate change and big business**

The impact of big businesses and large corporations on climate change cannot be underestimated. Not only do businesses burn carbon into the atmosphere, and thus play a role in global warming, but some businesses are blocking attempts to implement new policies to halt global warming. In 1989 the US oil company, ExxonMobil, formed the Global Climate Coalition (GCC), along with other oil companies such as Royal Dutch Shell, Chevron and Texaco. The aim of the coalition was to oppose climate action, and throughout the 1990s the GCC companies sought to ignore climate change ‘alarmists’. The GCC even helped to persuade US President George W. Bush not to join the Kyoto Protocol in 2001. This led to the downfall of that specific climate legislation (Muttitt 2015, p.24).

Since the break-up of the GCC in 2002, oil companies have continued to fund climate denial groups, lobby governments against climate action, and slow down the transition from fossil fuels to renewable sources. For example, between 1998 and 2010 ExxonMobil has provided at least $23 million USD to climate denial groups (Muttitt, p.24). In fact, the American oil company is currently under investigation by the New York attorney general regarding claims that it “lied to the public about the risks of climate change” (Gillis & Krauss 2015). Furthermore, ExxonMobil is an active member of one of the most influential US lobbying group against climate action and legislation, the American Legislative Exchange Council. The efforts of such organisations are aimed at either denying the existence of climate change, or lobbying against any real action on it.

In Europe the approach is slightly different but the results are the same. European oil companies Shell and British Petroleum (BP), have acknowledged the climate change threat, and attempted to position themselves as climate leaders. First they left the GCC, before asserting that the way to prevent climate change is by shifting from coal to gas. Shifting more focus on gas consumption, however, is not the answer. Gas releases carbon emissions into the atmosphere just like oil and coal. Furthermore, in 2011, Shell led a lobbying effort to halt EU targets for renewable energy and instead attempted to push for a major role for gas (Muttitt, p.24). Thus, whilst acknowledging the threat of climate change is real, oil companies that support a shift from coal to gas are attempting to do the same as companies that deny climate change. That is, to “slow down or divert action on climate, to prevent it from impacting their business” (Muttitt, p.25).
Whilst a transition away from fossil fuels to renewable energy would have a massive impact on the revenues of oil companies, refusing to make the change to renewable energy could be even more detrimental. As Chivers & Worth (2015, p.22) highlight, to avoid massive climate change states should be discussing ways to keep 80% of the earth’s fossil fuels in the ground. Furthermore, by making a transition to renewables now, energy companies like BP and Shell can become leaders in the renewable energy market.

Finally, companies like BP, Shell, and Exxon are claiming that their plans to continue expanding the fossil fuel sector carry a moral duty. That is, providing energy to the poorest parts of the world. Shell CEO Ben van Beurden (Muttutt 2015, p.25) highlights this point clearly: “the issue is how to balance one moral obligation, energy access for all, against the other: fighting climate change”. However, as Muttutt points out, this moral claim conveniently avoids the fact that “the poorest parts of the world are the hardest hit by climate change”. Ultimately, by proposing other alternatives, such as gas, these companies are delaying any action on climate change.

Despite the powerful impact of corporations such as Shell, BP, and ExxonMobil, to cause climate change (through the abstraction of fossil fuels from the ground), as well as to slow down or divert climate action, realism fails to take the role of big business into serious account. Realism views the international system as a vacuum of power filled by states. Some states have more power than other states, yet all states have some degree of power. Realists (some more than others) do acknowledge the existence of non-state actors such as international organisations like the UN or multi-national corporations (MNCs) like Shell and BP. However, realism generally views these institutions and corporations merely as extensions of state power and interest, and having no impact on developments in the international system. Thus, they are generally excluded from the conversation. This highlights another obstacle to a realist approach to climate change. Whilst corporations in some instance form a blockade against action on climate change, realism focuses on the power of states, and so cannot have a discussion on business and climate change.

However, it is naïve to view MNCs as having no impact on international developments. The biggest oil companies are richer than most governments. For example, “only 28 governments are bigger than Sinopec, and BP is wealthier than 154 countries” (Worth & Chivers 2015, p.15), whilst Shell is wealthier than Thailand, South Africa, Denmark, and Egypt singly. Furthermore, when securing their assets abroad, MNCs have the option (and the funds) to hire private military companies (PMCs). Thus, it can be argued that large corporations are not only richer than some states, but also have equal military capabilities also. These factors, combined with their influence in key capitals around the world, from Washington to Beijing, make MNCs very powerful in the international system. Realism needs to analyze the position of MNCs in the international system, and how these entities can affect the way states behave. By doing so, realism could highlight
the effect MNCs have on climate change and climate legislation and policy.

Defensive realism: balancing against the climate change threat?
Defensive realism, in particular Stephen Walt’s Balance of Threat theory, however, offers an angle that in fact urges states to take the climate change threat seriously, and to act to mitigate it. Walt’s theory of balancing describes two different state behaviours: firstly, when states form alliances to collectively balance against a threat, and secondly, when states align themselves with the threat (for example, a great power) in order to increase their security in the system.

In the case of climate change we can eliminate the second behaviour of balancing with the threat, as it is impossible to balance with climate change. Climate change is a transboundary problem, and does not discriminate between states and borders. That leaves us with the first behaviour: state alliance formed in order to balance against a threat. The external threats to states Walt describes are great powers or expansionist states. Climate change has the potential to be a similarly dangerous threat.

As Robert Kaplan (cited in Paterson 1994, p.190) argues, the changing of the earth’s climate is “the national security issue of the early twenty-first century”. That is, climate change arguably is the greatest threat to states today. Writing from a geopolitical perspective, Kaplan (p.1994) asserts that the “political and strategical impact of surging populations, spreading disease, deforestation and soil erosion, water depletion, air pollution and, possibly, rising sea levels in critical, overcrowded regions such as the Nile Delta and Bangladesh – developments that will prompt mass migrations and, in turn, incite group conflicts – will be the core foreign policy challenge”. The climate change threat is real, and as any realist foreign policy dictates, every potential threat must be taken seriously and reduced. Whilst realists contend that the international system of states is constant, Kaplan has warned that climate change has the potential to change the state system, thus altering the conduct of power politics. It is here that Walt’s first state behaviour can help discern a realist approach to climate change. Facing the external threat of climate change, which does not discriminate between states and their borders will prompt states to align themselves to collectively balance against this danger. Whilst this may involve some degree of interstate cooperation, something of which all realists are skeptical, the danger posed by the climate change threat will outweigh concerns of cooperation.

Realism is quite dismissive of interstate cooperation and the ability of international institutions to have a lasting impact on the behaviour of states. Both are necessary for effective action on climate change (Carter 2010, p.55). However, a defensive realist approach can use the threat of changing climate as a reason for state alliances to form, and balance against the threat by collectively reducing carbon emissions. As Laferriere and Stoett (1999, p.76) argue, “realist politics is prudent politics, and that prudence is a necessary ecological virtue”. The most rational and self-interested policy could be to align with other states and take collective action in mitigating the effects of climate
change. Thus, defensive realism could be a starting point to urge foreign policymakers and army chiefs to refrain from being realist war planners, and become “realist ecologists” (Laferriere & Stoett, p.76).

Ultimately, whilst offensive realism does not identify ways for policymakers and states to find long-term solutions to climate change, defensive realism and Walt’s Balance of Threat theory could be used to create a realist rationale for action against climate change.

COP21 and a Waltian theory of climate change: a realist solution?
Described as the “crunch” (Harvey 2015) talks on climate change, the upcoming Conference of the Parties (COP21) Paris climate gathering is set to be the most significant meeting of heads of state on the issue of avoiding catastrophic climate change. More than 190 nations will meet in Paris from 30th November – 11th December 2015, with the aim of announcing their commitments to reducing carbon emissions and possibly negotiating a new legally binding global agreement on climate change. Such legal documents have been agreed upon in the past, most notably the 1997 Kyoto Protocol. However, these were not ratified by countries responsible for 55% of global emissions, and so did not come into force. At COP15 in Copenhagen in 2009, countries agreed to cut carbon emissions, however these limits were not legally binding. Thus, the COP15 talks were deemed a failure by environmental groups.

In the lead up to COP21 in Paris, major carbon emitting countries have announced plans of action to mitigate climate change, including the EU and the US. China has agreed to cap its emissions by 2030, and is introducing a carbon trading system to begin this process. If the Intended Nationally Determined Contributions (INDCs) (the nations that emit the most carbon in UN terms) can agree to caps on carbon emissions, then adverse effects of climate change still can be avoided. Thus, the next step in combatting climate change is a legally binding agreement to be negotiated in Paris, which would regulate the INDCs.

Yet, there are other potential obstacles to a global agreement. Poorer nations want the rich countries to pay for sustainable energy that will help them reduce their carbon emissions. This is a particularly important issue because these nations, predominately in the southern hemisphere, are feeling the most severe impacts from climate change. However, not wanting to increase public spending, richer nations want international development banks and the private sector to provide most of the funding.

However, COP21 still could be a turning point in the response to climate change which, according to many environmental groups, has been insufficiently robust. If a global agreement can be reached in Paris, it could be a significant alliance among nation-states to combat climate change. A Waltian theory of climate change would recommend states use COP21 as an opportunity to balance against the threat of climate change, and agree on a path to reducing global carbon emissions. Climate change is not a traditional threat, as conceived by Walt. An alliance against climate change would not mean bolstering military capabilities and entering
into defence pacts. A climate change alliance would require states to develop and change the ways of producing and using energy, growing food, managing forests and other landscapes, and the levels of consumption.

A Waltian alliance against climate change is the closest that realism has to offer in addressing the causes of climate change, and developing a response to its symptoms. If states can rationalise the threat of climate change in a realist security paradigm, and realize the potential for collectively balancing in the form of an alliance against climate change, then the threat can be neutralised just as past revisionist empires have been defeated.

Conclusion and Policy
Recommendations

Despite the vast literature on realist analyses of war, conflict, geopolitics, alliances and balancing behaviours, and the way states operate in the international system, there is very little on the topic of climate change and environmental security. This alone suggests that realism has very little or nothing to say about possible solutions to climate change. However, after an analysis of the different realist sub-strands and deducing their approaches to climate change, a clearer picture has emerged. Numerous realist theories have very little to offer to the debate on mitigating climate change, such as the core realist tenets and offensive realism. An approach based on defensive realism, however, could provide a rationale for policymakers and statesman going forward. Below are a set of recommendations for policymakers and realist theorists on how realism can remain an important theory when it comes to preventing catastrophe from the climate change threat.

Realism: in need of a 21st Century dialogue for a 21st Century threat?

Realism is, and will continue to remain, an important theory of international relations. Despite this, little has been written by realist theorists on the topic of man-made climate change, and how states can utilise their capabilities to ensure their security from this threat in the future. IR theories cannot answer all the questions posed by international political events. A theory of IR can provide a set of guidelines to help explain why certain events happened the way they did, how events can be predicted, and how these events can be managed and controlled. The debate on the threat of climate change and how states can mitigate its effects will continue to be a key talking point of international gatherings. Thus, more research is needed on a realist perspective to climate change. Realist textbooks mainly focus on relations between states, future threats and destabilizing factors, and the potential for conflict, without analysing threats coming from the natural environment. Climate change, one of the greatest threats to the international system in the 21st century, is in need of a 21st century realist commentary.

Walt’s theory of balance as a climate-realist approach

If states cannot work together to protect the planet, species, and all of humanity, from the effects of climate change, then a self-interest style approach can provide a rationale for doing so. Walt’s (1985) theory of balancing can be used to provide a rationale for states to act on climate change. States should enter into alliances and balance against this threat, just.
as states have done in the case of revisionist states (for example, Imperial Germany, Nazi Germany, and Imperial Japan). By balancing against the threat, states can ensure their security and help mitigate the root causes of climate change. The upcoming COP21 gathering in Paris this December will be an important place for states to act on the science and enter into joint agreements on the climate.

COP21: the biggest last chance to turn things around?
The upcoming COP21 conference in Paris will be an important opportunity for states to band together and unite against the threat of climate change. The best outcome from COP21 would be a legally binding global climate deal agreed by states, to cut their carbon emissions so that the earth’s temperature stays below 2°C above pre-industrial temperatures. As Chivers & Worth (2015, p.22) highlight, to avoid massive climate change states should be discussing ways to keep 80% of the earth’s fossil fuels in the ground. However, this has not been put up for debate yet, and so far states have been submitting “non-binding promises of emission cuts that governments say they will make from 2020 onwards” (Chivers & Worth, p.22). It is likely that states simply will reveal their non-binding cut promises, before carrying on with business as usual. The chances of states banding together at COP21 to form an alliance against climate change are very slim, however, this could be a possibility in the future as the climate worsens.

Unless states take real steps to mitigate climate change now, we will witness more extreme weather events, longer droughts, and higher floods. There is great potential for climate change to cause conflict between neighboring states over scarce food and water. However, due to realism’s focus on power politics and warfare, it will not be able to provide a concrete analyses of climate change and avenues for avoiding it. This paper has highlighted gaps in realist theory that need to be developed if it is to have a greater influence on the way we think about climate change. Furthermore, this paper has concluded that there is potential for a realist theory of climate change, or a Waltian theory of climate change, that can provide clear rationales for states balancing together and taking the necessary precautions to avoid drastic climate change. COP21 will give a clear idea if this is happening, and of the way policy is heading for the next five years.
What do realists think about climate change?

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What do realists think about climate change?


