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The Heartland Institute and the Framing of Climate Change Denial

*An exploration of Environment and Climate News as an instrument of
anti-reflexive modernization*

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A thesis submitted for the degree of

Master of Science in Political Science

Abstract

The growing consensus among the world's climate scientists is that human activity is a major contributor to climate change. Whilst the scientific consensus has converged over the past decades, the debate on the causes of climate change has spread to the public and political spheres; where the outright denial of climate change by American conservatives is a growing trend in itself. This project analyses how key actors in the 'climate denial' movement have attempted to shape perceptions on climate change and undermine public policy in the United States. The primary focus of this analysis is on the Heartland Institute - a conservative organization that is commonly referred to as one of the pre-eminent climate-denying think tanks in America. To explore the reach of this organization's climate-denying network and the discursive approaches it uses, this study will examine the nature of the content published in *Environment and Climate News* – a tabloid-style newspaper published by the Heartland Institute's *Arthur B. Robinson Center on Climate and Environmental Policy*.¹

¹ The *Arthur B. Robinson Center on Climate and Environmental Policy* is the department dealing with climate-related issues.

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Abbreviations

ACC – anthropocentric climate change

AGW – anthropogenic global warming

ART- the Anti-Reflexivity Thesis

CCCM – climate change counter movement

CCD – climate change denial

CCT – conservative think tank

EMT – Ecological Modernization Theory

E&CN – Environment and Climate News

GND – the Green New Deal

HI – the Heartland Institute

IPCC – Intergovernmental Panel on Climate Change

NIPCC – Nongovernmental International Panel on Climate Change

RM – Reflexive Modernization

RST – Risk Society Theory

UN – United Nations

I - Introduction

On the 6th of June 1978, James Black - a senior scientist at Exxon- sent *The Greenhouse Effect* to his superiors. Reporting to company executives that although more research was needed to reach a qualified conclusion, the “current [scientific] opinion overwhelmingly favors attributing atmospheric CO₂ increase to fossil fuel combustion” (Exxon Research and Engineering Co., 1978). The memo thereby confirming that Exxon have for several decades known that the combustion of fossil fuels was contributing considerably to the Earth’s changing climate.

Throughout the late 1970s and well into the 1980s Exxon fostered a reputation as a leader in climate change research. Yet, while Black’s report made company –executives aware of the damaging implications of its operations a deliberate decision was made to oppose the advance of climate science. To achieve this, an extensive strategy of misinformation and denial was devised to protect the company’s interests, as it sought to turn ordinary scientific uncertainties into weapons of mass confusion (Neela Banjeree, H. Cushman, Jr. & Hasemyer, 2015). Since, this example has been widely cited as *the* foundational moment of the CCCM.

During the earliest period of climate change research, fossil fuel corporations largely relied on internal research to understand the findings of climate scientists. From the 1980s to the early 2000s Exxon opted for a change in tactic, proceeding to promote and fund climate change denial; stymieing international efforts to regulate and reduce greenhouse gas emissions.

Since the turn of the millennium, the growing public backlash about corporate financing in politics forced American fossil fuel interests towards an increasingly difficult-to-trace strategy to finance the coordinated denial of climate change. This push towards anonymity paved the way for conservative foundations and think tanks to lead the anti-environmentalist movement in the public and political spheres in present-day America. The guiding principle being to question the objectivity and legitimacy, as well as the consensus of the world’s climate scientists - often going as far as denying that human industrial activity contributes to climate change altogether. And it is within this socio-political context that CCCM organizations such as HI have been tasked with marketing climate change denial to the American public and its policymakers (Dunlap & McCright 2011).

The impetus of fossil-fuel interests to undermine policy-efforts aimed at mitigating greenhouse gas emissions is an illustrative example of this industry's – and its political advocates - dangerous defiance of socially-responsible modernization in 21st century America. A defiance which deliberately refuses to admit what RM scholars refer to as the societal meta-change from first to second modernity. In promoting the climate change skepticism, the (neo)conservative actors pushing this anti-environmentalist agenda refuse to acknowledge that the unbridled pursuit of capitalist production has – despite its immense transformative power – had *unintended side-effects* (Beck et al., 2003). With the drastic escalation in the rates of climate change in the post-industrial age perhaps representing capitalism's most dangerous unintended side-effect.

Since the 1970s the consensus of the world's climate scientists (currently at roughly 97%) has been that the burning of fossil fuels has greatly accelerated the natural changes in the Earth's climate. By deliberately undermine climate action efforts and downplaying the severity of the issue key players in the American conservative elite have ignored the calls for reflexive and responsible modernization in the 21st century. The efforts of fossil fuel corporations, conservative think tanks, and other special-interest groups in promoting the skepticism and outright denial of ACC further indicates the anti-reflexive tendencies of the U.S. energy lobby. The public insolence of climate science by many across the conservative political establishment is evidence of climate-skeptics' and their corporate backer's success in shaping the perceptions on climate change of many modern-day Americans. Not to mention how these anti-environmentalists have influenced the views and positions of leading policymakers on this issue.² The denial of climate change forms part of a strategic effort by the powerful corporate interests funding and supporting the CCCM, and as such this project will explore the following research question: *how do the framing strategies of organizations within the climate change counter-movement attempt to shape perspectives on climate change and climate policy in 21st century America?*

Numerous conservative organizations - foundations and think tanks – currently push the agenda of the CCCM in America. Performing thematic analyses of several organizations or publications would be an ideal, but unrealistic, endeavor to embark upon with this research project.

² Whilst during the 2016 elections some Republican presidential candidates acknowledged the reality ACC, all but one either opposed regulations or stated their doubts on the existence of the issue ("Presidential Candidates on Climate Change", 2016).

Considering this limitation, a close-examination of a specific case is a more realistic research objective to pursue. The major benefit of analyzing one case is that it can produce specific yet generalizable results. An exploration of the thematic and discursive practices of a prominent conservative organization can guide future research to be done on similar practices of other influential contrarian actors.

Considerable work has been done to expose, the connection between think tanks, the corporate sector and how such actors fit into the CCCM. Taking into account the existing analyses on the topic; an investigation of HI and one of its leading publications adds a case-specific dimension to the existing scholarship on coordinated CCD. According to its website, HI is “a national nonprofit research and education organization [functioning as] an action tank as well as a think tank” (“About Us | Heartland Institute”, n.d.). HI’s stated mission is to “discover, develop, and promote free-market solutions to social and economic problems” and it ranks itself as a global leader among free-market think tanks (“About Us | Heartland Institute”, n.d.). Beyond the self-characterization of its activities and positions; HI, the contrarian experts and others it employs “have [in the U.S.] cemented their propaganda into a broader agenda that pits conservatives of various stripes against almost any form of government regulation” (“Heart of the matter”, 2011). An agenda that has contributed to the country’s growing political polarization along ideological lines; something particularly salient on the issue of climate change. The leading scholars on the topic of CCD have referenced HI’s influence in undermining attempts to mitigate climate change through policy. Brulle’s (2014) sociogram identifies the leading conservative organizations pushing the CCCM’s agenda; HI’s inclusion confirming its position as a prominent anti-reflexive actor in contemporary America.³

Thus, a thematic analysis of *Environment and Climate News* - one of HI’s most popular publications -can help answer the research question in a detailed and generalizable manner. The aim of this study is not to examine the influence of fossil fuel interests on the conservative movement, but rather to explore the link between CTTs and public opinion and policy – shedding light on why this well-funded skepticism has made climate change mitigation in America so challenging. The relevance of this case-examination is that HI has, as an original and continued sponsor of the NIPCC, mounted ‘denialism’s’ most comprehensive challenge to the

³ See ‘Figure 2’ under Appendix B

IPCC.⁴ And in the process has become a major actor in the CCCM; forming part of the broader societal problem that is the counter-reflexive pursuit of modernization in the world's most powerful industrial power. Studying the thematic and discursive strategy of this climate-skeptic organization can be of considerable empirical value to the future of climate change mitigation and policy. Particularly because it seeks to illustrate how denialist actors attempt to influence the public debate on this urgent issue at present— with an understanding of such efforts useful for developing effective measures that establish climate change mitigation as having bipartisan relevance to the American public and policymaking spheres.

II - Literature Review

Important research has been done on the historical relationship between corporate actors and the anti-environmentalist movement in America. Yet on the topic of CCD and how this is discursively framed there is a limited availability of literature. Bearing this in mind, Antonio and Brulle (2011) argue that the climate change debate in America is a symptom of the broader political tug-of-war between the two dominant policy regimes. Market liberalism and 'conservatives' on one side, and social liberalism and 'liberals' on the other. As such, they consider the climate change divide as much ideological as it is political; an increasingly public split forming "part of a wider polarization over today's version of market liberalism - neoliberalism" (Antonio and Brulle 2011, 196).

Many 'left-leaning' Americans thought climate change had been recognized as a grave societal problem in the early 1990s. Among them, McCright and Dunlap have in the past two decades established themselves as leading authorities on CCD. They believe the conservative movement has since the 1990s presided over an organized effort to delegitimize and destabilize the seriousness of the issue (McCright and Dunlap 2000). Not only playing down the causes and effects of ACC but helping create a scenario of manufactured debate and uncertainty on the issue – in the public and political spheres. This strategy simultaneously challenges the "legitimacy of the field of climate science" (Dunlap and McCright 2014, 308); attacking the integrity and disputing the authority of the world's leading climate scientists (Hess 2014; McCright and

⁴ The IPCC is the world's leading body for assessing the science related to climate change.

Dunlap 2010; Michaels 2008). The foremost ‘denialism’ scholars suggest that over time this push has morphed from manufacturing uncertainty into manufacturing controversy; by “creating the impression that there is a major debate within the scientific community” (Dunlap and McCright 2014, 308; Ceccarelli 2011). And it is this impression of discord among ‘the sciences’ that has laid the foundation for public ‘climate denialism’ in America. The stark contrast between the country’s two most recent presidents is symptomatic of the wider polarization of American politics and society. Thus, let us take a few steps back to explore – historically - where this polarization began.

The earliest ideological origins of CCD can be traced to the wave of socially-progressive movements in the 1960s, which prompted an aggressive counter-reaction by conservative elites in the U.S (Dunlap & McCright 2014). With Reagan’s successful bid to the presidency the crowning moment of this (re)invigoration of the conservative movement. Coupled with the decaying state of socialism in the Soviet Union, the ascendance of neoliberal capitalism was all but guaranteed. And it was in this context that CTTs “developed into a powerful political force widely recognized to have shifted American politics significantly right ward” (Dunlap and McCright 2015, 304; Blumenthal 2008; Stefancic and Delgado 1996). Within the wider anti-environmentalist agenda, the reach of CTTs has grown at a steady pace. Currently they are the intermediaries between corporate America and the policymaking elite, and in so doing are integral to the climate denying machine.

From the 1980s to the 1990s the stiffest resistance to environmentalism came from the corporate sector. Recently, the funding and support of policy initiatives by the private sector encountered considerable public opposition. And this backlash granted CTTs the opportunity to lead the fight against climate science and policy; through which organizations such as HI have become this movement’s most visible component (Dunlap 2014).

Brulle (2014) identifies a well-funded and synchronized network of organizations which he deems responsible for pushing the present-day anti-environmentalist agenda in America. Having analyzed the financial data connected to 91 CCCM organizations; Brulle states that the data shows how in the last decade energy corporations have pulled back their public support and financing of this counter-cause. He concludes that as corporate financing has become increasingly anonymous “the largest and most consistent funders of organizations orchestrating

efforts to defeat efforts to mitigate climate change are a number of well-known conservative foundations” (Brulle 2014, 692).⁵ Several of which are linked to HI.⁶

Although this analysis does not explicitly place it as the largest or most influential anti-environmentalist organization the leading scholarly contributors to this topic have consistently referred to HI as a spearhead in manufacturing the debate on climate science. According to Dunlap (2014), HI exemplifies the CCCM’s use of the two-fold strategy of manufacturing uncertainty; concurrently putting into doubt the evidence used in climate science whilst questioning the integrity and objectivity of the ‘climate science community’. Plehwe (2014) notes that HI “presents climate change as a discourse characterized by a battle pitching NIPCC research forces against” (Plehwe 2014, 105) the science of the IPCC. By sponsoring the NIPCC, HI sits at the top of “an iceberg of global networks of normative (neoliberal) and corporate agencies that seek to prevent climate change policies from being designed and becoming effective” (Plehwe 2014, 106).

Importantly, Brulle’s (2014) analysis examined the extensive grid of corporations and foundations pushing the anti-environmentalist agenda of the (neo)conservative movement. Exposing the key actors financing this movement is an investigation into the entities operating ‘in the background’. On the other hand, a micro-analysis of those ‘in the foreground’ could shed light on how and where the anonymous funding is spent. This approach will be used to uncover the discursive and thematic practices used by a prominent climate skeptic organization, and can contribute to the current academic understanding on the CCCM’s influence of public policy. Shaping it not to reform the government through grassroots conservative mobilization but rather, to preserve the profits of the fossil fuel industry and its anti-reflexive tendencies.⁷ It is therefore essential that social scientists go about not only exposing corporate meddling in Western politics, but help clarify how ACC “has been turned into a controversy rather than a scientific fact in the U.S.” (Brulle 2014, 693).

⁵ See ‘Figure 1’ under Appendix B

⁶ See ‘Figure 2’ under Appendix B

⁷ In HI’s 2018 Annual Report for 2018, Mark Levin claims “the federal government, Congress, the Supreme Court, the president, the bureaucracy, they are not going to reform themselves. Only we can – through our starter representatives from the bottom up” (Annual Report 2018, 13).

III - Theoretical Framework: The Drivers of Anti-Reflexivity

The main argument of the Anti-Reflexivity Thesis is that by attacking the critical drivers of RM, the American conservative movement is a force of anti-reflexivity (McCright and Dunlap 2010). This claim rests on the underpinning that by strategically undermining policy efforts to mitigate ACC, climate-skeptic organizations reject the shift towards *reflexive modernity*; and are thus ‘anti-reflexive’. To position the HI and *E&CN* within ART; a brief dissection of the leading RM frameworks is imperative.

Risk Society Theory focuses on the risks faced by society during the transition from first to second modernity. Beck (1992) defined RST as “a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself” (p. 21). Ecological Modernization Theory extends this, but places an emphasis on environmental hazards. EMT scholars allude to the similarities between both RM frameworks; suggesting they are intertwined, because “the concept of the risk-society literally captures this idea of society and (environmental) risks being inseparable” (Buttel, Mol, & Spaargaren 2000, 3). Thus, to explore whether HI and *E&CN* can be categorized as ‘drivers of anti-reflexivity’ this project’s theoretical impetus begins with a discussion of a thought that is foundational to both traditions; namely that RM is a distinct phase of society.

RM as a Distinct Phase of Society: Relationship with Nature as an Example

Beck et al. (2003) concede that “crises, transformation and radical social change have always been part of modernity” (p.2). RM in itself refers to a distinct phase of modernity; in which the ‘modernization of modern society’ takes place (Beck et al. 2003). RM’s leading argument is that during the second half of the 20th century an evolution of modernity occurred; in which *we* transitioned from the first to the second modern society.

Evidence of this transition concerns the changing perceptions of society’s relationship with nature. RST scholars suggest that in the first and second modern societies *man* has contrasting understandings of nature. With the first modern view of nature based on exploitation, where nature is considered to be “simultaneously central to society and marginalized [and] conceived of a neutral resource, which can and must be made available without limitation” (Beck et al. 2003, 4)

According to EMT scholars, the process of globalization not only altered the character of modern societies but in particular altered the ‘notion of borders’ between nature and society (Buttel, Mol, & Spaargaren 2000). During first modernity the fixed border between society and nature allowed for one to unabatedly exploit the other. Yet, in second modernity the social system is no longer “neatly closed off from its outside environment [because] society and nature are not only interconnected and intertwined: nature/the environment is ‘pulled into society’” (Buttel, Mol, & Spaargaren 2000, 2). And as was identified by Beck (1986); the delineation of society and nature as “two separate bodies or realities [became] very much a characteristic of 19th century social thinking on society and its environment” (Buttel, Mol, & Spaargaren 2000, 2). Fundamentally, this is a crucial point of convergence among RM frameworks. It also points to how the intentional ‘border delineation’ of the human-nature relationship is outdated and ignores the unintended environmental risks of capitalist globalization.

Furthermore, unlike the first modern society – which believes itself to be the *culmination of history* - second modern societies’ conception of nature and the world in general is more reflexive. In the second phase of modernity society no longer has the luxury of conceiving of nature and its resources as infinitely available for extraction. Rather, “the perception of a global ecological crisis, which includes the acknowledgement of limited resources” has set in motion a political dynamic unheard of in first modern societies (Beck et al. 2003, 5). This alludes to how during modernity’s temporal progression it has become increasingly difficult to sustain the impression that natural resources are limitless. Adding further weight to the suggestion that climate denialists’ insistence on unabated industrial capitalism runs counterintuitively to the dynamics of second modernity outlined by RM. From this perspective *E&CN*, HI, and the broader CCCM, appear to be guided by an outdated premise of first modernity- one where nature is neutral and its resources are infinitely exploitable – with little to no consideration for any environmental ramifications this might have.

The suggestion that RM is a distinct phase of modern society is also central to ART - with the critical drivers of RM crucial to this transition (McCright & Dunlap 2010, Dunlap 2014). While RST and EMT emphasize different points they “both generally agree on the critical forces driving RM” (McCright and Dunlap 2010, 103; Cohen 1997). These are: *impact science* and *social movements* (McCright and Dunlap 2010; Beck 1992; Mol 2000).

The Challenge of Impact Science

In *Risk Society*, Beck (1992) notes that corresponding to the broader discrepancies between the phases of modernity, two divergent patterns can be identified within “the relationship of scientific practice and the public sphere; primary and reflexive scientization” (p.155). Thus, in the first phase of modernity; primary scientization – or ‘production science’ in *Anti-Reflexivity* – benefits from an ‘unbroken faith’ in its ability to deliver progress and innovation. During this phase the dominance of production science is absolute, particularly because it “faces a practice and a public sphere whose resistance it can sweep aside, supported by its success, with promises of liberation from constraints not yet understood” (Beck 1992, 155). Through time the limits and unintended consequences of capitalist industrial production became increasingly evident. Here, the dominant/primary sciences were “confronted with their own objectivized past and present – with themselves as product and producer of reality”, along with the problems *they* are tasked with solving (Beck 1992, 156). RST scholars contend that beyond being viewed as the solution to problems, the sciences were targeted as a cause of these problems. Similarly, EMT scholars also identify this shift; classifying (production) science as part of the problem in first modernity, whilst viewing (impact) science as part of the solution in second modernity.

Within ART primary scientization operates “in service of production [that] has expanded the hegemony of economic producers by giving them more control over resources (environment) and people (workers and consumers)” (McCright and Dunlap 2010, 104). On the other hand, reflexive scientization or *impact science* identifies, explores, and attempts “to ameliorate the negative effects of earlier scientific endeavors” – chief among these, climate change (McCright and Dunlap 2010, 104; Beck 1992, Mol and Spaargaren, 2000)

The Role of Social Movements

A second critical force of RM is the *social movement*. It helps “raise public consciousness of [the] unintended and unanticipated effects of the industrial capitalist social order, while providing a vision of the social transformations needed to address them” (McCright and Dunlap 2010, 104). Scholars within both RM traditions accept that the general shift towards reflexivity in the second modern society is not only limited to industry, science, or technology. Calls for reflexivity in politics, in governance and democracy, gathered pace in the second half of the 20th century. And whilst early environmentalist efforts first emerged several decades ago, such efforts

have in recent years gained a novel lease of life. Leading to widespread protests by civil society against climate breakdown, loss of biodiversity, and other ecological effects.

Thus, reflexivity in Western democracies extends well beyond – and under – the politicization of society. Here, social movements and the notion of ‘sub-politics’ are near-synonymous, and crucial to the establishment of an extended civil-political discussion to help ameliorate the negative effects of free-market capitalism. As Beck (1997) argues “sub-politics means social arrangement from below”.⁸ Generally, RST scholars “assert that social movements play a central role in RM, through spreading awareness of low-probability, high-consequence risks” (McCright and Dunlap 2010, 104; Beck 1997). Sub-politics and social movements have historically brought together diverse groupings to challenge the hazards brought upon them by the dominant political-economic order. And like their counterparts, EMT theorists also highlight the significance of RM at the political level – emphasizing that “political modernization is about changing relations between state, market and civil society” (Buttel, Mol, & Spaargaren 2000, 188). In *Environment and Global Modernity*, Leroy and Tatenhove write that “sub-politics refers to politics outside and beyond the representative institutions of the political system” of modern nation states; another reference to Beck’s RST notion that the essence of politics in second modernity is a reflexive sub-politicization of society (Buttel, Mol, & Spaargaren 2000, 193). A consequent influence of EMT on the Anti-Reflexivity Thesis is that its scholars believe “that mainstream environmental movements are crucial to the process of ecological transformation as they are major carriers of heightened concern for ecological crises” (McCright and Dunlap 2010, 104; Mol 2000). Thus, both RM frameworks highlight the significance of grass-roots movements in challenging the hegemonic influence of dominant ‘first modern’ societal elements. And while they differ on other points, EMT and RST scholars agree upon the fact that the emergence and successes of social movements are “crucial for helping the public and policy-makers confront the negative effects of industrial capitalism” (McCright and Dunlap 2010, 104).

⁸ Found in e-Book version of *The Reinvention of Politics* with page numbers unavailable – quotation taken from first page of the chapter title ‘Congestion – the meditative form of the strike in reflexive modernity’. See (Beck, 1997)

IV - Case Selection

Whilst HI is not per se the best-funded CTT in America it has a specialized focus on environmental issues; and has over the past decade established itself as a leading skeptic organization.⁹ Among CCD scholars, HI is known for its “persistent questioning of climate science, for its promotion of ‘experts’ who have done little, if any, peer-reviewed climate research, and for its sponsorship” (Oreskes & Conway 2010, 233) of the NIPCC and its ‘counter-conferences’ that paint the scientific community consensus on ACC as false and subjective.

The Institute was founded in 1984 by David Padden. More recently, HI gained a reputation as a leading denialist entity, but in the 1990s its efforts were centered on lobbying against smoking bans and discrediting the health hazards of secondhand smoke.¹⁰ Since, HI has continuously advocated for free-market solutions to everything - ranging from tobacco, to education and taxes. Upon the turn of the millennium these efforts have focused particularly on climate change denial. This shift further confirmed by the fact that the organization views “the debate over global warming [as] the most consequential public policy debate taking place today in the United States” (“Climate Change | Heartland Institute”, n.d.). The progression of HI reaffirms that - well before the debate on climate change gained its contemporary public salience— throughout the duration of its existence the organization’s activities have defied RM.

A major reason that HI has been selected as the focus of this case-study is because it hosts the NIPCC. And as the fossil fuel giants have pulled back their public support of climate change denialism, organizations such as HI have become this movement’s most public component. Moreover, HI’s stated mission is “to discover, develop, and promote free-market] solutions to social economic problems” (“Home | Heartland Institute”, 2019). These factors, along with the growing public acceptance of climate change denial among conservative politicians, emphasize the importance of an investigation of this entity’s framing strategy.

Upon a closer viewing of HI’s website, it becomes apparent that there is an immense variety and availability of content; on topics ranging from constitutional reform to healthcare. The *Arthur B. Robinson Center on Climate and Environmental Policy* is the HI department that deals with

⁹ See ‘Figure 2’ under Appendix B

¹⁰ Throughout the 1990s, HI worked closely with and supported the activities of tobacco-giant Phillip Morris. See (Oreskes & Conway 2010)

climate change, and it is in this section where content on related matters can be found. The documents analyzed for the purpose of this research project were issues of *Environment and Climate News*, published from 2015 to 2019.

As per the organization, *E&CN* is a “a monthly public policy newspaper [that] is sent to every national and state elected official in the U.S. and thousands of civic and business leaders and Heartland supporters” (Drukala, n.d.). From 2015-2018 HI published ten issues of *E&CN* per year, with four issues published to date in 2019. Each *E&CN* issue contains around twenty individual articles roughly related to climate change and policy. Following a rough examination of the content discussed in each issue from 2015-2019, two issues per year were selected for close analysis. Concerning the articles examined per issue; on average, three articles were examined. The outliers being the four articles in both issues from 2015, and two articles each for the January 2016 and January 2017. In total, thirty separate articles make up the set of data used for analysis. Considering the time-frame this was deemed to be the most efficient and effective approach to identify the framing strategy used in *E&CN*.

V - Methodology

For this project the ‘case-study’ method will be used to investigate the framing of climate denial in U.S.; exploring the thematic and discursive strategy used by this climate-skeptic publication. Conceptually, associations will be drawn between the case and RM; several reasons highlighting why a ‘case-study’ is the most appropriate methodology.

First, the project is exploring how a skeptic organization tries to shape public perception through discourse and not exclusively the phenomenon of CCD. Secondly, this research design adequately fits ART as summarized in the theoretical framework. The analysis of this case will be tested against this study’s principal hypothesis– that HI and the content published in *E&CN* undermine efforts at RM.

The underlying research objective is to identify how the framing strategies of skeptic organizations affect views on climate change and policy. As an individual researcher this methodology allows for a feasible analysis of a complex societal phenomenon. Thus, to uncover

whether HI's strategic framing of the climate-change 'debate' has anti-reflexive characteristics, an investigation of the discursive and thematic practices employed in *E&CN* is most appropriate.

Methods of Data Collection and Analysis

The first step of the content selection procedure determined which, of the ten yearly issues, would be analyzed. This included browsing the internet to briefly summarize the significant 'climate-related- events that took place in America during the period of analysis. This approach was useful because it helped identify the pertinent political events occurring in the U.S. from 2015-2019 – i.e., socio-political developments that might have influenced HI's approach to generating content.

An example of this being; to explore whether there was any observable periodical difference in the framing of the debate in *E&CN* during the contrasting presidencies of Obama and Trump. Additionally, the 'event summary' was also useful in identifying during which months of the year similar events – most relevant to climate change and climate policy – took place. This helped determine the data selection criteria; facilitating and providing valid reasoning for the selection of certain *E&CN* publications over others. A description of the selection reasoning for data collection is included under 'Appendix A'.

The final step of the selection procedure was to determine which articles would be analyzed. Rather than having chosen the articles at random, selection was based on their relevance to the framing of both sides of the debate; namely, how *E&CN* appealed to the fears of the conservative and general public, and how its authors expressed their views on climate policy. Each *E&CN* issue contained roughly twenty individual articles, the majority of which were opinion and editorial pieces. The other common written pieces being interviews and book reviews.

Operationalization

The discussion on industry's impact on climate change is publicly and politically in most of the world's industrialized nations. It is however, important to give the unacquainted reader a brief context for understanding this study's findings.

The analytical relevance of the period 2015-2019 is that 2015 was the penultimate year of Obama's administration– with his support for climate change mitigation evident throughout his

presidency. The end of the Obama presidency coincided with the unexpected emergence of Trump on America's political scene- confirmed by his election win in November 2016. Ideologically, Trump stands on the opposite side of the spectrum and throughout his campaign positioned himself as the climate-skeptic and pro-energy candidate - , a stance he had taken several years prior to 2016.¹¹ Trump's election victory has had an immense impact on the discussion of the climate change debate- with his administration coordinately reversing Obama's efforts at regulating and cutting down on greenhouse gas emissions. The most notable being the withdrawal of the U.S. from the Paris Agreement, a decision President Trump formally confirmed on the 1st of June 2017.

Following a preliminary reading of the *E&CN* issues from 2015-2019, on average three articles were selected for close examination. With here were two types of findings identified during the in-depth collection and examination. The broader type were the general patterns and themes that surfaced, with the specific set of data being the words making up these thematic categories. Separating the findings was done to compartmentalize and facilitate the analysis and discussion of the results.

Viewing the two data sets as mutually reinforcing is equally crucial to understanding them individually. On the one hand, there were several general patterns that surfaced during the data collection process. These were when the authors tried to; framing either end of the, playing on the naivety and uncertainties of the public, criticize or support policy decisions, and appealing to traditional fears or values of American conservatives. On the other hand, whilst these themes illustrate the overall framing strategy in *E&CN*; the specific word groupings were crucial to identifying these thematic patterns - both shown in the table below:

¹¹ An article published by Dylan Matthews on *Vox* details the 115 times Trump tweeted about his climate change skepticism from 2011 to 2015 – with tweets ranging from his sharing of the 'Climategate 2.0' in 2011 to his consistent criticism of the Obama administration's climate policy decisions. See (Matthews 2017)

Table 1 - Core Clusters of Terms Used to Frame the Debate on Climate Change 'Environment and Climate News'											
Cluster and Theme	These Terms and Clusters Are Used to:		N (frequency)								
			2015		2016		2017		2018		2019
Cluster 1											
a. Framing of the 'Position'											
1. Climate-realism, realists, skeptics, pro-energy	1. Describe 'the self' and own views	0	2	3	0	0	0	0	2	0	0
2. Capitalists, capitalism, conservatives	2. Outline the guiding ideology	2	1	0	0	0	0	0	0	0	0
3. Real science, energy science, energy economics	3. Highlight evidence that climate change is not manmade	1	2	3	0	0	0	1	0	0	0
4. Fighting, resistance, debate, no consensus	4. Undermine the scientific consensus and 'manufacture the debate'	0	0	1	0	0	0	1	0	0	0
b. Framing of 'Opposition'											
1. Climate-alarmism, alarmists, extremists	1. Describe 'the other' and opposing views	3	4	2	0	0	2	1	0	0	5
2. Anti-capitalists, crony-capitalists, liberals, socialists, socialism, doctrine	2. Outline the guiding ideology	2	1	0	0	1	0	7	1	3	1
3. Misinformation, believers, junk science, bogus science, climate change theory, consensus, models	3. Highlight a lack of scientific evidence of manmade climate change	5	6	3	0	0	2	4	0	0	3
Cluster 2 - Naivety & Uncertainties of the General Public											
1. Poverty, poor, income, growth	1. Suggest that 'pro-energy' interests align with those of America's and the world's poor	5	1	3	0	5	4	2	5	6	4
2. Millions, billions, trillions, costs, benefits	2. Shape the public perception on the macro-financial implications of climate mitigation	2	2	6	0	3	3	0	0	4	0
3. Public resources, taxpayers, taxes, taxpayer-funded	3. Shape the public perception of the financial strain for the individual American; and micro-financial implications	2	0	7	3	0	3	1	12	3	0
Cluster 3 - Traditional Fears and Values of Conservatives											
1. Economy, economic, industry, energy	1. Emphasize the importance of the broader economic implications; away from the social, political, and environmental ones	0	2	2	1	2	3	1	3	6	13
2. Freedom, security, dominance, war	2. Appealing to the notion of 'American exceptionalism'; that is under threat	0	0	0	0	0	0	5	1	0	6
3. Regulation, regulatory	3. Used to juxtapose the opposing positions of 'liberals and conservatives' on regulation	0	1	6	2	2	1	3	0	5	4
4. Climate-industrial complex, green profiteering, green entrepreneurs	4. Painting a picture of a threatening and manipulative 'green industry'	0	0	2	0	0	2	1	0	0	0
5. Bureaucrats, bureaucracy	5. Used to highlight the threat of big-government and 'top-down' governance	1	0	1	1	1	1	0	1	1	0
Cluster 4 - Views on Policy											
1. Adapt, adaptation, preparing	1. Describe policy and positions authors support	0	5	0	0	0	0	0	0	0	0
2. Mitigation, prevention, fighting	2. Describe policy and positions authors oppose	0	2	0	0	0	0	0	0	0	0
3. Laws, lawmakers, rules, rule-makers, policy, policymakers, legislation, legislators	3. Identify the decisions of past and current elected officials; often appealing directly to the officials at state and federal level and proposing action	2	0	4	0	2	0	0	0	2	1
4. EPA, Obama, Obama-era, Trump	4. Refer to the principal agency and individual members of government influencing climate policy	2	3	11	4	11	9	5	2	10	3

This section's first objective was to operationalize the 'data' before analyzing it. The second was to consider the content of the study's findings at face-value; creating a context in which they can be understood. Using both to ultimately identify the thematic and discursive tactics used by *E&CN* contributors to depict the current climate change discussion in America.

VI - Findings

As shown in ‘table 1’, the close-examination of *E&CN* identified five thematic categories– with the first two framed as *cluster 1a* and *cluster 1b*. These categories (*framing the position* and *framing the opposition*) were combined because together they frame the broader debate.

Describing the contrasting perspectives on this issue on both ends of the conservative-liberal ‘spectrum’. Thus, the decision was made to also delineate a division in this *cluster* to highlight distinctive discourse used to frame the views of *the self*, compared to those used to frame those of *the other*. In the three remaining *clusters*, each corresponds with a specific *theme*. In total, 236 separate excerpts were taken from 30 *E&CN* articles from 2015-2019. The ensuing section presents the results obtained during the data collection process; with each subheading corresponding to the five themes in ‘table 1’.

Framing of the Position

Of all the themes, this surfaced the fewest– with discourse used to ‘frame the position’ present in 19% of the analyzed excerpts. Given that HI is a self-styled conservative think tank it is unsurprising this thematic category was discussed the least. Primarily because the majority of the target audience identify as conservative, and thus can be assumed to support HI’s advocacy of “free-market solutions to social and economic problems” (“Home | Heartland Institute”, n.d.).

This theme describes the positions of the publication’s contributors; emphasizes their guiding ideology; and promotes ‘evidence’ disputing human activity as a leading cause of climate change. It also helps create the false impression of debate among climate scientists emphasizing a supposed lack of scientific consensus on the issue. The thematic analysis identified two overarching thematic patterns.

Climate Change Skepticism as a Criminal Endeavor

Whilst exploring how the ‘position’ was framed, it became rapidly evident that *E&CN* writers almost exclusively referred to themselves as climate ‘skeptics’ and not ‘deniers’. Here, the use of ‘skepticism’ is particularly interesting considering that much of the scholarship on this topic frames it as *denial*. Though the total number of references to ‘skepticism’ is comparatively low, they are consistent in *E&CN* throughout.

In an interview included in *E&CN* from February 2015 Lord Monckton¹² suggests that climate skeptics are under attack; by extremists demanding they “be put on trial for high-crimes against humanity and executed” (February 2015). In January 2016, the author writes that “skepticism is supposed to be encouraged in science [and that] being wrong in the pursuit of knowledge is not criminal” (January 2016). This builds on the persistent insinuation that ‘leftist-environmentalists’ consider skepticism paramount to criminal behavior. In April 2019 there is a more recent example of this pattern, where the author writes that when “confronted with facts casting doubt on aspects of the theory of human-caused climate change, climate alarmists revert to ad hominem attacks, calling the researchers providing such evidence insulting names or questioning their motives” (April 2019).

Trump as the Guardian of Skepticism

Another thematic pattern closely related to skeptic-criminal image is how Trump is framed as the protector of climate skepticism. This surfaced particularly in *E&CN* from 2017 onwards, where Trump is repeatedly contrasted with his predecessor. Throughout, he is portrayed as the deregulatory president – not the anti-Christ, but in every sense the anti-Obama. Following his inauguration, Trump’s views are described as being “very much pro-energy” (January 2017). Thru this issue he is framed as the climate-skeptic president; promising to lift the restrictions, rules and other ‘Obama-Clinton roadblocks’ that have not only burdened Americans but, for people in developing countries have “further [delayed] their opportunity to enjoy some aspects of modern life” (January 2017). Trump’s role as the ombudsman against Obama’s regulatory over-reach is evidenced by his successful push to cut funding and staffing for the EPA; nostalgically described as “at its lowest since the Reagan era” (February 2018). Aside from having kept the Trump-campaign promise of down-sizing the EPA, the article suggests that the rollback of Obama-era regulations shows how “with President Trump, this Congress is leading America towards energy dominance and strong economic growth” (July 2018). These, among numerous other examples showcase the framing of Trump as the guardian of climate skepticism; who’s reversal of “eight years of failed energy policy [has put] America on a strong path to energy

¹² In the 1980s, he was one of the first policymakers in Britain to draw Thatcher’s attention to the influence of carbon dioxide emissions on global temperature – but has since risen to prominence among British denialists.

dominance and economic security for all Americans” (July 2018).

Framing of the Opposition

The word groups used to *frame the opposition* were present in 40% of the excerpts. Words such as ‘alarmism’ and ‘extremism’ described the exaggerated views of those advocating for climate change mitigation. Words such as ‘anti-capitalists’, ‘liberals’ and ‘socialists’ were used towards similar ends but, more closer references to ideology. A third ‘word-grouping’ depicted a supposed lack of scientific evidence of ACC – concurrently undermining the objectivity of climate science whilst disputing the scientific consensus.

Alarmism and Religious Zealotry

Both 2015 *E&CN* publications include commentary on Pope Francis’ support of climate change mitigation; *Pope Francis Takes on Climate Change* from February, and *Pope Pushes Environmentalism* in November.¹³ The first is featured on the newspaper’s cover page, with Burnett critical of the decision to make the fight against “global warming an important papal cause in 2015” (February 2015). Whilst the author suggests the Pope’s priorities are ‘misplaced’ and He is ‘misinformed’ about the climate science; the tone of the article is not exaggeratedly critical.

Considering that *E&CN* for November 2015 was published in the lead up to COP21,¹⁴ the tone in the second article is markedly different. The author quotes a prominent skeptic’s claim that the pontiff “is now serving as the chief religious lobbyist for manmade global warming and the United Nations [which] is a very ill-conceived role for any pope to play” (November 2015). Additionally, Burnett writes that “Pope Francis leaves America to long-term stagnation and decline based on the anti-growth overregulation of Obama’s [EPA], which Francis supported” (November 2015). The metaphor of a climate conspiracy is palpable; supposedly Obama’s alarmism has *even* influenced the Holy Father. More recently, Burnett suggested that the “hypothesis of human-caused climate change is really more akin to religious belief” with the *ad hominem* attacks on climate skeptics “a hallmark of doctrinaire religious zealots, not of scientists

¹³ Both written by H. Sterling Burnett.

¹⁴ *COP21*; officially the ‘2015 United Nations Climate Change Conference’ was the conference which negotiated the ‘Paris Agreement’. See (Sutter 2015)

engaged in an honest exchange of ideas in pursuit of knowledge” (April 2019). And this imagery; portraying ‘alarmist’ views on climate change as religious doctrine persists across the publications examined in this study.

Obama Weighing Down America

Upon exploring the *framing of the position*, it became evident that the juxtaposition of the Trump and Obama would be a dominant theme. As such, in *framing of the opposition* another major thematic pattern were the condemnatory references to the Obama administration.

Criticism was levelled at Obama’s in several *E&CN* articles in 2015, yet this disapproval appears to have become increasingly unambiguous post-2016. The January issue includes an interview between Burnett and Inhofe,¹⁵ where they discuss the ‘Climategate’ scandal,¹⁶ the narrow scientific consensus, and the emergent class of ‘green billionaires’. As it progresses there is an exchange in which Burnett suggests that under Inhofe’s “leadership the Senate Environment and Public Works Committee has uncovered e-mails and documents detailing Obama administration collusion with environmental groups to push climate policy” (January 2016). In response, Inhofe confirms that he led the investigation that exposed “how the Obama administration collaborated with outside environmental groups” (January 2016). In May 2016, another skeptic accuses the Obama administration of “funding and organizing hard-left green activists” (May 2016) in his bid to oppose the use of fossil fuels. Illustrating how *E&CN* portrays the ‘regulatory overreach’ and ‘backdoor funding’ of Obama’s ‘anti-energy’ administration not only as “criminal [but] reminiscent of what we see in banana republics, and a danger to a free society” (May 2016). These are some of the numerous examples in which Obama is framed as the ‘anti-freedom’ and ‘anti-energy’ leader; whose policies imposed undue burdens on American exceptionalism, the economy and the individual taxpayer.

¹⁵ Inhofe has developed a reputation as an ardent ‘climate-denier’ and is well known for his rejection of the scientific consensus on climate change, see (Dryzek et al. 2011). And ranks as the ‘most conservative’ member of the U.S. Congress, see (GovTrack.us 2017; GovTrack.us 2018)

¹⁶ In November 2009 there was a “controversy over a set of over 1,000 private emails and many other documents that were stolen or leaked from the University of East Anglia’s Climatic Research Unit”. See (Carrington 2011)

Trump: The Antidote to Obama's Legacy

It is worth noting that in *E&CN* Obama's 'decision-making was used towards conflicting ends to frame different aspects of the discussion. This contrast is particularly visible amid an apparent shift in strategy from 2015-2017 (which undermined and attacked the legitimacy of the administration's decision-making) to the tactic used in 2017-2019 - which uses Obama's failures to reinforce Trump's successes.

The title on the January 2017 cover page is 'Trump Vows Changes in Nation's Energy, Climate Policies'. This heading's inclusion on the cover page the first following Trump's election victory - foreshadowed how the strategy to *frame the opposition* would unfold. In this article's first paragraph the author refers to how Trump's "public statements highlighted many differences with Obama on energy and climate policy" (January 2017). The same article references *Trump's Contract with the American Voter*, which pledges to lift the 'restrictions' from the previous administration; establishing Trump as the man to undo the Obama's regulatory legacy.

This pattern persists in 'post-Obama' *E&CN*. In a discussion of EPA funding and staffing in *E&CN* for February 2018 an HI policy advisor proposes Scott Pruitt¹⁷ "get rid of all Obama holdovers and the other staff who've collaborated with green organizations to push a big-government anti-freedom agenda" (February 2018). Fewer overt references are made to the ills of the Obama administration in the excerpts taken from *E&CN* articles from 2019. Though links continued to be drawn between the pre-Trump regulatory regime and America's waning global dominance. Furthermore, in these later *E&CN* issues the view that "climate regulations restricting fossil fuel use or raising energy prices undermine the U.S. economy and national security" (April 2019) were espoused throughout.

Hyper-focusing on economic dominance has been a hallmark of modern-day American politics, with *E&CN* keen to emphasize American exceptionalism; where "economic prosperity is important to sustaining a military able to combat threats to Americans" (April 2019). Not to mention that "by imposing expensive, economy-killing energy sources on America, global warming alarmists would severely undercut national security" (April 2019). These fragments

¹⁷ Pruitt is a Republican politician from Oklahoma, and served as the 14th EPA Administrator from February 2017 to July 6 2018. He rejects the scientific consensus on ACC, and by 2017 had sued the EPA more than a dozen times during his tenure as Attorney General of Oklahoma.

confirm *E&CN* authors' contribution to the mounting polarization between the left and right in U.S. politics; strategically framing Obama and other alarmists not only as threats to American dominance, but as dangerous to American society.

The Naivety and Uncertainties of the Public

An examination of this theme reveals that references to this category surfaced in 46% of the excerpts. Expectedly, the themes identified as *cluster 2* and *cluster 3* overlap on various points. Consider the traditional liberal-conservative dichotomy in American politics. Resultingly, one can assume that a similar number of American voters identify as conservatives as those who identify as 'liberals. And this assumption results in an overlapping set of uncertainties among the general public and conservatives. A word transcending each theme, but of particular pertinence to this category is *socialism*. Considering conservative voters form a sizeable portion of the general public, the references to *socialism* in *E&CN* will be examined in relation to the *naivety and uncertainties of the public*.

The Brown Scare

Throughout the analyzed issues, *E&CN* authors use the fears of socialism and imagery of the 'red scare' to depict the growing threat of environmentalism. When commenting on widespread calls for investors to divest themselves of stakes in fossil fuels the author frames this move as the 'divestment war' of environmentalists, suggesting that "full divestment in fossil fuels would result in the collapse of modern civilization into horrendous chaos" (February 2015). The pictures of an impending civilizational conflict – with 'climate realists' on one end and environmentalists on the other - is a powerful tool used in *E&CN*. It delineates the increasing schism of the country's dominant ideological categories. For future bipartisanship on climate policy this perception is problematic; leaving little room for conservative involvement in remedying the climate crisis.

Another example illustrating how *E&CN* takes advantage of the fears of the average American voter is the framing of *environmentalism* as *socialism*. The amalgamation of 'green' and 'red' is framed as a novel ideological threat to American capitalism; the Brown Scare. The insinuation of a new-and-improved version of an age-old threat is overwhelmingly present in the examined

issues of *E&CN*. Included in the February 2018 issue is an edited version of a speech made in December 2017 by Vaclav Klaus. In it, abundant references are made to his experience under the Communist regime of Czechoslovakia. Claiming that during this era he “witnessed an irrational situation where science was at the same time promoted and prohibited, praised and celebrated, manipulated and misused” (February 2018). Damningly, he likens this experience to the *fight* against climate alarmism; saying he has “very similar feelings now” (February 2018).

Closely associated with the polarizing imagery of the ‘Brown Scare’ is how climate change mitigation is framed as ‘uneconomic’. The best example hereof identified in both issues from 2019. One of the articles from February was a reaction piece on the Green New Deal. As well as pointing out that it resembled ‘old-fashioned socialism’, the author used a specific set of words to describe the potential impacts of GND. These words – ‘millions, billions, trillions, costs, benefits’ – have been included in ‘table 1’ under *cluster 2* and represent another recurring discursive practice used in *E&CN*. To shape the audience’s perception of GND’s potential implications the author claimed that the elimination of fossil fuels by 2030 would idle trillions of dollars in capital assets, eliminate millions of jobs, and cost the economy more than \$7 trillion dollars” (February 2019).¹⁸ The author also suggesting that GND would “replace productive work with federally backed make-work jobs, distorting the labor market and hurting private businesses” (February 2019).

This tactic already in effect in *E&CN* in 2015. In February, the results of a U.N. poll supposedly “showed millions of respondents around the world had little interest in action to address climate change” (February 2015).¹⁹ Or in November when a skeptic suggests the damages caused by the politicization of climate science are “the waste of trillions of dollars on economically and environmentally farcical ‘alternative’ energy sources [as well as] the waste of billions of dollars on mediocre and often pointless climate research” (November 2015).

Here, rather than explicitly playing on the fears the general public, this framing approach exploits two of the major short-term and long-term uncertainties of the average American; job and economic security. By using ‘millions’, ‘billions’ and ‘trillions’; the authors simultaneously

¹⁸ The elimination of fossil fuels a major objective of the ‘Green New Deal’, see (166th Congress 1st Session, 2019)

¹⁹ Taking into account that the 16 ‘priorities’ on the list included ‘a good education’, ‘better job opportunities’ and ‘better healthcare’; among others. See (Lee 2014)

emphasize the macro-financial implications of climate change mitigation, as well as the implications for the individual citizen. This method expertly shifts the reader's focus away from the benefits – economic, social, or environmental – and redirects it towards the negative implications of the GND. While it is also worth noting that the stringent emphasis on negative economic impacts the GND is based entirely on a hypothetical and not a proven scenario

The Traditional Fears and Values of American Conservatives

There were fewer references to this thematic category than expected – with the word clusters used to appeal to the ‘identities of American conservatives’ present in 25% of the excerpts. This theme shifts the focus of *E&CN*'s audience away from the social and environmental benefits of ACC mitigation and towards the potential economic implications. This theme also: appeals to the notion that American exceptionalism is under threat; further polarizes ‘liberals’ and ‘conservatives’ on taxes and regulation; alludes to a ‘hostile takeover’ from the ‘climate industrial-complex’; and finally, emphasizes the growing threat of big-government or top-down governance. With two general patterns encompassing this theme identified.

Big Government, Regulation and Taxes

Intertwined with the core values of conservative voters is the ‘right’s’ traditional views on the size and influence of government, and the consequent regulation and taxation levels. Although *E&CN* certainly appeals to conservative opinion on these matters the extent to which it was referenced was considerably less than expected. However, reference to these core political values was done consistently in *E&CN* from 2015-2019.

E&CN from February 2015 one of the few direct references to these values was made. In *U.N. Poll, Climate Change Is the Lowest Priority for Action*, a prominent skeptic claimed that “in a nutshell, climate action would give U.N. and rich country bureaucrats the power to tell the world’s poor; ‘sorry, you can’t have the living standards we enjoy, because that would hurt the climate’” (February 2015). Although it also concerns the fears of the general public, the claim plays on the conservative ‘fear’ of big government - here, the unelected bureaucracy of the United Nations. In November 2015, several references are made to the ‘growing federal imposition’ of Obama’s alarmist bureaucracy. Chief among these the suggestion that the world is

stuck with the IPCC's unelected officials IPCC "for at least a little longer, as well as innumerable national greenhouse offices, ministries of climate change, [...] national and international science organizations with climate alarmist views, and an untold number of other climate change research groups, organizations, and lobbyists" (November 2015). This imaginary list of agencies a subtle metaphor reinforcing the traditional fear he is highlighting; namely, the growing list of mitigating organs and size of government.

The 'aggressive and excessive top-down regulatory regime' is depicted across *E&CN* from 2016-2019. In January 2017 a skeptic proclaims that hardworking Americans have "finally had enough of unelected, unaccountable Washington, DC bureaucrats dictating every aspect of [their] lives" (January 2017). It is likely that at the time, and at present, much of the electorate in 'fly-over country' felt disconnected to the decisions made by the Washington's governing elite.²⁰ Trump's election win as evidence of this widening gap between white-collar working-class Americans and the country's wealthy coastal regions. The deliberate framing of Trump as the antidote to the political establishment in Washington takes attention away from the fact that he is the wealthiest president to have ever been elected – perhaps *the* example of 'coastal' influence on American politics.

Responses to Policy

References to climate policy were made in 34% of the excerpts. Throughout, a consistent trend is criticism of the EPA. This pattern surfaces in every theme, but because it mitigates environmental issues, the *E&CN* contributor's responses to EPA actions puts into context their views on existing climate policy. Some of the significant claims include: articles in which the authors state which policies they support and oppose; [is] commentary on past and presently-elected officials; as well as direct appeals to policymakers. However, the most persistent pattern was the contrasting depiction of the agency under Obama's and Trump's leadership.

²⁰ This is a reference to how some – particularly urban, middle- and upper-class – Americans negatively view the rural parts of the country, situated between the East and West Coasts.

Dangers of the Rogue EPA

From 2015-2017, ‘Obama EPA’ was roundly criticized, whilst ‘Trump EPA’ efforts were commended from 2017-2019. During both periods however, the EPA’s ‘behavior’ was described as that of a rogue agency. In an opinion piece from January 2016, Senator Inhofe states that the EPA lacked transparency, colluded with environmentalists, and that the science its policies were based on was selective. In short, the Obama-era EPA had “not been forthright with the American people in its regulatory agenda” (January 2016). During the first year of Trump’s presidency, a similar tone was used to describe this ‘rogue’ agenda – whilst Trump’s role in stemming the agency’s unprincipled behavior was applauded. Burnett, in July 2017, notes that Trump’s “focus on undoing the EPA’s regulatory rampage [was] a key to achieving 3 percent [yearly economic] growth” (July 2017). In excerpts from 2019 there is little mention of the EPA’s rogue activities, because counter-commentary on the ‘Green New Deal’ dominated these *E&CN* issues. In light of this, the supposedly biased activism of EPA staffers and ‘Obama hold-overs’ is comprehensively criticized in 2018’s issues. Such as when February, the author likens Trump’s EPA to the agency under Reagan, whilst also claiming that Obama’s “EPA diverted resources from actions prescribed by Congress [...] to new programs of the agency’s own design, primarily related to climate change mitigation” (February 2018).

VII – Discussion

For several decades now strategic anti-environmentalism has undermined climate science, also destabilizing all policy-attempts to mitigate the ACC’s adverse effects. The overarching practical argument made in this study is that HI is part of this concerted effort; that denies the reality and severity of ACC purely to protect the economic interests of the fossil fuel industry.

The central premise of the RM frameworks discussed above is that RM signifies the transition from first to second modernity. ART contends that on the issue of climate change RM’s key mechanisms for are *impact science* and *social movements*. This brings us to this research’ principal theoretical argument; that HI intentionally ignores the call for RM, and by definition anti-reflexive. Summarized above, the results identify a clear and strategic framing of the climate

change discussion in *E&CN*; which incorporates a clear and intentional set of thematic and discursive tactics.

The Transition of Modernity

An initial assumption drawn from the results is the distinct portrayal of Obama and Trump administrations climate-related actions. This contrast was evident in *E&CN* throughout the period of analysis, and surfaced consistently in each of the thematic categories identified in ‘table 1’.

From 2015-2019 the Trump-Obama juxtaposition is illustrative of *E&CN* being driven by anti-reflexive perspectives. The persistent comparisons, and their contrasting views on climate change, bear particular similarities with the transition from first to second modernity. McCright and Dunlap (2010) contend that in the pursuit of reflexivity society must confront “the unintended and unanticipated consequences of modernity’s industrial capitalist order” (p.103). Considering climate change as an *unintended side-effect* of the global capitalist order, Obama’s efforts in tackling this crisis domestically and globally common knowledge. Notwithstanding, *E&CN* contributors view these efforts as extreme, damaging and anti-capitalist. Unduly burdening not only on America’s economic and global dominance but damningly on the freedoms enjoyed by the individual American.

Since he entered the political arena Trump has publicly criticized his predecessor’s approach to dealing with climate change. This was a mainstay of Trump’s s campaign, and upon his election victory went beyond rhetoric and into practice – evidenced by the decision to withdraw the U.S. from the Paris Agreement. This move, Trump’s public climate-skepticism and his administration’s deregulatory efforts are praised and applauded throughout *E&CN*. And, while from 2015-2017 the Obama-era EPA is framed as a rogue agency Trump is commended for undoing Obama’s legacy and downsizing the agency to Reagan-era levels.

Trump’s actions on climate change could not contrast more with those of his predecessor. The support for Trump’s and disdain for Obama’s climate policies is a central feature of the issues of *E&CN* analyzed in this study, and reinforces HI’s anti-reflexive positions. By criticizing the exhaustive attempts to curb the impact of ACC whilst praising the non-action at present, the *framing of the opposition* all but confirms the fact that HI is ‘stuck’ in first modernity.

Defense of Production Science

In *Challenging Global Warming as a Social Problem*, McCright and Dunlap (2000) noted that discrediting impact science was “the pre-dominant counter-claim” used by the conservative movement regarding climate science (p.510). The tendency to criticize the evidentiary basis of climate change and the outright rejection of the scientific consensus on the matter is a pattern also observable in *E&CN*.

Across the articles from 2015-2019, the climate consensus is framed as manipulated. This was however, particularly dominant in *framing the opposition* - with numerous references made to the bias of climate scientists and a supposedly narrow consensus. The framing of the opposition as biased was also surfaced in *E&CN's responses to policy*. Throughout the period of analysis, *E&CN* authors were adamant that the ‘alarmist’ mitigative labors of the IPCC and the Obama-era EPA were based on ‘bogus-’ and ‘junk science’. Concurrently, the imagery of bias was subtly used to *frame the position*. Here, Trump’s support of the fossil-fuel industry and the pro-energy positions of other skeptics were depicted as critical to undoing the ‘scientifically-misinformed’ climate policies of the Obama administration.

In short, while the direct attacks of the climate sciences were less explicit than hypothesized; this study’s findings make clear that the position of *E&CN* rejects the crucial shift in the institution of science outlined by the RM frameworks. The framing of the consensus as narrow intentionally creates a false sense of debate among the climate sciences. Furthermore, whilst criticizing the evidentiary basis for climate change, articles featured in *E&CN* depict the fossil-fuel industry as vital for American global dominance. These discursive methods identify HI as part of a broader coalition with anti-reflexive interests. A movement made up of corporate and politically conservative actors that intentionally “undermine the development and employment of scientific evidence documenting environmental problems, in order to defend the current economic system of production” (Dunlap 2014, 1; McCright and Dunlap 2010).

The steadfast defense of production science and the reluctance of *E&CN's* authors to admit to the ills of capitalism proves they are living in first modernity. The themes, and the pertinent discourse, found in *E&CN* reinforce the claim that HI is guided by a ‘first-modern’ conception of science and nature. Similar to the one adopted by Exxon executives in the late 1970s. And,

according to ART, the protection of science functioning in service of production is by definition; anti-reflexive.

The Role of Social Movements

The emphasis on the growing threat of ‘socialist’ or ‘hard-left’ environmentalism is a powerful instrument to dissuade American conservatives from participating in climate change mitigation. This stance effectively excludes the average conservative voter from being part of the solution to the climate crisis, and it illustrates why HI is an anti-reflexive actor that is feeding into the broader polarization of American society. McCright and Dunlap (2010) argue that “during times of fundamental societal change, some sectors of society – for ideological and/or material reasons – mobilize” to resist the transition from first to second modernity (104). With both RM frameworks recognizing that contrarian forces gather and mobilize against the calls for widespread transformation characteristic of RM (McCright and Dunlap 2010; Beck 1997; Mol 2000).

Taking into account the definition of the *social movement* in the theoretical framework, those calling for action on climate change function as one. Efforts of the CCCM are a counter-reaction to this critical RM driver. The intentional destabilization of the climate action movement is demonstrative of the contrarian movement’s insolence of reflexivity. And the thematic examination of *E&CN* provided various examples of how skeptics try to delegitimize those calling for climate action.

Another prominent thematic pattern in *E&CN* is the framing of environmentalism as Communism reincarnate. The image of the ‘red scare’ and its threats to capital order is powerful, and one that undoubtedly brings back unwanted memories for America’s older generations. *E&CN*’s contributors make expert use of America’s general aversion to Communism; likening efforts of climate mitigation to those undertaken by Europe’s Communist regimes. With this imagery implemented consistently in every thematic category and is utilized in every examined publication of *E&CN*.

HI’s newspaper also uses longstanding fears of radical socialism to frame climate skepticism as paramount to political conservatism in America – depicting HI, its contributors, and CCD as bastions of freedom and democracy.

Another prominent theme observed in *E&CN* is the framing of CCCM as a grassroots movement; reaffirming the reactionary challenge to the fundamental societal change in second modernity. There are numerous instances in which *E&CN* contributors frame their ‘grassroots activism’ as under attack by environmentalists. Suggesting throughout its publications that ‘alarmists’ are intent on putting skeptics on trial for crimes against humanity. In April 2019 the author claims that when confronted with evidence casting doubt on the theory of ACC ‘alarmists’ question skeptics’ motives, often reverting to ad hominem attacks. These examples are part of the broader polarizing strategy employed by HI in *E&CN*. And reinforce a crucial claim of ART; that skepticism falls under conservative’s challenge to the fundamental societal shift experienced during the transition of modernity.

Modernization According to the Heartland Institute

Through *E&CN*, HI insists on the continuation of free-market and unrepentant industrialism. A stance strengthened by the organization’s ‘first modern’ views of the society-nature relationship, and its advocacy of ‘pro-energy’ production science. Fundamentally, this CTT favors uninterrupted industrial modernization, evidenced by the framing methods entrenched in *E&CN*. Accordingly, one can suggest that this fixation on the ‘first modern’ perspectives on science and nature is the ideological vertebrae of CCD among many American conservatives.

A few years after the first publication on ART, Dunlap (2014) wrote that the thesis is “a perspective that attributes conservatives’ denial of anthropogenic climate change and other environmental problems and attacks on climate/environmental science to their staunch commitment to protecting the current system of economic production” (p.1). Considering this definition, the following components are critical to Dunlap and McCright’s extension of RM theory; conservatives, the denial of ACC, attacks on climate/environmental sciences, and the commitment to protecting the current system of economic production (i.e., free market capitalism).

Given that HI stated mission is “to discover, develop, and promote free-market solutions to social and economic problems” (“Home | Heartland Institute”, n.d.) one can assume that the organization is protecting ‘the current system of economic production’. The Institute defyingly acknowledges that it is a “significant contrarian actor and has been prominently studied in past literature on organized climate skepticism” (Drukala, n.d.). Also, the organization styles itself as

a conservative/libertarian think tank; forming part of the broader conservative movement in the United States. This study's thematic analysis of *E&CN* sheds light on how HI has attacked and undermined the two critical drivers of RM – with the organization's intentional insolence of the premises of second modernity as further proof of its anti-reflexive tendencies. The following is therefore a forthright suggestion; that the case of the Heartland Institute, and the framing strategy employed in *Environment and Climate News* - is of considerable analytical evidence to the Anti-Reflexivity Thesis.

VIII - Conclusion

The aim of this research project was not to revolutionize the scholarly understanding of climate change denial. Rather, this case-specific examination identifies and explores the framing strategy used by a prominent CTT to influence perspectives on climate change and policy.

Not only do the results and insights give the reader an idea of the discursive and thematic methods used in *E&CN*, but serve as an illustration of the coordinated manner in which a climate-skeptic organization seeks to undermine the seriousness of ACC. This study did not measure HI's influence on climate policy per se. But rather constructed a contemporary context within which the un- and well-acquainted reader can critically assess publications such as *E&CN*. Though relevant, the academic understanding of coordinated CCD is still in its early stages. Thus, as was intended, this study extends Brulle's funding analysis in the other direction; revealing how 'corporate-anonymous' funding of the CCCM translates into written discourse.

Organizations such as HI employ a coordinated strategy to shape perspectives on climate change and policy. This framing tactic predominantly involves criticizing the evidentiary basis of climate science whilst attacking and undermining the positions of alarmists. Expectedly, the uninformed public is particularly susceptible to the subtle imagery and discourse encompassing the framing strategy in *Environment and Climate News*. Trump's presidency and the growing public defiance of the 'scientific consensus' by conservatives; coupled with the increasing polarization of American society has granted HI, and other contrarian actors, an unprecedented opportunity to advocate their free-market agenda. This case analysis makes evident that the framing strategy used in *E&CN* promotes the exploitation of fossil fuels whilst simultaneously

undermining the attempts of environmentalists to raise public consciousness about ACC. HI's refusal to accept that ACC is capitalism's most dangerous *unintended side-effect*; cements its status as a force of anti-reflexivity in contemporary America.

While providing insight into the themes and discourse employed in *E&CN* the study would have been more comprehensive had it examined every issue published from 2015-2019 – with the time frame for the completion and submission of this research project a principal constraint. Another limitation closely associated with the time frame is the selection of the *E&CN* issues, selected deliberately based on their relevance to the themes in 'table 1'. As such, future research can build on this study but expand it in size and scope; with a more extensive examination of skeptic publications (expanding the number of analyzed publications as well as extending the period of analysis) ideal for identifying the CCCM's broader thematic methods.

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Appendix A: Data Selection Reasoning

For the year 2015, the issues of *Environment and Climate News* published in February and November were selected. *E&CN* for February was selected because it was the first edition to be published after President Obama's State of the Union address to the joint session of the United States Congress. *E&CN* for November was selected because it was published in the lead-up to COP 21, formally the 2015 United Nations Climate Change Conference, which was held from the 30th of November to the 12th of December. The relevance hereof is evident in the fact that it was during the conference that the Paris Agreement was negotiated in which each signatory would commit to actively and formally undertake efforts to mitigate global warming.

For 2016, the issues of *E&CN* published in January and May were selected. *E&CN* for January was selected because it was the first issue published during that calendar year, but also because it included an interview with Senator James Inhofe – who has over the past two or so decades developed a reputation as an ardent 'climate-denier', is well known for his rejection of the scientific consensus on climate change (Dryzek et al. 2011), and has from 2016 to present-day consistently been ranked as the ideologically most conservative member of the United States Senate by *GovTrack.us*. The issue published in May was selected because it was in the weeks leading up to this month that Donald Trump was confirmed as one of the leading candidates during the Republican Party presidential primaries – with the confirmation that he would be the Republican Party's nominee for the 2016 presidential elections coming after both Ted Cruz and John Kasich suspended their campaigns to endorse him.

For 2017, the issues published in January and July were selected. *E&CN* for January was selected because it was the first issue of the year, but more importantly because it was the first edition published after Donald Trump's election victory in the 2016 presidential elections. *E&CN* for July was selected due to the fact that it was the first edition published after President Trump confirmed the United States withdrawal from the Paris Agreement, which he had formally announced a month earlier on the 1st of June.

For 2018, the issues published in February and July were selected. *E&CN* for February was selected because it was the edition published in the immediate aftermath of President Trump's State of the Union address, his first public address before the joint session of the U.S. Congress.

E&CN for July was selected primarily due to Scott Pruitt's – administrator of the United States' Environmental Protection Agency – impending resignation after facing several months of accusations of unethical practices as head of the EPA; with Pruitt's resignation confirmed on July 5th.

For 2019, the February and April issues were selected for analysis. *E&CN* for February was selected because it was on the 7th of February that U.S. Representative Alexandria Ocasio-Cortez and U.S. Senator Ed Markey released the resolution of their 'Green New Deal'. *E&CN* for April was selected because it was, at the time of data collection, the most recently published edition of the publication.

Appendix B: Figures

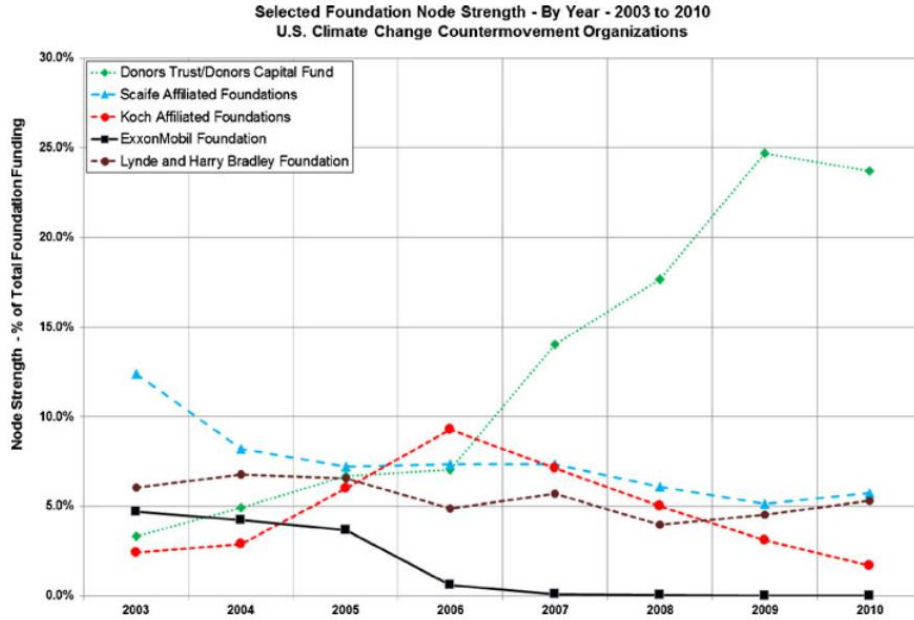


Figure 1 – Selected Foundation node strength – by year – 2003 to 2010 U.S. CCCM organizations (Brulle 2014, 691)

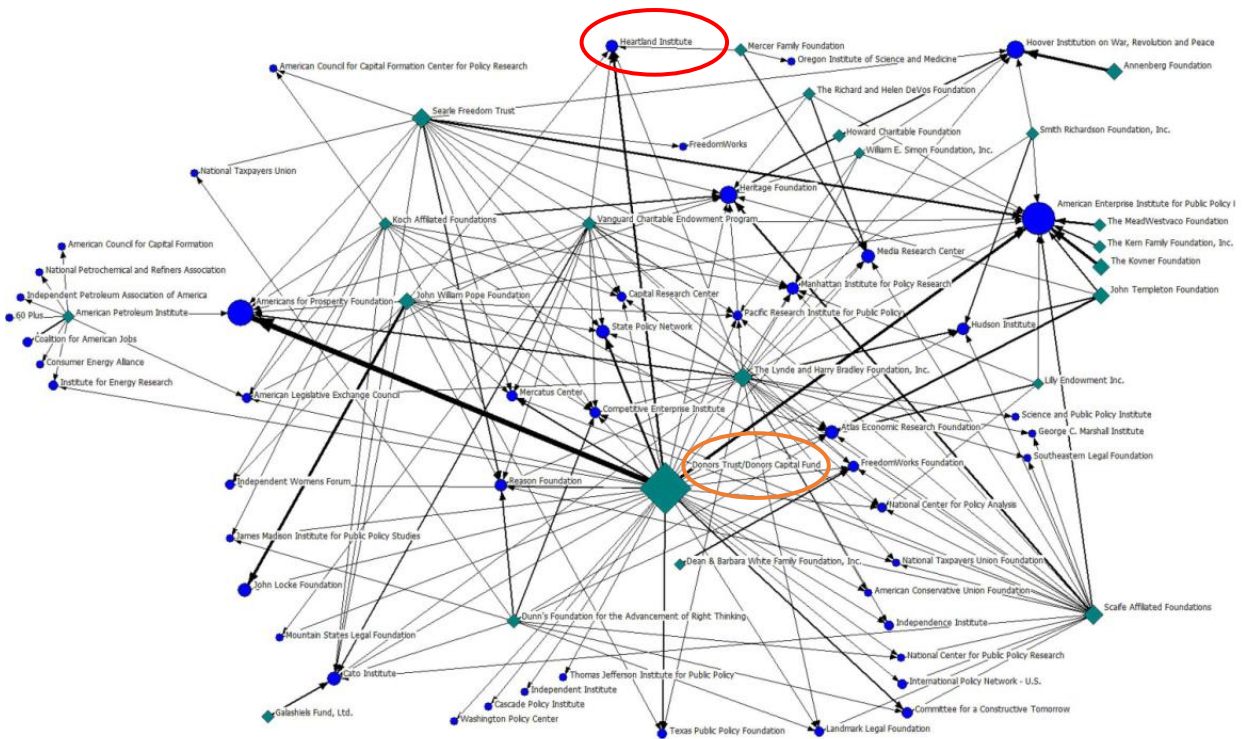


Figure 2 – Sociogram of CCCM organizations by funding foundations (Brulle 2014, 691)