

Spring 2020

From Belief to Action: Histories and New Directions within the Youth Climate Movement

Christian Sabharwal
Bard College, cs4570@bard.edu

Follow this and additional works at: https://digitalcommons.bard.edu/senproj_s2020



Part of the [Environmental Studies Commons](#), and the [Politics and Social Change Commons](#)



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 License](#).

Recommended Citation

Sabharwal, Christian, "From Belief to Action: Histories and New Directions within the Youth Climate Movement" (2020). *Senior Projects Spring 2020*. 178.
https://digitalcommons.bard.edu/senproj_s2020/178

This Open Access work is protected by copyright and/or related rights. It has been provided to you by Bard College's Stevenson Library with permission from the rights-holder(s). You are free to use this work in any way that is permitted by the copyright and related rights. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself. For more information, please contact digitalcommons@bard.edu.

From Belief to Action:
Histories and New Directions within the Youth Climate Movement

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
Christian Sabharwal

Annandale-on-Hudson, New York
May 2020

Acknowledgements

To my advisor Monique Segarra,
for her support, humor, and incredible insight

To Peter Klein,
for showing me what a genuine love for teaching can look like

To Kellan Anfinson,
for the many different ways you made climate change visible

To Stuart Levine,
for your wisdom, friendship, and conversations that I will never forget

To the Climate Museum,
for making me feel like family

To my interviewees,
for their stories and dedication to activism

To the Youth Climate Movement,
for having the courage to do the right thing

Table of Contents

Introduction.....	1
Part One: The Nascent Youth Climate Movement.....	4
History of the Climate Museum.....	10
Literature Review.....	14
Social Movement Theory.....	15
Climate Communications Theory.....	18
Part Two: Stories from the Frontlines.....	22
Museum as a Launchpad for Future Activism.....	23
We Demand Climate Justice.....	25
Storytelling as a Means for Change.....	28
Discussion: Changing the Climate Conversation.....	31
Conclusion.....	34
Bibliography.....	36

Introduction

Young people are in a challenging position as the climate crisis ravages on. They have seen the multiple failures of older generations to address climate change and recognize that their generation has the most to lose in a changing climate. Even if it were forthcoming, federal legislation for mitigating climate change and radical targets for decarbonization to support a low carbon transition may be decades away. Moreover, the Trump Administration has successfully undermined much of Federal protections for the environment and climate. The slow or adversarial position at the Federal level is in direct contrast to the pressing necessity to address climate change now. As noted in the International Panel on Climate Change (IPCC) Special Report, we are already seeing the consequences of 1°C above pre-industrial levels of global warming through more extreme weather events, rising sea levels, diminishing sea ice in the Arctic region, etc. (IPCC 2018). Without energy or policy changes, we are heading towards irreversible and utterly destructive changes to the environment.

Science says we only have a few years to transform our energy system and curb greenhouse gas emissions, but the youth of the world are not waiting any longer. Recently, youth voices have begun to capture global attention on climate, from Greta Thunberg's climate strikes in Europe to mass mobilization within major U.S. cities. While the reasons for protest are multifaceted, young people understand that they are the most vulnerable to the decisions made by older generations on climate change. What we are witnessing now is a major re-alignment of values around the climate crisis as youth are galvanizing in astonishing numbers, demanding urgent action and marching for their lives. As a result, it would seem that this current generation of young people are well placed to shift the long-term societal response to this crisis.

While youth certainly have the energy and momentum on their side, it raises the question of how long they can continue to protest. As Thunberg eloquently delivered in her speech at the World Economic Forum: “I want you to act as if our house is on fire. Because it is” (Thunberg 2019). If world leaders fail to take substantive action, how long can youth serve as the primary mobilizing force in this crisis? After all, students cannot miss school, plan protests, and lobby representatives forever. While it still remains to be seen how the youth movement will progress in the near future, it is safe to say that sustained social and political mobilization is not guaranteed. To address these issues, this project raises the question of how climate organizations can effectively communicate and work with youth. The project also focuses on what motivates young people to engage with climate change and what compels them to act. What pushes youth to engage with climate change? What are the various activations that lead from simply thinking to acting? How can the youth climate movement be strengthened to sustain collective action?

These questions are important to ask now, as young people lead massive protests, with millions of participants under the age of 18. A key advocate for this group of young people are formal climate organizations; success in the movement is dependent on communication networks and the integration of youth into these organizations. Examples of these groups include Sunrise Movement, Extinction Rebellion (XR), 350.org, and many more. As more young people join the climate movement, it is important that there are conversations and strategies between organizations and participants, as activists can learn how to keep the movement from fizzling out. This movement is emerging at a critical time in human history as the window for combating climate change has never been more urgent. Importantly, this year many in the youth climate movement in the United States will be old enough to vote in their first presidential election, but it

cannot stop there: protests, school strikes, and confrontations with candidates must continue. If there are more active knowledge transfers between climate organizations and youth groups, there will be greater recruitment strategies and training for new members—giving the movement reinforced momentum.

To address these transfers and nexus between the two groups, my senior project analyzes the various motivating factors for youth to join this emerging social movement. I developed a set of semi-structured, open-ended interviews targeting youth (ages 14-18) in high school who are active members of youth climate activist groups in New York City (NYC). I conducted interviews focusing on three areas: 1) personal inspiration (home, community, environment), 2) where they get their information about climate change and, 3) how do they know how to translate both into action. My research and methods follow an emerging field of youth-oriented climate communication and activism that uses in-depth interviews to understand motivations to action. Using social movement theory and research from climate communications, I ask questions about how youth become activated to an issue as complex as climate change.

The project is organized as follows. Part One begins by examining the history of the climate change movement and the early problems faced by organizations in enacting effective climate change policies and goals. From there, I address more grassroots-based organizing and the history of the youth-oriented climate movement. I build on this recent history by identifying the programming of the Climate Museum and assessing its impact on mobilizing student activists within the movement. Part One concludes by assessing literature on social movement theory as well as climate communications theory to analyze the interaction between youth climate activists and climate organizations.

Part Two seeks to provide answers as to how students interact with climate change and how organizations can help facilitate this. Through open-ended interviews, I analyze themes and present them within the context of the youth climate movement. The highlighted themes were the importance of the Climate Museum as a driver for future activism, the weight of climate justice and intersectionality within the movement, and the importance of storytelling as a means for engagement. From there, I discuss implications for the future of the movement and close the project by offering suggestions as to how future research can address issues related to social movement organizations (SMOs) more broadly and how they can better engage with youth.

Part One: The Nascent Youth Climate Movement

The origins of the climate change movement can be traced back to the 1980s when climate scientists and environmental NGOs started to pressure international organizations and their member states to take action based on atmospheric studies that showed a clear trend in global warming. As a result, the United Nations, facilitated largely by the US government, established the IPCC (Selin and VanDeveer 2015, 291). This body was the first of its kind to routinely monitor climate change as well as facilitate discussions on how to reduce greenhouse gas emissions. In 1988, climate scientist James Hansen testified before the U.S. Senate Committee on Energy and Natural Resources, telling lawmakers that “climate change is already happening now” (Shabecoff 1988). Hansen’s testimony as well as the 1992 IPCC First Report laid the groundwork for the creation of the United Nations Framework Convention on Climate Change (UNFCCC), which was established during the Earth Summit in 1992 (Selin and VanDeveer 2015). By 1997, with the adoption of the Kyoto Protocol, the details for an

international climate regime were formalized. All of these efforts, in terms of structure, were largely the work of institutional bodies such as the UN and international NGOs.

Although Hansen and others were undeniably influential in putting global warming on the agenda, it did not take long for an opposing campaign to form and to challenge the significance of recent scientific findings. Notably, fossil fuel corporations and the U.S. conservative right joined together to cast doubt on the evidence for anthropogenic global warming (AGW) and the need for reducing carbon emissions. Recognizing that transparent attacks on regulations could cause backlash from the public, these groups pushed another strategy—one of “environmental skepticism” (Dunlap 1987). This tactic, while not new, seeks to challenge the scientific findings for environmental problems so that federal regulations would be questioned. As noted by Naomi Oreskes, the tactic of “manufacturing uncertainty” has been pushed by groups who opposed problems such as ozone depletion, acid rain, and the dangers of secondhand smoke (Conway and Oreskes 2010). Since climate science is much more vast and complex than the aforementioned problems, the attack on AGW was massive. These conservative groups challenged the integrity of a range of actors, from; individual scientists, to environmental organizations, the IPCC, and Kyoto.

As scientific evidence for AGW continued to grow, however, and stimulate a greater level of public awareness on the issue, factions of corporate America modified their assault on scientific findings (Collomb 2014). That is not to say that there were no opponents, as there was a rise in the number of conservative think tanks (CTTs) that sought to challenge scientists and deny the findings of climate experts. Particularly active in the late 1980s and 1990s, these groups included the Heartland Institute, the CATO Institute, the Competitive Enterprise Institute, etc.

(Conway and Oreskes 2010). It stands that CTTs hold enormous influence in the policy arena by manufacturing doubt and outright denial of climate change science.

Beginning in the mid-2000s, a climate change movement began to emerge. For example, in 2007 a group of Middlebury College students, with help from activist Bill McKibben, organized over 1,400 global warming demonstrations. Titled “Step It Up”, the campaign pressed for Congress to pass legislation to cut carbon emissions by 80 percent by 2050. This marked the largest day of protest on climate change in the U.S. and paved the way for more mass-protest nationwide events on climate (McKibben 2007). In the U.S, these rallies were in large part due to first, the U.S. withdrawal from Kyoto in 2001 under President George W. Bush and second, with perceived failure of the 2009 Copenhagen climate meeting to produce a clear road forward.

In Europe, the first Camp for Climate Action (Climate Camp) was set up as a week-long protest outside the coal power station at Drax, Yorkshire in 2006. What began as an environmental protest movement in Britain focused on climate change soon became an annual tradition and expanded to other European cities for several years (Bergman 2014). Known widely for its strategy of nonviolent direct action, Climate Camp was successful in drawing in several thousands of participants. While not exclusively focused on youth, these demonstrations effectively mobilized citizens into citizen activists and helped energize the environmental movement. With new protests popping up around the world, this led many to question the legitimacy of the UNFCCC process and if such frameworks had the ability to solve an issue as complex as climate change.

With a seemingly weak coordinated global response in the aftermath of Copenhagen, the climate movement began to see a shift from institutional advocacy to a more grassroots,

youth-led coalition. Several key themes emerged in the post Copenhagen period, an important one being a climate justice movement. Climate justice has been defined in a number of ways, but at its core is used to contest the unequal impacts of climate change, both geographically and socially. According to Naomi Klein, “The promise of climate justice—as opposed to just climate action—is that, in changing our economy to respond to climate change, we can do more than move away from fossil fuels. We can heal the centuries-old wounds that were intrinsic to an extractivist economy and an extractivist worldview. We can get at the root of the problem” (Mowe 2015). Using Klein’s logic, we see how climate justice can and has been used as a key framing and mobilizing discourse that helps bolster climate activism more broadly and not solely from a critical market environmentalist perspective.

This expanding framing of climate change as unevenly and inequitably impacting both the most vulnerable populations in terms of age, race, gender, environmental, economic and social status, etc. started receiving increasing attention in 2014 and 2015 as activists began holding global days of protest in most of the world’s countries¹ (Tokar 2018). Climate justice advocates believe that policy changes need to be driven by the agendas that align with grassroots campaigns and not solely large public and private governing bodies. This is because policymaking traditionally carried out by elites and corporate interests have not served the needs of the people nor the planet. The climate justice movement seeks to upend that by recognizing the unequal impacts of climate change on youth, indigenous peoples, women, minorities—this framework has been pivotal within the youth climate movement going forward.

¹ See Chapter 2 on the development of the climate justice movement, and the 2014 People’s Climate March, Brian Tokar, *Routledge Handbook of Climate Justice*, (Routledge, 2018), 13-26.

Discussion about the views and power of youth by media outlets and elected officials has gained attention around the world due in large part to rising work and visibility of youth activists on climate and other social issues. One such example was the march by the youth climate organization, Zero Hour, led by Jamie Margolin (16). The Zero Hour march took place on July 21, 2018 in Washington, D.C. and was preceded by the March for Our Lives protests in March 2018 (Zero Hour 2020).² This group against gun violence organized a protest in Washington, D.C. that drew over 800,000 people and inspired sister marches on every continent. What originally began with students from a school in Florida ultimately transformed into a youth movement and marked a turning point in America's conversation on guns. Thus, the youth climate movement was not only able to build off the momentum of March for Our Lives, but was also able to witness how a movement could function and interact with a variety of institutional actors. Hundreds of young people joined Margolin in D.C., which drew considerable media attention and showed how this younger generation is disproportionately impacted by the climate crisis. Zero Hour can be seen as a catalyzing group that helped lead to a series of events that would trigger worldwide mobilization on climate.

Just one month later in August 2018, Swedish teenager Greta Thunberg (15) staged her own climate protest outside the Swedish Parliament. She continued to skip school for weeks until people started taking notice. The next month, Thunberg started the "Friday for Future" strikes, inviting other young people to skip school and protest. These strikes caught media attention and inspired students across the globe to protest and strike in their own cities. By the end of 2018, more than 20,000 students had held strikes in at least 270 cities around the World (Carrington

² See "Zero Hour, Past Actions", Accessed on March 2, 2020, <http://thisiszerohour.org/our-actions/>

2018). Looking back, we can chart how Thunberg's activism evolved from lone protesting to taking part in political demonstrations throughout Europe—making speeches and further mobilising her followers via social media platforms. Over the course of a few months Thunberg was deemed a climate herald, a teenager with a leading voice inside the movement.

By 2019, school strikes were taking place in countries around the world, with more young people organizing strikes. The movement started to adopt participants from other fields—one still led by youth, but with participation from people of all ages. The idea transformed into a worldwide strike where people would skip school or work to join protests for climate action. In the United States, national organizations such as Greenpeace, Sunrise Movement, 350.org, Sierra Club, etc. encouraged their members to join the strikes (Engelfried 2019). Employees from tech companies such as Google, Amazon, and Microsoft planned walk-outs to participate in the march. Perhaps the week that drew the most attention to the movement was the Global Climate Strike between September 20-27, 2019. It was reported that over 7.6 million people participated, making it the largest case of climate mobilisation ever (Newcomb 2019). This strike marked almost a year since the damning IPCC 1.5°C report was released, which called for a dramatic cut of fossil fuels in order to avoid the most catastrophic effects of climate change (IPCC 2018).³ It was also the same week that Thunberg testified before Congress saying to “Unite behind the science”, listen to scientists if they would not listen to youth activists, and finally take action (Ortiz 2019). The movement has gained incredible momentum going into 2020 with the rise of SMOs and the Youth Climate Strike promoting thousands of actions across the globe. In New

³ See “Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C”, Accessed on February 11, 2020, <https://www.ipcc.ch/sr15/chapter/spm/>

York City one important organization for inspiring youth activism is the Climate Museum, described below.

History of the Climate Museum

The Climate Museum is an interdisciplinary museum dedicated solely to climate change. It is the first such museum in the United States and second in the world. The Museum's mission is "to inspire action on the climate crisis with programming across the arts and sciences that deepens understanding, builds connections, and advances just solutions" (Climate Museum 2020). Founding Director Miranda Massie, then an environmental rights lawyer, conceived of the idea in the wake of 2012's Hurricane Sandy. She identified a discrepancy between the many academic institutes dedicated to the study of climate change and the representation of this research in public-facing organizations, such as museums (Kormann 2015). By 2014, the organization formalized the Climate Museum Launch Project to lay groundwork documentation for the future museum. From its inception, the Climate Museum has existed for the purpose of increasing civic engagement around climate, though not strictly through the lens of youth activism. Prior to opening its first exhibitions and public programming, the museum engaged in public and scholarly outreach to gain support for and begin conceptualizing the future museum building. For example, the museum worked with the Rhode Island School of Design on a design course offered in spring 2015, *Climate Museum Launch Studio*, where students created architectural proposals for a theoretical museum building on a site in Lower Manhattan (Solondz 2015).

The Museum began planning its first exhibition and public programs in 2017. *In Human Time* presented the intersections of polar ice, humanity, and time through video and photography

installations of two contemporary artists, Zaria Forman and Peggy Well, in two consecutive runs. Since polar ice melting is a very strong representation of a shifting climate, the exhibition begged a sense of urgency and action from viewers. The show ran from December 2017 to February 2018 in partnership with the Sheila C. Johnson Design Center (SJDC) at the Parsons School of Design in Manhattan (Climate Museum 2020).⁴ The museum began public programming in tandem with the show, including high school tours, a climate arts discussion panel with curator Christiane Paul and artists Peggy Weil and Oliver Kellhammer, and an open house with scientist Dr. Gisela Winckler. A special workshop program for teens across the city, “A Climate Arts Workshop with DJ Spooky,” prompted the students to create a media campaign or art project to promote public awareness about the urgency of taking action on climate change. During the workshop, the students and museum staff decided to form the Youth Advisory Council (YAC) to continue the teenagers’ involvement with not only the museum but also climate activism. Part focus group, part climate club, the YAC works with the museum to help design future programming aimed at furthering youth engagement.

In September 2018, the Climate Museum showed its second exhibition called *Climate Signals* in partnership with the NYC Mayor’s Office for Climate Policy and Programs. This was a public art exhibition by Justin Brice Guariglia which consisted of ten solar-powered highway traffic signs installed in parks and public spaces throughout NYC. Each sign flashed in different languages with messages such as “CLIMATE CHANGE AT WORK” and “FOSSIL FUELING INEQUALITY”. This exhibition, too, called for urgency but did so using provocative diction in an urban landscape. From there, the museum began to pivot towards youth activism, with the

⁴ See “The Climate Museum: Exhibitions, In Human Time”, Accessed on February 12, 2020,

YAC becoming an essential part of the Climate Museum community and giving teenagers a gateway into climate activism. The YAC helped coordinate the museum's participation in Zero Hour's march in 2018 (Calma 2018) and has helped facilitate many other marches in the NYC area. Apart from striking, youth became a central focus for museum programming and exhibitions.

In the Spring of 2019, I joined the museum as an intern where I helped plan and research information related to upcoming shows. Once summer began, I worked as a Programs Coordinator for Special Events related to the 2019 exhibition called *Taking Action*. I organized public programming that allowed outside guests to come and use the space as an educational hub. For instance, at one of our "Ask a Scientist" events, Researcher Gisela Winckler talked with an audience about extracting sediment cores from the ocean floor via livecast while aboard the JOIDES Resolution vessel (Climate Museum 2020).⁵ At another event, teenagers had a communications workshop with Dr. Edward Maibach of the George Mason School of Climate Communication (Climate Museum 2020).⁶ This show was inspired by the youth climate movement and was staffed principally by high schoolers who worked as docents. *Taking Action* featured hands-on learning about solutions for the climate crisis with a focus on cultivating youth engagement. From going on climate strikes to contacting local representatives, the exhibition presented methods to empower young people to choose from a range of commitments and actions to combat the urgency felt around the issue. It ran on Governors Island's Nolan Park from June through October 2019.

⁵ See "The Climate Museum: Taking Action, Events", Accessed on February 12, 2020, <https://www.takingaction.nyc/events>

⁶ Ibid

The second major program is called “Climate Speaks” (Speaks), an annual youth poetry/spoken-word program about climate change (with its inaugural year starting in 2019). This program presents an opportunity for NYC high-schoolers to have a platform to speak up in the climate conversation. Speaks is divided into three phases: workshops, coaching, and performance. In order to get people to sign up for the workshops, I frequently went to different high schools in NYC and tabled during lunches and other events. This involved talking to high schoolers about the program and getting feedback on how much climate science is taught in the curriculum, which in many cases was sparse. In addition to physical outreach, I located contacts within high schools (principals, english and science teachers, sustainability coordinators) and sent information about the program to them. By the end of our outreach, we had collectively sent emails to 324 high schools and 143 organizations in NYC.

After the application window closed, the CM held workshops in all 5 boroughs of NYC. In these workshops, students learned about the connections between climate change, social justice, and the arts. These workshops were taught by experts in climate issues, poets and performers. After attending a workshop, students were invited to submit an original poem or rap through a submission portal. Those who were selected received multiple opportunities for in-depth performance coaching and mentoring at multiple venues in preparation for the final performance. The final performance took place on June 14, 2019, at the Apollo Theater in Harlem, where finalists performed in front of a live audience and read an original work on climate issues. The final performance was not only deeply heartfelt but a grand spectacle of creativity and collective action.

As creative and connected organizations, museums serve an important role within the climate movement and youth activism. Recognizing that not all museums have the ability to speak out on political issues due to funding, it stands that museums, like the Climate Museum, act as vital locations for people to convene and support environmental issues. Especially given that the Climate Museum does not have a permanent space, their pop-up programming has made information more accessible and allowed for a diverse mix of communities, organisations, and individuals to come together and share ideas for collective action. Museums, as trusted institutions, are in a position to share facts and support climate scientists. Museums can also, as was evident in many climate strikes throughout 2019, align themselves with youth protests and amplify voices that have traditionally been excluded from media and policy discourses. When museums, both small and large, support youth activism, they are effectively reframing their relationship with younger audiences as an institutional and educational safe space. Furthermore, it demonstrates a commitment to bridge the transgenerational divide on emotions and impacts related to the climate crisis.

Literature Review

To analyze the interaction between the youth climate movement and climate organizations, I draw on literature from social movement theory, climate communications studies, and existing survey data that tracks the perceptions and beliefs of young people. Social movement theory helps construct the larger dynamics of power, the many tools and resources that are available, and the emergence of the youth climate movement while climate communications theory seeks to explain the gap in what “we know” and what “we don’t know”

about climate messaging and transmission to different audiences. Recent survey data helps explain what motivates active engagement from youth, including networking strategies, social media activism, and life histories that lead to direct action. Each of these literatures help me craft a framework in which I can better understand the context and varied reasons for engagement within the youth climate movement today.

Social Movement Theory

For the purpose of this project, I adopt Sidney Tarrow's definition of social movements as "collective challenges, based on common purposes and social solidarities, in sustained interaction with elites, opponents, and authorities" (Tarrow 1994, 4). I choose this definition because it embodies the different properties of social movements: collective challenge, common purpose, social solidarity, and sustained interaction. It is these elements, according to Tarrow, that shift collective action from riots or flash mobs to sustained collective action. Social movements should be thought of as dynamic—they consist of a broad association of individuals that are continually shifting through political opportunities and challenges. Tarrow sees social movements existing within the realm of contentious collective action and those movements become contentious "when it is used by people who lack regular access to institutions, act in the name of new or unaccepted claims and behave in ways that fundamentally challenge others" (Tarrow 1994, 2). Put simply, social movements seek to challenge social norms and change perceptions—they are created when people outside the political spectrum are able to organize behind some collective action or goal.

Social movement theory scholars identify a set of factors that lead to mobilization on any given issue. These factors, while varied, are critical in shaping the emergence, development, and overall impacts of social movements. They include: 1) political opportunities (or opportunities for change within a political system), 2) mobilizing vehicles that help facilitate change, and 3) processes of interpretation that help facilitate movement buy-in. These factors can be simply identified as political opportunities, mobilizing factors, and framing processes. I will describe the importance of each below and relate them to the youth climate movement.

The idea of “political opportunities” has often been present within discussions on social movements during the past few decades. These opportunities affect the possibilities that outside groups have to mobilize effectively against whatever policy or group that is in place. While political opportunity theory (POT) is quite vast, for its purposes here, we can analyze it as being an important factor that affects the vulnerability of political systems to various mobilizations (McAdam 1982, Tarrow 1994). Political opportunities, thus have the capacity to create “windows of opportunity” that can act as events where actors can coalesce and join in a social movement. Moreover, such opportunities affect degrees of success, levels of mobilization, and strategies for protest (Meyer 2004).

Once nascent social movements begin to form, a critical step is to create organizations that support further mobilization. These SMOs can serve as mobilizing structures which are “collective vehicles, informal as well as formal, through which people mobilize and engage in collective action” (McAdam et al. 1996, 3). Effective and successful mobilization has been routinely linked to ideals of belonging and personal identity (Tarrow 1984). In other words, people who can identify strongly with a social movement will be enabled to take action for the

movement because these organizations give them a structured set of roles and mechanisms by which they can participate. Moreover, being part of a group creates a sense of solidarity and helps motivate participants to protest and feel a collective consciousness.

Given that SMOs want to consistently attract new people to their cause, each must carefully mobilize the resources that they need. Resource mobilization is a strategy to aid social movements in their ability to acquire resources and mobilize individuals to achieve goals and take advantage of political opportunities (McCarthy and Zald 1977). These resources can include people, ideas, money, skills, among others. For example, in the civil rights movement, African American Churches (SMO) were able to serve as sites of education, organization and community engagement for the movement's vast number of supporters. Aldon Morris notes that such black institutions were critical in securing the financial and intellectual momentum to continue the message of the civil rights movement (Morris 1984). Mobilizing structures can be thought of as the building blocks to any social movement—they must be able to mobilize formal and informal networks. These structures focus on ties between people on the ground or in grassroots setup and serve to support social solidarity that is necessary for effective mobilization (Tarrow 1994; McCarthy 1996). While all movements face a different set of challenges, common ground can be sought in the fact that one of the most pressing challenges facing social movements is the ability to create mobilizing structures that are flexible and that can last through adversity (Tarrow 1994).

Social movements also use framing to enlarge their movement and enhance solidarity across audiences. Snow and Benford (1988) identify three types of frames to help movements: diagnostic, prognostic, and motivational. Diagnostic framing identifies the movement in a clear

way and seeks to assign blame. Prognostic framing offers solutions to the problems and avenues for implementation. The third frame, motivational framing, is the call the action. With all of these different frames, one may ask how can people actually organize? Snow et al. (1986) claim that when social movements are able to become robust and group together, a “frame alignment” occurs. This alignment allows its constituents to find common goals and makes it possible for diverse factions of the movement to identify with a frame that unites them all.

Although social movement theories provide a key framework to help us analyze the emerging climate youth movement, it does not totally address the issues of how youth can more easily transition into professional climate spaces or SMOs. While it is evident that the climate movement has been able to organize itself to rapidly expand, less is known about activation methods. I am interested in the moments that lead young people to go from simply thinking about climate to acting on climate issues. This action component is often facilitated by SMOs—they remain crucial to the life trajectories to more and more youth activists. Thus, my research addresses the communication strategies between youth activists and formal climate organizations and how these can be improved to activate more people.

Climate Communications Theory

At its most basic level, climate change communication is about education and informing people about the issues that climate change presents in order to spur both individual action as well as mobilizing public and private sector actors to move towards a low carbon economy and address adaptation challenges. On a more complex level, climate communication theory helps identify how to link together different worldviews, values, actions, and experiences so that we

can better understand not only the threats but solutions to climate change. As noted by Susanne Moser, research in climate communications does not have a long history, but rather has “emerged largely as a pressing need perceived by those directly involved in communicating the issue” (Moser 2010, 33). Those “communicating” have primarily been environmental organizations or scientists, actors that do not have a firm grasp of social science or communications research. Moser identifies this lack of exchange among those researching climate change and those communicating it. This leads her to suggest the importance of audience and framing around climate, as people have differing values and behaviors around the issue (Moser 2010). Max Boykoff also recognizes the importance of certain contexts (cultural, political, economic, environmental, ideological, etc) and how climate communications are strong when there are accessible messages and trusted messengers. This suggests that approaches to climate communications should be both careful and creative to allow for more effective engagement (Boykoff 2019).

While much literature has been dedicated to assessing models that detail the harrowing risks we face due to climate change, much less has been written about how people can go from thinking to acting on climate issues. Of this action-oriented research, even less has been studied or focused on on youth activists—arguably the most passionate demographic rallying against climate change in the 21st century. Within the small but evolving literature, one strand is composed of analysts using surveys to identify and assess the emotions and intentions behind youth climate activists. For example, Sarah Hards (2012) evaluates the “transformative moments” in which people consciously commit to doing something about climate change. Using participants, young and old, Hards uses narrative tools to explore these transformations, with

emphasis on the “the inter-related roles of context, information, emotions, and relationships with other people”. She found that significant life events (such as starting university or becoming a parent) acted as key moments where people are more likely to explore action on climate change. She also found that these transformative moments acted as deeply convictional experiences that triggered shifts in environmental practices and values.

While there is little existing research that explores the ways in which young people can be more actively engaged in climate issues, Scott Fisher’s (2016) “Life trajectories of youth committing to climate activism” explores the idea of commitment towards a social movement. He interviews 17 youth climate activists from 14 countries and cites the role of social justice and concern for nature as important factors in committing to the movement. This suggests that framing climate change as purely an environmental or social justice issue could be a barrier to people committing to climate activism. Fisher also discusses the idea of a “youth climate activist” and how there is an emerging recognition of youth in the politics of climate change. Recognizing that there are conflicting views on what constitutes “youth”, “climate”, and “activist” across cultures, Fisher does not label “youth climate activists” as fitting an age range, but as dynamic and as a “people contextually considered youth who intentionally engage in actions connected to the political and collective aims of addressing the problems of contemporary anthropogenic climate change” (Fisher 2016, 231).

Additionally, in Corner et al.’s (2015), “How do young people engage with climate change?” he looks broadly at the way young people deal with climate change. His review focuses on factors such as the role of values and worldviews in determining climate change views; the efficacy of ‘information-based’ interventions; the ‘psychological distance’ of climate change and

message framing in communicating climate change. For example, on the subject of messengers, Corner et al. found that paying careful attention to who the messengers are affects youth engagement on climate. His study identified parents, teachers, scientists as, notably, other young people as promoting positive social messaging on climate issues. This last group proved to be very influential as young people, through peer-to-peer approaches, promoted sustainable behaviour among those surveyed.

Corner et al. draws from various survey data and international studies research that helps map where young people fit into the issue. These surveys include young people's engagement with climate change relative to other concerns (Harris et al. 2010; Youniss et al. 2002), attribution of guilt on the issue of climate change (Hibberd 2013), and levels of awareness, concern, and skepticism about climate change among the target age groups (Feldman L, Nisbet MC, Nesbit A, Leiserowitz A, Maibach E. 2011; Whitmarsh 2011).

His article also touches on the various gaps that exist in terms of understanding how to engage young people on climate change. Notably, there are discrepancies in the number of studies on young people and climate change in different nations, with a bias toward Australian, European and U.S. data. Apart from this, Corner et al. acknowledges that "Although the literature on how the general population engages with this climate change has proliferated, there are many areas where no direct evidence in relation to young people is yet available" (Corner et al. 2015, 530). Thus, there must be a push to investigate engagement (the role of messages, language, and narratives) that resonate with young people in order to gain a richer understanding of climate change activism.

The frameworks laid out above prove useful both to shaping the kinds of questions I asked in my interviews and interpreting those results, both with the Climate Museum and youth activists discussed in the following sections.

Part Two: Stories from the Frontlines

To explore questions of how youth become activated to climate change issues and how organizations can help aid this activation, I use interviews conducted with high schoolers in the NYC area. I recruited participants by using mailing lists associated with the Climate Museum YAC network as well as the youth network from Climate Museum exhibitions and programs. I was able to interview eight teenagers aging from 14-18 and two young adults working in climate-related organizations. All interviews lasted between 30 minutes and 1 hour, with the majority of them being conducted over Skype.

The interviews had a semi-structured format with open-ended questions. Each started with the question: “What was your first experience with climate change activism?” As they progressed, I asked questions based on the participant’s interests within the climate movement. For example, some interviews tended to highlight concerns related to environmental justice, while others were more focused on the economic and market effects of climate change disasters. I also posed questions related to the themes addressed in social movement and climate communications literature, such as the importance of framing and SMOs within the movement. Near the end of the interviews, I posed the question: “How does the youth climate movement need to change going forward?” in order to gauge how activists see the trajectory of a highly dynamic movement. In addition to recording and transcribing the interviews, I kept field notes to

track additional ideas, emotions, and inspirations that were not necessarily conveyed through the spoken-word interview. These notes helped me flush out ideas from the transcription and were critical in discerning the overall attitudes from each interview. Below, I will discuss my interpretations from the interviews and identify common themes from participants' stories and ideas. I organize the interpretations around the Climate Museum, as this was a vital organization that helped mobilize many participants from simply thinking to acting on climate issues.

Museum as a Launchpad for Future Activism

It's easy to look at climate change as an abstract issue or as something that's transpiring far out there in the world. Psychological distancing (Norgaard 2012) remains pervasive and also highlights the importance of making climate issues personal. This is a challenge that lies ahead for SMOs in being able to draw in more participants to the youth climate movement. This notion of turning climate from an abstract issue into a personal, community issue was an overwhelming topic that was brought up by my interviewees. It was this transition, largely facilitated by Climate Museum programming, that brought students on board. For instance, Jade (17) is currently a senior at the High School of American Studies in the Bronx. She first became concerned about climate change after watching Greta Thunberg's speech at COP 24. Being a writer herself, Jade was interested in the poetry competition, Climate Speaks, and heeded the call to participate. Looking back on that event and performing at the Apollo Theater, Jade remarked:

That opportunity opened the whole activist world to me. What was so powerful about the experience for me was that I was translating something that was so abstract or something that was removed from myself into terms that were personal especially because it was my responsibility to come up with this by myself. When I was writing my poem I had to ask myself what story or issue is important to me and my community.⁷

⁷ Lozada, Jade. Interview by the author. Skype Interview. Annandale on Hudson, February 10, 2020.

Following Climate Speaks, Jade became an organizer at Fridays for Future and helped plan the September 20, 2019 and December 6, 2019 climate strikes in NYC. She also joined Polluters Out, a coalition of youth as well as adult allies and scientists that are working to get fossil fuel money out of the decision-making process of events such as COP (Polluters Out 2020).⁸



Figure 1. Youth activists perform at Climate Speaks program at the Apollo Theater in Harlem, June 2019⁹

For Otto (18), a senior at Brooklyn Friends School, his interest in climate change was more of a gradual process. As climate issues were always on his radar, he felt encouraged to sign up as a docent for the Taking Action exhibition on Governors Island. Reflecting on his experience there, he said:

Thinking about one of the greatest problems that we are facing [climate change] made me sign up at the Museum as an intern. The experience made me see the issue in its full capacity and made me understand its interconnectedness with politics, economics and

⁸ See “Polluters Out, This is us”, Accessed on April 22, 2020

⁹ Goodfriend, Sari. Photograph. Apollo Theater, June 14, 2019, The Climate Museum, Accessed on May 2, 2020

race. Working at CM helped me build skills of communication and helped me be aware of the audience and the message I was giving everyday.¹⁰

After that experience, Otto got involved with striking and organizing work. He also conducted projects focusing on waste management and helped manage the profile for his school that examined different ways they could reduce waste.

For all the youth interviewees, the Climate Museum helped serve an important function in that it helped build relationships within the sphere of climate activism. Whether it was through programming or social media, the Museum helped facilitate an environment where youth can connect and collaborate. As seen with Jade and Otto, the Museum acted as a catalyst for future climate endeavours, with participants expanding to SMOs and activist groups such as Sunrise Movement and Zero Hour. Perhaps most importantly, the interviewees discussed the importance of networking and building relationships/friendships with other activists due to the initial Museum experience. These links are vital in social movements as they build up community trust and a sense of social solidarity that people can align themselves with.

We Demand Climate Justice

A trend that carried across the interviews was the resounding rejection of “business as usual” politics around climate. Participants additionally recognized the importance of intersectionality and diversity within the movement and how traits such as these have been excluded from past environmental movements. Yet, within the youth climate movement, there is an emphatic belief in climate justice and social equity for all people. Regardless of differentiated interests within the climate movement, all participants raised concerns about social justice and

¹⁰ Moran, Otto. Interview by the author. Skype Interview. Annandale on Hudson, February 15, 2020.

the fact that climate change disproportionately affects people of color, low-income populations, and young people. For one interviewee, Manav (17), the issue of climate justice is very intimate. Born in India, Manav has seen how climate change has affected the country in adverse ways. From flooding to overpopulation to climate refugees seeking refuge from Bangladesh, there has been a deterioration in people’s livelihoods and cultures. Now living in Long Island, Manav started getting involved in climate-related work in 2019—participating in both Climate Speaks and Taking Action.



Figure 2. Manav Bansal presenting at Taking Action exhibit, Governors Island, July 2019 ¹¹

From there, Manav became involved with Fridays for Future, Extinction Rebellion and helped organize different strikes in NYC. He also joined the YAC of the Climate Museum and writes frequently about the climate crisis. All of these actions prompted me to ask him: “How do

¹¹ Goulet, Lisa. Photograph. Governors Island, July 24, 2019, The Climate Museum, Accessed on May 2, 2020

you think of climate justice? What does that term mean for you?” Without any hesitation, he answered:

I recognize that it is intersectional in regards to race, gender, ethnicity, etc. and what interests me the most is the social inequity that exists within the climate movement. We have these power structures in our society where the ones at the top can keep spending and burning fossil fuels while those at the bottom are forced to deal with the consequences. Especially marginalized, poor, people of color face the largest risks... This is a social justice issue and we have to treat that as a fact. We have to make sure that communities of people of color are heard and are used as a catalyst for climate conversations. The white man cannot serve as a facade for people of color no longer.¹²

His thoughts very much aligned with the transnational movement’s ethos of justice and inclusivity as being a central demand.

For Elizabeth (15), a sophomore at Staten Island Technical High School, she was drawn in by the movement due to personal experience. Due to Hurricane Sandy, Elizabeth lost her home and was displaced—she instantly connected this to the climate crisis. A finalist at Climate Speaks,¹³ her poem “humanizes the climate crisis as a mother and she is scolding us for causing the whole thing...there are many references to floods and rivers because I remember seeing videos of that during Sandy and seeing my home just destroyed and that really stuck with me and made its way into the poetry” (Climate Speaks 2019).¹⁴ After this program, Elizabeth became more interested in public speaking and recently spoke at the United Nations on the topic of Female Empowerment through Policy Development and Economics. Both of these experiences helped impact the way she viewed issues of social justice within the movement as well as her own writing. While the participants’ grasp of “intersectionality” varied, all interviewees recognized the links between environmental, economic, and social issues related to climate

¹² Bansal, Manav. Interview by the author. Skype Interview. Annandale on Hudson, February 22, 2020.

¹³ See Climate Speaks 2019, Elizabeth Shvarts, “Mother(Nature) to Child,” Accessed on April 24, 2020 <https://www.climatespeaks.org/elizabeth>

¹⁴ Shvarts, Elizabeth. Interview by the author. Skype Interview. Annandale on Hudson, March 1, 2020.

change. This was especially true when confronted with questions of how the social movement needs to change going forward.

Storytelling as a Means for Change

According to Fridays for Future's most recent demands, they cite: "Ensure climate justice and equity" (Fridays for Future 2020).¹⁵ The Sunrise Movement's Principles section states that "we are of many colors and creeds, from the plains, mountains, and coasts...we value each other in our differences and we are united in a shared fight to make real the promise of a society that works for all of us (Sunrise Movement 2020).¹⁶ Likewise, Zero Hour's mission states that: "We also recognize that a movement for climate and environmental justice cannot be successful without building meaningful coalitions and cross-sector alignment with other movements for social justice" (Zero Hour 2020).¹⁷ While climate justice seems to be ingrained within SMOs and how they organize, interviewees consistently cited the need to do more. Consequently, "doing more" starts with how climate stories are presented and framed.

As institutions of trust and information, SMOs have a responsibility to tell honest narratives about climate change. This has been pointed out in numerous studies communicating the importance of message framing (Corner et al. 2015) and how this impacts engagement and behaviour around climate change (Gifford and Comeau 2011). Recognizing this, I was interested in what my participants thought about how climate stories are being told now. For Jade, she pointed out how buzzwords often miss the mark:

¹⁵ See Fridays for Future, "Our Demands", Accessed on May 1, 2020 <https://fridaysforfuture.org/what-we-do/our-demands/>

¹⁶ See Sunrise Movement, "Principles", Accessed on May 1, 2020 <https://www.sunrisemovement.org/principles>

¹⁷ See Who We Are, "Our Vision", Accessed on May 1, 2020 <http://thisiszerohour.org/who-we-are/>

I want people to start thinking of the issue more fully. It's so easy to think of “climate” and “science” and “2050” and it doesn't seem that close or personal. I would like to challenge them to understand the very human story and where they live and people they know. I think each person has a story and it just requires finding it.¹⁸

Other participants agreed that the story around climate needs to be all-encompassing and that many are left out due to how SMOs frame the crisis. One interviewee discussed frustration with how organizing is conducted:

It annoys me that certain groups uphold this image that is pretty narrow at what caring about climate has to look like. Why do you have to fit the mold of a white intellectual? I think that movements such as Sunrise and XR perpetuate this image that you have to be “granola” or a certain type of person to care as much as they do. I think this is something that I struggle with in my own organizing circles...I don't know if I fit that aesthetic.

As this participant explains, there is a homogeneous culture that exists within many SMOs that send a damaging message. This message perpetuates the idea of youth activists primarily being white, educated, and coming from well-to-do families. As another participant pointed out, there have been issues with getting people of color to join SMOs within NYC: “I know people who have opted to not join XR because they are a mainly white base and have a lack of diversity. Also, not everyone is comfortable with getting ‘arrested’. This notion has raised doubts and confusion about joining”. Across the board, participants advocated for the need of more people of color and women to be on the frontlines, particularly in leadership positions within organizations.

This push for inclusivity in relation to how climate stories are framed was highlighted with adult participants working in formal climate organizations currently. When asked about the

¹⁸ Lozada, Jade. Interview by the author. Skype Interview. Annandale on Hudson, February 10, 2020.

direction of the youth climate movement and how organizations can help lead the way, one participant suggested the need for better representation:

If you want to talk about justice in communities that are being hit first and the hardest by the climate crisis, you have to be intersectional. You can't talk about climate change, you have to talk about climate justice. It's beautiful how this rhetoric is reflected within the youth climate movement but outreach, demands, and representation needs to shift. We need to tell narratives that are all encompassing and the people who are talking about the narrative cannot only be white. We will not win this way....it goes beyond being the "right thing to do", but we will not succeed unless there is a multi-generational, class, race coalition.

This suggests that while narratives regarding intersectionality are shifting within the climate movement that weren't changing ten years ago, there is still a problem of the authority behind these narratives and that the people who are telling them are still privileged whites. Another adult participant recognized the importance of art within the climate movement and how artistic narratives can be creative and participatory:

I think that art offers a unique gateway towards engagement and what we are focused on presenting are things that are impactful to the point where it feels participatory. I would like to see a broadening of access points for people to engage with not only the subject matter of climate change but I would like to see broader public programming where we can teach people how to become climate artists and activists themselves. I think that this is the most powerful action you can do when you can bring in younger audiences and let them be and give them a safe space for processing and giving them the tools to turn that into action.

Based on these two excerpts, it suggests a need for better representation and space for creativity among participants within the youth climate movement. This is a great challenge for not only places like the Climate Museum, but SMOs in general. As climate change continues to devastate communities, SMOs must find ways to craft stories and construct meanings that have more weight than the wildfires, floods, and droughts (Newell et al. 2017).

Discussion: Changing the Climate Conversation

We are living in an unprecedented time of climate activism and youth engagement. The climate protests that we are seeing now largely differ from those that occurred a decade ago in that they are not a response to international climate summits. Rather, they began as school strikes (largely due to the protesting efforts of Greta Thunberg and other youth activists) and evolved into an international movement with students striking around the world. By being able to interact and conduct interviews with a group of youth climate activists, I am able to glimpse into a small window of the burgeoning movement. The interviews and themes that emerge from them highlight the process of mobilization from individuals to activists within the nascent youth climate movement.

In addition to my own experience at the Climate Museum, hearing the stories of others made me realize the profound impact the organization had on students. In regard to movement engagement, social movement theory stresses the importance of SMOs as a key body that enables mobilization (McAdam et al. 1996). Effective SMOs are able to draw in a wide range of participants, so that they are able to identify with the organization and feel a sense of solidarity within the movement. In the case of the Climate Museum, participants felt united not only by their interactive programming, but by the “strong presence of authority on knowledge and policy” on climate issues.¹⁹ As with many participants, they put their trust in organizations like the Climate Museum and count on them to deliver information that is valid and based on credible science. Once these SMOs are legitimized, activists can begin to feel collective solidarity with others in the movement. As made clear within the interviews, the Museum served as an

¹⁹Ludtke, Sophia. Interview by the author. Skype Interview. Annandale on Hudson, February 20, 2020.

influential segue for many into other avenues of climate activism and protest. This was true not only while students were collaborating with the Climate Museum, but further involvement with climate issues was indicated when asked: “What are your plans for the future?”. All participants displayed a desire for future climate activism, with high-school seniors already making plans to get involved with their college’s fossil fuel divestment program or youth climate coalitions.²⁰²¹

For increased mobilization within the movement, there must be a shared collective identity among activists. Within the field of social movements, collective identity can be defined as “an individual’s cognitive, moral, and emotional connection with a broader community, category, practice, or institution” (Polletta and Jasper 2001). In this sense, strong collective identity within a social movement implies that there is solidarity among supporters to sustain collective action. This requires going beyond a shared passion for the environment—in order to bolster collective identity (recruitment and retention among new youth), the youth climate movement must continue and expand their demands for climate justice.

While this movement was conceived with themes of social justice certainly in mind, the movement must adapt framing strategies going forward. As noted by the interviewees, SMOs and their constituents need to create more broad and inclusive framing strategies that not only address disproportionate social inequities, but also propose solutions and further mobilize people. While some scholars have pointed out that collective action frames, such as the environmental justice movement, are too broad and prevent them from having one clear voice (Benford 2005), I would argue otherwise. In the short time that the youth climate movement has taken form, they have already amassed global media attention unlike any other before. They have

²⁰ Lozada, Jade. Interview by the author. Skype Interview. Annandale on Hudson, February 10, 2020.

²¹ Moran, Otto. Interview by the author. Skype Interview. Annandale on Hudson, February 15, 2020.

done this on a transnational level, with youth being able to align climate issues with the burning of fossil fuels at the expense of the poor and low-income communities.²² The climate justice frame has been effective in locating the pervasive and disproportionate harms around climate change—the issue is where youth need to turn next. As one interviewee powerfully stated upon reflection: “This is one of the biggest youth movements we are seeing, the passion of the youth is astounding and we are working non-stop....something I want people to know is that we don’t want attention, we want action”.

Given the slow and ineffective global responses to climate change, it is clear from the interviews and the increasing mobilization that youth cannot wait for action from policymakers or international groups. This has caused youth to take action into their own hands. A struggle, as we have seen in the response by governments, is being able to tell meaningful and effective stories on climate issues. It has been studied that references to storytelling have become increasingly common in climate change and energy research and a more “narrative turn” within the social sciences in general (Moezzi et al. 2017). While technical and economic representations are still needed, they do not always represent power dynamics, structures, and issues of justice related to climate. As the interviewees noted, there is a need within the movement to create new climate stories—ones that reframe narratives that are missed in the more scientific depictions of the crisis. This includes storytelling that encapsulates the different relationships, identities, and histories of all people—regardless of race, class, gender, sexual orientation. While storytelling alone is not the silver bullet that will translate into action, they are vital in that they project new

²² Moran, Otto. Interview by the author. Skype Interview. Annandale on Hudson, February 15, 2020.

meanings and inspire confidence in youth activists, the target group that have become the moral authority on climate activism.

Conclusion

In this project, I have examined the history and direction of the youth climate movement. Using interviews from current youth activists in NYC, I was able to glean perspectives on mobilization strategies and themes that have emerged within the movement. Of these themes, the concern for climate justice and the importance of intersectionality within the movement was a salient issue. This was especially true in regard to the future of the movement—there must be diverse representation and proper framing methods if the movement is to succeed. On this latter point, this suggests that stories related to climate change need to be told in an inclusive manner that does not exclude parties that have traditionally been isolated from the climate conversation. This suggests that SMOs must be tactful in how they frame climate change, so that they are able to accrue new participants and effectively mobilize.

Using the Climate Museum as a case study, I was able to see the impacts of how one organization can push youth from thinking to acting on climate issues. The Museum proved to be an invaluable resource for many students; providing resources and opportunities for youth to engage with climate change as well as being an educational safe space for discussion of climate issues. This study has targeted a particular group of activists that share similar trajectories in how the Climate Museum propelled them forward. By analyzing the themes from the interviews, the study suggests questions and insights for further exploration; both theoretical and methodological. Further research is needed to explore the effects that SMOs have on participants

more broadly—by talking with more actors, researchers will be able to assess how SMOs devise mobilization strategies and can better locate the needs for various activation methods.

Bibliography

- “2019 Recap.” Climate Speaks. Accessed April 24, 2020.
<https://www.climatespeaks.org/2019-recap>.
- “Activist Speeches.” Fridays For Future. Accessed April 20, 2020.
<https://fridaysforfuture.org/what-we-do/activist-speeches/>.
- Benford, Robert. “The Half-life of the Environmental Justice Frame: Innovation, Diffusion, and Stagnation.” *In Power, Justice, and the Environment*, by David N. Pellow and Robert J. Brulle, 37-52. Cambridge: MIT Press, 2005.
- Bergman, Noam. “Climate Camp and Public Discourse of Climate Change in the UK.” *Carbon Management* 5, no. 4 (April 2014): 339–48.
<https://doi.org/10.1080/17583004.2014.995407>.
- Boykoff, Maxwell. *Creative (Climate) Communications: Productive Pathways for Science, Policy and Society*. Cambridge University Press, 2019.
- Calma, Justine. “Teens Help Reimagine America's First Climate Change Museum.” *Grist*. Grist, July 24, 2018.
<https://grist.org/article/teens-help-reimagine-americas-first-climate-change-museum/>.
- Carrington, Damian. “‘Our Leaders Are like Children,’ School Strike Founder Tells Climate Summit.” *The Guardian*. Guardian News and Media, December 4, 2018.
<https://www.theguardian.com/environment/2018/dec/04/leaders-like-children-school-strike-founder-greta-thunberg-tells-un-climate-summit>.
- Collomb, Jean-Daniel. “The Ideology of Climate Change Denial in the United States.” *European Journal of American Studies* 9, no. 1 (2014). <https://doi.org/10.4000/ejas.10305>.
- Conway, Erik, and Naomi Oreskes. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoking to Global Warming*. London: Bloomsbury, 2010.
- Corner, Adam, Olga Roberts, Sybille Chiari, Sonja Völler, Elisabeth S. Mayrhuber, Sylvia Mandl, and Kate Monson. “How Do Young People Engage with Climate Change? The Role of Knowledge, Values, Message Framing, and Trusted Communicators.” *Wiley Interdisciplinary Reviews: Climate Change* 6, no. 5 (2015): 523–34.
<https://doi.org/10.1002/wcc.353>.
- Dunlap, Riley E. “Polls, Pollution, and Politics Revisited Public Opinion on the Environment in the Reagan Era.” *Environment: Science and Policy for Sustainable Development* 29, no. 6 (1987): 6–37. <https://doi.org/10.1080/00139157.1987.9931329>.

- Engelfried, Nick. “How the Youth-Led Climate Strikes Became a Global Mass Movement.” *Waging Nonviolence*, September 16, 2019. <https://wagingnonviolence.org/2019/09/youth-led-global-climate-strike-thunberg-margolin/>.
- “Events.” Taking Action. Accessed February 12, 2020. <https://www.takingaction.nyc/events>.
- “Exhibitions.” Climate Museum. Accessed February 12, 2020. <https://climatemuseum.org/exhibitions>.
- Feldman Lauren, Matthew Nisbet, Anthony Leiserowitz, and Edward Maibach. “The climate change generation? Survey analysis of the perceptions and beliefs of young Americans.” Yale Project on Climate Change and the George Mason University Center for Climate Change Communication, 2010.
- Fisher, Scott R. “Life Trajectories of Youth Committing to Climate Activism.” *Environmental Education Research* 22, no. 2 (2015): 229–47. <https://doi.org/10.1080/13504622.2015.1007337>.
- Gifford, Robert, and Louise Comeau. “Message Framing Influences Perceived Climate Change Competence, Engagement, and Behavioral Intentions.” *Global Environmental Change* 21, no. 4 (2011): 1301–7. <https://doi.org/10.1016/j.gloenvcha.2011.06.004>.
- Goodfriend, Sari. Photograph. Apollo Theater, June 14, 2019, The Climate Museum, Accessed on May 2, 2020
- Goulet, Lisa. Photograph. Governors Island, July 24, 2019, The Climate Museum, Accessed on May 2, 2020
- Hards, Sarah. “Tales of Transformation: The Potential of a Narrative Approach to pro-Environmental Practices.” *Geoforum* 43, no. 4 (2012): 760–71. <https://doi.org/10.1016/j.geoforum.2012.01.004>.
- Harris, Anita, Johanna Wyn, and Salem Younes. “Beyond Apathetic or Activist Youth: ‘Ordinary’ Young People and Contemporary Forms of Participation.” *Nordic Journal of Youth Research* 18, no. 1 (2010): 9–32. <https://doi.org/10.1177/110330880901800103>.
- Hibberd, Matthew, and An Nguyen. “Climate Change Communications & Young People in the Kingdom: A Reception Study.” *International Journal of Media & Cultural Politics* 9, no. 1 (2013): 27–46. https://doi.org/10.1386/macp.9.1.27_1.
- Klein, Naomi. *This Changes Everything: Capitalism vs. the Climate*. London: Penguin Books, 2015.

- Kormann, Carolyn. "The Museum of Unnatural History." *The New Yorker*. The New Yorker, June 16, 2015. <https://www.newyorker.com/tech/annals-of-technology/the-museum-of-unnatural-history>
- McAdam, Doug. *Political Process and the Development of Black Insurgency, 1930-1970*. Chicago: University of Chicago Press, 1982.
- McAdam, Doug, Mayer Zald, and John McCarthy. *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*. Cambridge: Cambridge University Press, 1996.
- McCarthy, John, and Mayer Zald. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82, no. 6 (May 1977): 1212–41. <https://doi.org/10.1086/226464>.
- McKibben, Bill. "Step It Up." *Grist*. Grist, January 9, 2007. <https://grist.org/article/mckibben/>.
- Meyer, David S. "Protest and Political Opportunities." *Annual Review of Sociology* 30, no. 1 (August 2004): 125–45. <https://doi.org/10.1146/annurev.soc.30.012703.110545>.
- "Mission." Climate Museum. Accessed March 30, 2020. <https://climatemuseum.org/mission>.
- Moezzi, Mithra, Kathryn Janda, and Sea Rotmann. "Using Stories, Narratives, and Storytelling in Energy and Climate Change Research." *Energy Research & Social Science* 31 (2017): 1–10. <https://doi.org/10.1016/j.erss.2017.06.034>.
- Morris, Aldon D. *The Origins of the Civil Rights Movement: Black Communities Organizing for Change*. New York: The Free Press, 1984.
- Moser, Susanne. "Communicating Climate Change: History, Challenges, Process and Future Directions." *Wiley Interdisciplinary Reviews: Climate Change* 1, no. 1 (2009): 31–53. <https://doi.org/10.1002/wcc.11>.
- Mowe, Sam. "Capitalism vs. the Climate." *Tricycle*, Fall 2015. <https://tricycle.org/magazine/capitalism-vs-climate/>.
- Newcomb, Alyssa. "Google Workers to Join Amazon and Microsoft Employees on Sept. 20's Walkout for the Environment." *Fortune*. Fortune, September 16, 2019. <https://fortune.com/2019/09/16/global-climate-strike-protest-google-amazon-microsoft-walkout/>.
- Newell, Jennifer, Libby Robin, and Kirsten Wehner. *Curating the Future: Museums, Communities and Climate Change*. New York: Routledge, 2017.

- Norgaard, Karl Marie. "Climate Denial and the Construction of Innocence: Reproducing Transnational Environmental Privilege in the Face of Climate Change." *Race, Gender & Class* 19, no. 1 (2012): 80–103.
- Ortiz, Erik. "Teen Climate Activist Greta Thunberg Tells Congress: 'Unite behind the Science'." NBCNews.com. NBCUniversal News Group, September 18, 2019. <https://www.nbcnews.com/science/environment/climate-activist-greta-thunberg-tells-congress-unite-behind-science-n1055851>.
- "Our Actions." Zero Hour. Accessed March 2, 2020. <http://thisiszerohour.org/our-actions/#past>.
- "Our Demands." Fridays For Future, August 2019. Accessed May 1, 2020. <https://fridaysforfuture.org/what-we-do/our-demands/>.
- "Our Principles." Sunrise Movement. Accessed May 1, 2020. <https://www.sunrisemovement.org/principles>.
- Polletta, Francesca, and James Jasper. "Collective Identity and Social Movements." *Annual Review of Sociology* 27 (2001): 283–305. <https://doi.org/https://doi.org/10.1146/annurev.soc.27.1.283>.
- Selin, Henrik, and Stacy D. VanDeveer. "Global climate change governance: the long road to Paris." *Environmental policy: new directions for the twenty-first century*. 9th ed. Thousand Oaks, CA: Sage (2015): 288-310
- Shabecoff, Philip. "Global Warming Has Begun, Expert Tells Senate." The New York Times. The New York Times, June 24, 1988. <https://www.nytimes.com/1988/06/24/us/global-warming-has-begun-expert-tells-senate.html>.
- Snow, David A, E. Burke Rochford, Steven K. Worden, and Robert D. Benford. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51, no. 4 (1986): 464–81. <https://doi.org/10.2307/2095581>.
- Snow, David, and Robert Benford. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research*, no. 1 (1988): 197–218.
- Solondz, Simone. "Confronting Climate Change." Confronting Climate Change | News, June 19, 2015. <https://www.risd.edu/news/stories/confronting-climate-change/>.
- "Summary for Policymakers." Global Warming of 1.5 °C. Accessed February 11, 2020. <https://www.ipcc.ch/sr15/chapter/spm/>.
- Tarrow, Sidney G. *Power in Movement: Collective Action, Social Movements and Politics*. New York: Cambridge University Press, 1994.

“This Is Us.” Polluters Out. Accessed April 22, 2020. <https://pollutersout.org/this-is-us>.

Thunberg, Greta. “Our House Is on Fire’: Greta Thunberg, 16, Urges Leaders to Act on Climate.” The Guardian. Guardian News and Media, January 25, 2019. <https://www.theguardian.com/environment/2019/jan/25/our-house-is-on-fire-greta-thunberg16-urges-leaders-to-act-on-climate>.

Tokar, Brian. “On the Evolution and Continuing Development of the Climate Justice Movement.” In *Routledge Handbook of Climate Justice*, 13–26. Routledge, 2018.

Youniss, James, Susan Bales, Verona Christmas-Best, Marcelo Diversi, Milbrey McLaughlin, and Rainer Silbereisen. “Youth Civic Engagement in the Twenty-First Century.” *Journal of Research on Adolescence* 12, no. 1 (2002): 121–48. <https://doi.org/10.1111/1532-7795.00027>.

Interviews

Interviewee 1. Interview by the author. Skype Interview. Annandale on Hudson, January 27, 2020.

Lozada, Jade. Interview by the author. Skype Interview. Annandale on Hudson, February 10, 2020.

Moran, Otto. Interview by the author. Skype Interview. Annandale on Hudson, February 15, 2020.

Ludtke, Sophia. Interview by the author. Skype Interview. Annandale on Hudson, February 20, 2020.

Interviewee 5. Interview by the author. Financial District Office, New York City, February 21, 2020.

Bansal, Manav. Interview by the author. Skype Interview. Annandale on Hudson, February 22, 2020.

Shvarts, Elizabeth. Interview by the author. Skype Interview. Annandale on Hudson, March 1, 2020.