Opportunities for Climate Policymaking at the City Scale

Hayley Elszasz
Chardon, Ohio

B.A., Williams College, 2016

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Professor Gabrielle Kruks-Wisner (chair),
Professor Jennifer Rubenstein, Professor Denise Walsh,
and Professor Barbara Brown Wilson (Architecture)

ABSTRACT

While the science behind climate change continues to advance – and the evidence in favor of acting to mitigate emissions grows – states and cities in the United States have varied greatly in their policy response to the challenge. Social scientists have debated the potential roadblocks to addressing climate change in democratic contexts (Fiorino, 2018) and have speculated about how to funnel citizen concern into policy action through deliberation and other tools (Niemeyer, 2013). In this dissertation, I look to one U.S. regional leader on climate mitigation – the Peninsula of California – to track prospects for enacting strong, democratic municipal climate action. By conducting interviews and surveys and engaging in observation, I find that the meaning that individual policy actors attribute to their role (as activists, representatives, citizens) and to the issue of climate change itself shapes their response and level of engagement with climate mitigation. While the climate challenge is global in scale, attentiveness to how differently-positioned individuals and groups produce meaning around climate change offers insight into potentials for acting on climate mitigation at the local level. I find that strengthening local climate mitigation action and democracy together is possible when city councilors balance their roles as trustees and delegates, city governments demonstrate commitment to sustained community engagement and input, and professional activists continue to do the important work of deep translation, connecting communities and policymakers.

Acknowledgements

INTRODUCTION

In the New Year of 2023, the Bay Area of California—particularly around the coastline—experienced extreme flooding due to heavy rains, causing closed highways, flooded houses, and dangerous conditions. An email blast from the city of Half Moon Bay warned, "At this time, the safest thing that you and your family can do is to remain inside your home, unless it is an emergency. If you must leave your home, use extreme caution and avoid driving through flooded roadways" (City of Half Moon Bay, December 31, 2022). The local radio station, KQED, reported "heavy rain and damaging winds," "contribut[ing] to at least two deaths as of Thursday," and warned that another storm would arrive again three days later (KQED, January 5, 2023). This damaging episode was just one of a series of extreme weather events that has been increasingly plaguing the region—including droughts, heavy rains, and extreme heat—made more severe and frequent by climate change.

While California has generally been ahead of the rest of the country in its policy responses to the issue of climate change—banning the sale of gas-powered cars by 2035 statewide, achieving carbon neutrality by 2045—at the local level, policy debates have raged over whose responsibility it is to take on the significant costs of climate mitigation and adaptation. Cities vary in their responses to the crisis; while the most advanced, like Berkeley and Menlo Park, have moved to cut off gas lines to homes, other cities host vibrant debates over jurisdiction, responsibility, and cost burden. Though climate change is a unique challenge in terms of its scope and implications, the policy tools we have to deal with it remain the same: it enters through the same channels of democratic

policymaking as other issues in the United States, where it often competes for funding and attention with other issue areas.

This dissertation deals with the dynamics of climate policy in the United States, but the underlying conditions are shared amongst all global democracies, which are contending with similar challenges related to responding to the urgent, existential challenge of climate change alongside other contemporary policy problems. The case of the United States helps illustrate tensions between democratic practice (slow, bureaucratic, containing a multiplicity of actors and interests) and climate change. Scholars and politicians alike agree that contemporary liberal democracy poses barriers to effective climate action, although they disagree about which—climate change or democracy—should be dealt with first. In April 2022, U.S. Congressman Jamie Raskin said that "we've got to save the democracy in order to save the climate and save our species" (Rao, 2022). According to Representative Raskin, we must improve democratic quality *before* and *so that* we have the capacity to address the challenge of climate change. In contrast to Raskin, the environmental scientist James Lovelock famously contended that we need to put democracy "on hold" to deal with the problem of climate change (Lovelock, 2009).

The primary arguments for why democracy may be incompatible with climate change is that it is too slow (Stehr 2013) and biased towards the interests of present people, rather than future global citizens (Fritsch 2015; MacKenzie 2021). Shearman and Smith (2007) argue that it is not the fault of democracy as a form of governance, but rather that our contemporary form of liberal democracy is too interwoven with the dynamics of capitalism requiring the pursuit of constant growth, creating barriers to solving problems of the commons. Others argue that non-democracies are better able to impose the strong

policies needed in the face of this collective action problem (Beeson, 2010). Most scholars, however, mediate their arguments about the relationship between democracy and climate change, proposing that certain kinds of democracy (or democratic representation) are especially bad or good at tackling climate change.

Still other scholars argue that democracy can be better at handling climate change under certain conditions: increased accountability (Fiorino 2018), less corruption (Povitkina 2018), stronger democratic principles (Hanusch 2017), or more deliberation (Niemeyer 2013). Fiorino (2018) is hopeful about the prospects for democracies to address climate change because they are more likely to promote innovation, engage in policy learning, and advance gender equity (Fiorino 2018, 96-7). He is amongst a group of scholars that contend that the way forward is not to abandon democracy, but rather to adjust the form and function of our democracies; in other words, climate change is "to be tackled through better democracy, not less democracy" (Willis 2020, 4). Rebecca Willis argues: "Given a meaningful opportunity to have their say, most people would support action in the face of the climate breakdown that is unfolding in front of us. But our democracies, *in their current form*, are just not giving people that choice" (emphasis added). Specifically, the barriers to climate action in contemporary democracies include too much interest group influence, not enough debate, and few avenues for citizen learning (3-4).

Fueling the fears of those who doubt that American voters will support strong climate policy, polls show that Americans at large don't agree about climate change—its existence, severity, or what must be done to address it. According to studies conducted by the Yale Program on Climate Communication, only 63 percent of Americans reported themselves to be "worried about global warming," and only 43 percent believed that

"global warming will harm them personally." This lackluster level of personal concern leads to a situation in which only 35 percent of American adults "discuss global warming at least occasionally."[1] Another poll—conducted by *ABC News* and *The Washington Post*—found that fewer than half of Americans think that the government should "take immediate action" in response to climate change, while slightly more agree that the government should "wait for further study": a troubling divide to scientists, activists, and scholars who urge that the problem requires swift action.[2] Such a scenario of citizen indecision and governmental reluctance brings to the fore the central question of whether American democracy is capable of achieving the results we need to prevent the worst predictions of climate scientists.

But, as I will demonstrate in this dissertation, democracy in the United States (as elsewhere) is much more rich and varied than the actions of its three federal government branches, and citizen experience of climate change is affected by individual and group factors including risk, vulnerability, location, and socioeconomic status. State and local governments make decisions everyday about climate mitigation and adaptation in their jurisdictions. I look to the level of the city to determine the prospects and possibilities for local climate action, even under inhospitable national and political conditions.

Ahead of COP26, held in Glasgow in 2021, 135 cities in the United States committed to net-zero emissions by 2050.[3] And, by the beginning of 2022, 35 of the 50 largest cities in the United States had adopted climate action plans detailing their policy

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[1] "Yale Climate Opinion Maps 2020," Yale Program on Climate Communication, September 2, 2020. https://climatecommunication.yale.edu/visualizations-data/ycom-us/.

[2] "Most Favor Steps Against Climate Change, Though the Public Divides on its Urgency," *ABC News/Washington Post,* November 12, 2021. https://www.langerresearch.com/wp-content/uploads/1223a1ClimateChange.pdf.

[3] https://www.c40.org/news/american-cities-net-zero-climate-goals/

actions to reduce greenhouse gas emissions.[4] Given this substantial action at the local level in spite of polarization and weakened democratic institutions, this dissertation focuses on the major protagonists of municipal democratic practice. I went to California—one of the most severely climate impacted states in the U.S.—to examine the fulcrum of city-level environmental activism on electrification, gas bans, and community choice energy. I ask: How do non-governmental organizations, local governments, and residents interact during the climate policymaking process? What factors constrain or enable productive collaboration towards enacting stronger local climate mitigation measures?

Local Democracy and Climate Action

What level of government is the most appropriate for addressing climate change within a democratic governance framework? The policy literature offers explanations for why larger communities (like nation-states) might be more efficacious spaces for addressing policy challenges than smaller ones (like cities). For one, larger political communities are more diverse, making it more difficult for small factions to drive the process or for special interests to dominate (Stone 2002, 369). They can also be home to more political talent, ensuring that the issue is addressed by those most likely to be experts. Of course, there is the fact that climate change is a challenge of global scale, and requires high-level, coordinated action to decrease carbon emissions enough to stave off the worst effects. Some scholars point out how the contributions to and effects of global climate change bleed beyond borders and boundaries, necessitating "governance beyond national governments and across scales" (Chan and Amling, 2019). It follows that some city-level

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[4] https://ballotpedia.org/Climate_action_plans_in_the_50_largest_cities

representatives, including some who will feature in this dissertation, doubt that their jurisdiction is the most appropriate for taking climate action.

However, there are also some institutional reasons for believing that climate action might be more possible at the local rather than national level. According to Elinor Ostrom, "collective action problems faced by large groups are often decomposable into smaller problems among which some are typically surmountable given pre-existing trust between some members."[5] While progress is not guaranteed, Ostrom suggests that higher levels of inter-actor trust at smaller scales might help make progress collective action problems, of which climate change is a significant one. The benefits of decentralized decision-making also include more access to local knowledge, feedback, and legitimacy, as well as opportunities for experimentation.[6] Subnational governments are also able to act more quickly in response to changing conditions and threats (Chen et al., 2010).

Given these varied predictions about local democracy, I approach the city as an important setting in which to examine the potential for but also limits of climate action. As the chapters that follow will reveal, the city can be a critical site for democratic action and zone of experimentation. Factors like partisanship and campaign finance are real, if lesser, challenges in city politics. However, cities hold more opportunities for testing deliberative and community-led approaches to governance; lines of accountability between residents, city officials, and activists can be stronger due to proximity and interaction. Cities are potentially better able to be responsive to local interests, and since climate change is experienced at the local level, these debates often happen through local channels.

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[5] Quoted in Marshall, Graham R. "Nesting, subsidiary, and community-based environmental governance beyond the local level." *International Journal of the Commons* 2(1) January 2008, 77.
[6] Ibid., 78.

But what makes the city a viable setting for policymaking on the issue of climate change specifically? Aside from the interaction and experimentation that smaller political units allow, cities are also networked with each other in ways that facilitate policy learning and profusion, allowing small political units to amplify their impact on climate mitigation. Cities "are preparing risk assessments, setting greenhouse-gas emissions reduction targets, and pledging to act."[7] While each individual municipality may be a "drop in the bucket" on global carbon emissions, they increase impact through peer learning groups like C40, ICLEI, and the US Mayors Climate Action Agreement. Therefore, because climate action is more likely to occur in city governments, and cities are able to learn from and advance their action together, municipalities hold promise in advancing climate policy action. While most literature focuses on large-sized cities (Hoppe, Van der Vegt, and Stegmaier 2016), medium- and small-sized cities also have an important role to play in policy experimentation, setting new standards, and "upping the ante" on climate mitigation, as I document in the case of electrification in Half Moon Bay.

Argument in Brief

In this dissertation, I examine the role that experiences—on both sides of the state-citizen divide—play in shaping actors' understanding of the problem of climate change and of the possibilities of governmental action. Through interviews, participant observation, and surveys of diverse local actors—city councilors, residents, and professional activists—I examine the conditions under which residents feel that their climate concerns are heard and representatives feel empowered to make climate-forward decisions. In other words, how

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[7] Rosenzweig, C., Solecki, W., Hammer, S.A., & Mehrotra, S. (2010). "Cities lead the way in climate-change action." *Nature* 467, 909.

can we advance climate mitigation policy and democracy together? I conclude that this occurs at the city-level when representatives balance their roles as trustees and delegates, city governments take input from citizen task forces seriously, and professional activists continue to do the important work of deep translation, connecting communities and policymakers.

I argue that we cannot understand the possibilities for climate change policymaking at the local level without first understanding the political meaning-making of local actors. Localized interpretations of governance, representation, and participation shape how both climate change and policy change are seen at the local level. Climate change is never simply a "policy" issue, but rather one that both reflects and shapes underlying understandings of politics; therefore, climate action that neglects the importance of local meaning and interpretation will fail.

The spaces for action on climate are shaped not only by actors' understanding of climate change, but also their understanding of "politics": the meaning they give to notions of representation (chapter 1); governance (chapter 2); and, activism (chapter 3). I look at these important political concepts through the lens and in the time of climate change, a large-scale, diffuse phenomenon that presents challenges to and opportunities for democratic practice. I examine how climate change magnifies and refracts flashpoints of citizenship and policymaking with the following sub-questions in each chapter: How do NGO staff and activists mobilize support for climate action amongst fellow residents and leaders? How does the unique threat that climate change poses to society at large (and individual communities particularly) shape the type of democratic representation we

require? How does resident experience of working on climate mitigation at the city level affect their future engagement?

By tracing localized accounts through interviews and surveys, I find that each actor plays a distinct role in climate policy, but that each faces important barriers that must be addressed in order to better facilitate the climate policymaking process at the city scale. First, city councilors experience distinctive pressures as representatives vis-a-vis climate change: they must arbitrate between their roles as delegates and trustees, navigating the pulls of current public opinion and long-term resident wellbeing. Second, when cities use residents as agenda-setters on community climate priorities, they need to be attentive to respecting resident time and value in order to ensure their long-term engagement. And finally, professional residents are a vital piece of the policy ecosystem because of their unique role as deep translators between communities and officials; city governments should support these groups in line with their importance.

Research Design and Case Selection

My case study cities came about through an inductive process of grounded theory. To study climate policy processes and the interactions between actors, the most relevant geographic areas would have the following characteristics:

1) Mounting environmental challenges attributed to climate change;

2) Layers of actors operating on different scales to address the challenge; and,

3) Conditions ripe for political mobilization of social movements and NGOs.

Cases in this domain would include areas under some form of "democratic" governance, where actors like social movements, NGOs, and CBOs can operate in the policy ecosystem

along with governments and residents. Since I am especially interested in how residents get involved in climate policymaking, my cases have to be at least nominally democratic – i.e. there are instances of resident involvement and interaction with governmental and non-governmental entities working on climate issues. The universe of potential cases includes democratic states with municipal governments that are devolved to the extent that they have at least some control over policies that have the potential to affect climate mitigation (housing ordinances, zoning policies, transportation measures, etc.) This means that there are a wide array of potential areas for studying the interplay of climate and democracy; my case selection was driven by iterative work with community leaders, starting in one region that has been leading on climate mitigation policy in the U.S. Therefore, this research potentially sets the stage for comparative study of how interactions between differently-positioned actors shapes climate policies in other national or global cities.

I engaged in a nested series of case selection decisions; first, I narrowed my work to focus on the United States for both practical and theoretical reasons. While comparative politics scholars are typically conditioned and encouraged to undertake field research in far-flung or international contexts, I carried out this work in the era of pandemic and climate threat: these are two significant factors that led me to consider research in the American context, which would inherently require no border crossing and fewer carbon emissions for travel. As an American, I came to the project with some baseline knowledge that made the dissertation more feasible in my given timeline.[8] As a native English speaker, white woman, and U.S. citizen, I have been able to navigate my field site area with relative ease and safety. As a PhD researcher housed at an American university, I have enjoyed a

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[8] At the time of writing, PhD candidates are guaranteed funding for 5 years.

level of access and credibility that I may not have had in a different context (or that someone else differentially positioned may not have had). Studying the United States can benefit comparative politics; especially when thinking about the issue of climate change, the United States is a large and significant actor on the global scale. For those who care about advancing climate mitigation policy, learning about what does and does not work in the United States matters because it is the second largest global emitter of carbon.[9] Policy decisions made or not made in the United States have knock-on effects for future climate change in more ecologically and economically vulnerable countries. Further, for examining democratic avenues for climate policy, it constitutes a key case as one of the largest and oldest democracies.

Within the United States, California is at the nexus of many of the most pressing climate change effects: sea level rise, extreme heat, flooding, wildfires, and drought. California broadly has a reputation as a progressive state and leader in climate policy, with a plethora of climate actions happening at the state, regional, and city levels. As one of the areas of the country facing severe early impacts of climate change, it meets the challenge with investment. The state sent its own 22-member delegation to Glasgow for the 2021 UN Climate Summit (known as COP26).[10] In 2022, California's governor proposed a budget of $37 billion to spend on diverse climate change-related measures over the next six years, including investments in healthcare, transportation, housing, and education.[11]

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[9] Statista. "Distribution of fossil fuel CO2 emissions worldwide in 2020, by select country." https://www.statista.com/statistics/271748/the-largest-emitters-of-co2-in-the-world/

[10] Madrigal, Alexis. "California Delegation Heads to High Stakes UN Climate Summit." November 1, 2021. *KQED*. https://www.kqed.org/forum/2010101886270/california-delegation-heads-to-high-stakes-un-climate-summit

[11] Roth, Sammy. "Here's how California plans to spend $37 billion flighting climate change." January 13, 2022. *LA Times*. https://www.latimes.com/environment/newsletter/2022-01-13/heres-how-california-plans-to-spend-22-billion-fighting-climate-change-boiling-point

I argue that the United States and California in particular present fruitful ground for exploring the advancement of climate policy. It is a "most likely case" for the passage of climate policies because the state's political environment is relatively amenable to climate policy.[12] And, it is a "crucial case" for climate policy in that California's population, economic size, and policy influences makes it a leader and potential model for other states in the United States. It is a case through which to study a broader puzzle about the potentials and limitations of advancing climate policy at the local level in democratic systems.

California is a laboratory for the rest of the country:[13] it sets the standard on issues regarding health and the environment, from car emissions standards[14] to anti-tobacco smoking laws.[15] David Vogel of UC Berkeley coined the term the "California Effect" to describe the way that this pivotal state can lead and direct federal policy.[16] It is the largest economy and largest by population size. Famously, if California were a sovereign state, it would be the fifth largest economy in the world; and, it would have the second fastest growing economy after China.[17] Its importance in the United States and the world cannot

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[12] Cohen, Steve. "California's continuing climate leadership." *State of the Planet: Columbia Climate School*. https://news.climate.columbia.edu/2020/09/28/californias-continuing-climate-leadership/

[13] Thanks to Professor Paul Freedman for making this point.

[14] "EPA Restores California's Authority to Enforce Greenhouse Gas Emission Standards for Cars and Light Trucks." March 9, 2022. https://www.epa.gov/newsreleases/epa-restores-californias-authority-enforce-greenhouse-gas-emission-standards-cars-and

[15] "California Tobacco Laws that Reduce ETS Exposure." *California Air Resources Board.* https://ww2.arb.ca.gov/our-work/programs/environmental-tobacco-smoke/california-tobacco-laws-reduce-ets-exposure#:~:text=California%20has%20been%20referred%20to,law%20in%201995%20(Labor%20Code

[16] Woods, D. and Ma, A. "The impact of California's environmental regulations ripples across the U.S." *NPR*, September 9, 2022. https://www.npr.org/2022/09/09/1121952184/the-impact-of-californias-environmental-regulations-ripples-across-the-u-s#:~:text=ADRIAN%20MA%2C%20BYLINE%3A%20So%20the,the%20University%20of%20California%2C%20Berkeley.

[17] Winkler, Matthew A. "California Defies Doom With No. 1 U.S. Economy." *Bloomberg*. June 14, 2021. https://www.bloomberg.com/opinion/articles/2021-06-14/california-defies-doom-with-no-1-u-s-economy.

be denied. Prior scholars have identified it as a sub-national climate "entrepreneur" (Anderton and Setzer 2018).

I focus on cities in the Peninsula area of California: a small sliver of land that contains the heart of "Silicon Valley" between two shores, those of the San Francisco Bay and the Pacific Ocean. This is a landscape of great inequality, technology, diversity, and differential vulnerability to the persistent wildfires, flooding events, drought, and extreme heat events. It exemplifies the challenges facing many American urban areas in regards to the mounting effects of climate change, and differential vulnerability to these impacts. In this way, I consider it a key site for thinking about challenges that will affect most of the world, and for thinking through the landscape of possibility for local climate policy. The cities in the Peninsula are laboratories for climate action, casting critical light on both environmental and local politics. Starting in this more narrow geographic area, my cases were driven by interviews with climate leaders and activists.

I focus on cities in one particular region of California in order to explore the opportunities available for proposing and passing climate policies at the local level. These groups of actors are operating in cities that have some of the most progressive climate policy (Half Moon Bay) and innovative ways for integrating residents into city decisions (Mountain View). The sites of research were chosen through an iterative, grounded theory approach, whereby I asked my interlocutors to tell me about what interesting developments were happening in the state from their perspective. This way, I learned about new or unique approaches—such as the Environmental Sustainability Task Force in Mountain View and the electrification debate in Half Moon Bay—through the process of snowball interviewing with actors on the ground engaged in local-level climate action.

When I drill down to the level of the city for chapters 1 and 2, I leverage distinct types of case studies: In chapter 1, my study of Half Moon Bay's city councilors and their interactions with the electrification ordinance constitutes an "intrinsic" case study.[18] Because Half Moon Bay was the first city to propose an ordinance requiring that residents replace their gas appliances with electric upon burnout, it was the logical case study area for looking at how concepts of representation affect outcomes around a strong climate mitigation policy. Since the electrification ordinance in Half Moon Bay was first proposed, however, other cities have followed suit. "Replace on burnout" failed in Half Moon Bay, which we see reflected in other cities as well. The Sierra Club collected a list of 74 cities and counties in California with building ordinances, the majority of which require electric new construction. Although Berkeley was the first to ban gas in new buildings in 2019, the original aspirations of the Half Moon Bay ordinance constituted a new step forward in building mitigation policy during the time I was conducting my dissertation research (2020-2023).[19]

Phenomenon of Interest	Potential Case Study Cities	Location	Population Size, Demographic Notes
New type of strong proposed climate mitigation policy	Half Moon Bay, California	Peninsula of California; Pacific side	11,363 people (2021) 70.8% white; 31.9% Latinx Median household income = $137,346

[18] Stake, Robert E. *The Art of Case Study Research* (Thousand Oaks: Sage Publications, 1995).
[19] Gable, Jessica. "California's Cities Lead the Way on Pollution-Free Homes and Buildings." *Sierra Club*. February 14, 2023. https://www.sierraclub.org/articles/2021/07/californias-cities-lead-way-pollution-free-homes-and-buildings.

In chapter 2, I utilize Mountain View, California as an "instructive" case study: it is a case of a specific phenomenon (citizen climate task force) in my relevant area of study (the Peninsula) that can tell us more about the general challenge of integrating residents into city-level climate policy decision making.[20] As the table below shows, climate task forces have been convened in diverse parts of the country. Mountain View came on my radar through grounded study of the region and through building connections with its task force participants, but my findings about the importance of integrating and respecting citizen input to foster long-term climate engagement can apply to other task forces convened in other areas.

Selection of Cities with Citizen Task Forces	Features	Year Convened	Timeframe
Troy, New York	Only three citizen appointees at a time	2014	Established permanently; representatives serve terms
Jackson, Mississippi	Members selected from particular organizations working on climate	2020	Currently ongoing
Pensacola, Florida	Nine current members	2017	2017-2018
Appleton, Wisconsin	Included 10 "community volunteers"	2020	2020-2021
Charleston, South Carolina	Convened in order to establish Climate Action Plan; contained working groups with about 150 residents total	2020	2020-2021
Cambridge, Massachusetts	Members selected from particular organizations	2022	6 meetings over 3 months

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[20] Stake, *The Art of Case Study Research*, 1995.

	working on climate		
Bainbridge Island, Washington	Currently recruiting "experts"	2017	
Bristol, Connecticut	Nine current members	2008	

For the purposes of this analysis, what counts as climate policy on the city scale? I take a broad view to consider any climate policies that are considered in their local context to be progressing the goal of mitigating greenhouse gas emissions or negative climate impacts on the community. I focus on policies intended to curb emissions at the city level, including the electrification ordinance in Half Moon Bay and electric vehicle incentives in Mountain View.

Through this dissertation, I argue that attempts to understand climate issues as technical policy problems will fall short without sustained attention to local meaning-making, which I uncover using interpretive approaches attentive to personal experience. My research offers important insights into how and when residents, activists, and city councilors work together to advance strong policies in California: America's climate policy laboratory. However, the lessons learned extend beyond this state to help us understand the conditions and experiences that make it more likely for residents and leaders to get involved in advancing climate policy.

Policy Approaches: Situating local climate action within the study of policymaking

Political science has advanced away from a narrow reliance on rational-choice frameworks for understanding policymaking processes towards integrating the role of emotions, relationships, and community in shaping how, when, and why certain policies move to

implementation. Deborah Stone, in her seminal volume *Policy Paradox* (2002), emphasizes the irrational and highly political aspects of policy processes. She contends that analysis and politics are mutually entwined. This text offers insight into the progress and limitations in how political science understands policy on climate change. Significantly, Stone makes it clear that scientific facts and magnitude of importance are not the decisive factors for selecting policy priorities. Counting and measuring are political processes that shape how and when populations perceive a problem and legislators act on it. And, mobilization around an issue is shaped by the diffusion of the affected population rather than its sheer size (Stone 2002, 228). Interests are not only given, but shaped; they are not a question of physical matter or facts, but of interpretation. All steps of the policy process – from issue definition to implementation – are political. Policy relies on categorizing what counts as an issue, a group, or a certain type of thing to be regulated. Around climate change, for example, we encounter political issues from the outset: should climate change be defined and treated as an emergency? As a public health challenge? As an injustice? Categories have significant impact in how an issue is dealt with, under which jurisdiction, at which scale, by which actors; in sum, categorization shapes the power dynamics at play and interests involved in a policy process.

One of the areas of continued research in political science and policy studies is the most proper and effective scale for policy processes; the dominant finding remains, "it depends" (Stone 2002, 366). Arguments for addressing a policy at a particular scale – from the municipality up to the federal level – are arguments in favor of "a particular configuration of power": funneling resources towards a jurisdiction (368). While climate

legislation happens at all scales from the international down to the municipality, cities are where we see the most frequent and fervent action, for reasons described earlier.

Of course, another significant player in shaping our societal response to climate change is the private sector: corporate sustainability pledges, ESG stock options, and technological remedies for climate resilience, mitigation, and adaptation. Private sector policies and innovations interact with and respond to governmental dictates; for example, moves by California and New York to ban future sales of gas-powered cars incentives car companies to manufacture and advertise more electric vehicles. Rebate schemes for heat pump technology cause financial institutions to tout the tax benefits of home electrification. In sum, the private and public sector sustainability initiatives are always in conversation. But, the distribution of power and amount of climate-related activity between the private and public sector has an impact on the democratic character of the outcomes.

Finally, there are arguments in favor of further democratizing climate policy rather than leaving it in the realm of technocratic elites. The literature suggests that we should increase the diversity and number of opinions included in policy processes as the issues at hand get more complex and more uncertain. Climate change is a perfect example of a contemporary issue riddled with complexity and scientific uncertainty; some scholars argue that giving more people access to policy deliberation can increase the quality of approaches and recommendations. Equal and inclusive power distributions can be more important than sheer expertise for landing at solutions that have impact and staying power (Landemore 2020, 192). Empirical evidence from large-N cross-national surveys support the finding that popular involvement in decision-making improves outcomes across a variety of variables (Johns and Saltane, 2016).

It is important to note that "expert" and popular inputs need not be sharply distinguished. There are ways to format deliberative processes that allow regular citizens to have access to different types of "experts"—lawyers, scientists, economists—to inform and consult as needed: a situation that Helene Landemore calls "experts on tap, not on top" (Landemore 2020, 192).

The climate policies discussed and implemented by cities in the Peninsula sometimes fall into the traps of technocratic solutions. In fact, I found that some local leaders and community members express great technological optimism, buoyed by their embeddedness in the professional environment of Silicon Valley. Despite the shortcomings and challenges associated with electrification, it remains the dominant strategy for climate mitigation in California as elsewhere in the country. Even so, I am interested in exploring the meaning-making that community members and community leaders (elected and not) engage in around climate mitigation policies: the meaning they associate with the issue of climate change, and with the potentials they see available in their cities. Rather than evaluating or ascribing judgment to the specific policies proposed, I am more interested in exploring the pathways taken towards policy proposal and implementation. In this dissertation, I document how city councilors, regular residents, and climate activists articulate their priorities and challenges, and how they work together to advance solutions in line with their needs.

Methods, Epistemology, and Positionality

I use interpretive methods in order to shed light on the process of meaning-making around climate change and politics. This methodological orientation informed both my collection

and analysis of evidence, as well as the evolution of my research questions. The majority of the evidence that informed my theory-building came from conversational interviews with Peninsula residents, activists, and local government officials. While I brought to each interview a list of questions or topics I hoped to address (depending on that individuals' role in the policymaking ecosystem), I allowed the interviews to be driven by the events most interesting to my interlocutor. This approach was key to my iterative, grounded approach, wherein each interlocutor provided me with information about what events they found to be most significant as well as how they interpreted these events. I approached my interviewees as experts in their own experiences and contexts. I shared with the majority of my interlocutors an abiding concern about climate change and interest in efforts to combat it, and I positioned myself as interested in hearing their stories. Bringing my "humanity" to the process of interviewing, I found that I gained access to more and to different types of information as I enhanced my relationships with individual interviewees and with groups.[21]

To analyze my interview data, I transcribed each interview, read each closely several times, and engaged in open coding along themes relevant to each chapter (moments when the interviewee engaged in meaning-making around climate change, representation, governance, activism). Throughout my research process, I iterated between reading secondary literature, interviewing, analyzing interviews, and writing. These were "entwined" processes that bled from one to the other and resulted in deeper understanding and more thorough interpretations over time.[22] For example, in researching Chapter 2 about

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[21] Yanow, Dvora and Peregrine Schwartz-Shea. "Generating Data." In *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (Taylor & Francis Group: 2013).

[22] Yanow, Dvora and Peregrine Schwartz-Shea. "Analyzing Data." In *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (Taylor & Francis Group: 2013), 255.

residents' engagement with city climate policymaking, I increasingly found that my interlocutors' interpretations of Task Force outcomes were complex and varied, and did not fit squarely with the first narrative I tried to tell about how those with disappointed expectations continued to engage. I continued to interview members of the Task Force—and some members more than once—until I reached "saturation," when I stopped learning new things about members' experience working with the city on climate policy (Small, 2009).

An overarching guide-post for my methodological approach is grounded theory; the resulting research reflects an interactive process of triangulating between collecting evidence (reading, interviewing, observing, surveying), analysis, and writing. This approach is especially appropriate for studying meaning-making: the ways in which various actors understand and contextualize climate change and politics. The environment gives meaning and context to all local interactions and politics; it structures the resources available to actors and affects how safe and secure they feel in the present and future. Grounded theory is a particularly appropriate approach for the study of climate and environment because of its attentiveness to meaning, feeling, and interaction. I have used open coding techniques throughout to code my evidence—including notes taken during meetings, observations, and interview transcripts—to look for trends and trace key concepts. For the past several years, I have drafted preliminary memos to track my inductive process of talking, listening, reading, and writing over time (Charmaz, 2014). These memos document my changing research questions and agenda, which have shifted through my interactions with my interlocutors.

Along with 46 semi-structured interviews with 41 individuals—from city governments, non-profits, community-based organizations, and community task forces—I triangulated my findings with a survey, participant observation of community meetings, and analysis of city council meetings.[23] For example, Chapter 1 is based on analysis of city council actions and statements; therefore, I first watched recordings of all city council meetings related to the electrification ordinance. Then, I added texture to this information through interviewing individual city councilors and city staff members to gain more information about their perceptions, motivations, and goals. Chapter 2 relies on studying participant experience of the city's sustainability task force. I conducted a survey of all former members, and then gained added information from interviews with those who agreed to a follow-up. Singular sources of information would not be sufficient for tracing the meaning behind actors' decisions; I needed to "check" my early research with additional fine-grained data from open interviews.

My overall approach can be described under the umbrella of civically engaged research (CER) (Rasmussen, Levine, Liberman, Sinclair-Clapman, and Smith 2021). I attended the Institute for Civically Engaged Research at Tufts University during my time writing the dissertation (summer of 2022). The approach informed my continued engagement with interlocutors, interviewees, and community climate groups in the Peninsula. Particularly central to my project is the aim of engaging with governing groups—city councils, advocates, NGOs, citizen assemblies—in mutually beneficial ways: learning from them, letting their input shape my iterative research questions, and sharing

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[23] I conducted a survey with an N of 18; I observed about 30 meetings.

back my preliminary findings and reactions.[24] Another key component of this approach is attentiveness to the production and circulation of power; in my case, this included being attentive to the hierarchies between actors in the climate policy space. I direct my attention to the particulars, focusing my time and energy towards understanding the dynamic relationships and communication networks that exist amongst the diverse array of actors working on climate-related policy. Finally, my research is guided by pressing real-world social problems and an effort to uncover information that might help address them.[25]

While conducting CER is a professional goal of mine and an ethos to which I am allied, this project falls short of its standards in important respects. First, my relationship with my interlocutors has not been entirely reciprocal. I started my dissertation project without prior connections to advocacy networks in my chosen site, and under the conditions of a global pandemic, which delayed and shortened my in-person fieldwork. I lacked the time to build what I would consider to be true relationships of reciprocity and trust with a single or multiple community partner. Second, this project was not co-created by myself as the researcher and partner organizations; rather, it is my own work informed and shaped by interaction with locally-situated consultants. From the prospectus and grant-writing stages to this final dissertation project, my research questions and hypotheses have been shaped by my local interlocutors, their concerns, and their priorities. Their thoughts, strategies, explanations, and hopes guide my analysis and conclusions. I have remained responsive to the community of climate actors in my case cities, but my engagement fails to reach the standards of reciprocity and co-production.

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[24] Rasmussen, Amy Cabrera et al. "Preface." *Professional Symposium: Civically Engaged Research and Political Science* October 2021, 708.
[25] Dayna Cunningham, Presentation at the Institute for Civically Engaged Research, Tufts University, June 20, 2022.

Chapter Overview

Chapter 1 focuses on climate policymaking from the perspective of city councilors in Half Moon Bay, California as they contemplate the passage of what would have been the most advanced home electrification ordinance in the country. In a city where almost half of the carbon emissions come from buildings, this ordinance was a significant response to the threat of climate change. Throughout the months-long debate and public comment period, each city council member responded uniquely to the input from experts, research by city staff, and comments from the public. Using individual interviews with city councilors and transcripts from their meetings, I explore the different notions of representation that each councilor advances through their words and actions. There are two critical areas of difference in how the councilors define their role: the importance they give to "public opinion" in decision-making, and the degree to which they claim that climate change necessitates distinct policymaking processes. Reflecting on these dynamics, I argue that existing models of representation (Pitkin, 1967; Mansbridge, 2003; Saward, 2010; and others) do not capture all the ways that city representatives see themselves when they are working on climate policy. Each councilors' idea of representation is shaped by both the meaning they ascribe to their role, but also their interpretation of what they believe climate change requires. Building from this case, I consider the types of representation needed in the era of climate change and models for leadership at the level of local climate policy.

Chapter 2 shifts its lens to learn about how "regular citizens" become involved in city-level climate policymaking, and how their experience with this process shapes their future engagement with the city and with climate change issues. My primary site is

Mountain View, California, where, in 2018, 29 residents participated in the city's Environmental Sustainability Task Force. These residents operated within "invited" spaces (Gaventa, 2006), created and conditioned by the local government. Four years after they submitted their final report to the city, I interviewed and surveyed the members about their experience working with their fellow residents, city council, and city staff to build actionable proposals for the city to decrease its carbon emissions. In my conversations, I found that variously-positioned citizens differed greatly in their emotive reactions to the outcomes of the task force (disappointment, pride, hope, fear). The most significant predictor of how residents feel about their engagement with the city is their prior experience; those who have formerly worked with the city government are less likely to be disappointed with the outcomes of the task force, but also less likely to continue to engage after the Task Force.

Chapter 3 turns to a set of "professional" activists to build a theory of how non-governmental and community-based organizations can advance climate action by facilitating two-way dialogue between citizens and the state: acting as translators to both communicate the benefits of climate action to communities and express community environmental priorities to government officials. I argue that, instead of focusing on achieving consensus on climate change issues, these effective organizational actors make space for a range of community-resonant narratives around environmental change to inform their work. These actors consciously acknowledge the different meanings that different actors across the public-private divide ascribe both to climate change and to the policymaking process, and work to translate across different audiences. They operate

within "claimed" spaces of power (Gaventa, 2006), where their efforts to shape policy decisions are informed by their work with communities.

Chapter 1:

City-Level Representation and Support for Climate Mitigation Policies

Abstract

Elected officials differ in their interpretation of their role as representatives. Hanna Pitkin (1967) outlined two main core categories of representation—those who advance the interests of their constituents ("trustees"), and those who advance the preferences of their constituents ("delegates")—which later theorists have expanded. Contemporary large-scale problems like climate change complicate the task of representation, as it is well-documented that both the costs of environmental change and the benefits of taking action to mitigate it are not evenly distributed.

What type of representation and representative practices are best able to advance climate policy action at the municipal level, and what are the foremost challenges to this type of representation? To answer these questions, I examine city government—an arena where we see the most policy experimentation on climate mitigation. Using interviews with the city councilors of Half Moon Bay, California and analysis of council meetings, I chart how individual city councilors understand their roles in general and in terms of the climate crisis. I find that while there is a divide between councilors that prioritize resident opinion and those who wish to move ahead of public opinion on climate policy, one councilor tried to bridge this divide by balancing the needs for bold climate action with deepening democratic involvement of residents. These findings advance our understanding of how representatives' individual meaning-making around the idea of representation and the issue of climate change shapes their policy choices.

Introduction

"Stop trying to force our little community onto the frontlines of the worldwide battle against climate change."[1] These are words from a public comment given in front of Half Moon Bay's city council during a reading of its proposed electrification ordinance. In this debate, the town's residents and city council were faced with a dilemma: Would it become

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[1] Public Comment, Half Moon Bay City Council, December 21, 2021.

the first city in the country to require people to replace their gas appliances with electric ones when they burned out? This debate about electric appliances was, as the commenter notes, also about a bigger issue facing the city, the country, and the world: the mounting climate crisis. With increasing frequency, city councils in the United States have been presented with the challenge of responding to the crisis (or not). While the commenter points out the important reality that climate change is a global phenomenon, it is experienced locally as changing weather patterns, more frequent and severe storms, challenges to agriculture and other local industries, and rising sea levels. In turn, city councils have policy leeway to pass ordinances that affect zoning, housing, and transportation in ways that can mitigate climate change by reducing greenhouse gas emissions. Therefore, the city is a vital and active arena where climate mitigation policies have been proposed, debated, and passed, and where representatives must consider how they should respond to information from experts and input from residents. City representatives must contend with the challenge of whether to advance the present opinions of their constituents – many of whom argue that they should not have to take on the costs of mitigating emissions – or, whether they should take a longer view – taking on the wider geographic and temporal scale of climate change – to push for stronger action on climate.

This chapter delves into the relationship between city councilors' self-conception as representatives and their action on city-level climate mitigation policy. I trace how city councilors advertise their role in public (at city council meetings) and to me during interviews; how they engage in the decision-making process; and, ultimately, the policy decision they make to support or oppose a significant piece of climate mitigation legislation. I operationalize self-conception as the representatives' political performance of

articulating and leveraging their role to justify policy decisions. Representatives verbally demonstrate their role to the public, asserting that they are in their position in order to advance constituent interests and/or represent constituent stances. The extent to which they shape their self-conception to the particular issue depends on the issue's perceived singularity; while some councilors defend climate mitigation as an issue of unique importance that requires a unique approach and type of representation, others advocate for a "normal" policy process, despite the particular challenges that climate change amplifies for democratic representation. I find that the councilors most influenced by "expert" assessments of climate mitigation are more likely to support the electrification ordinance, while those more concerned with public opinion hold back. Yet, the former group is less concerned with resident buy-in and the future prospects for holistic climate action. I argue that representation today requires leadership—the willingness to "go ahead of public opinion"—balanced with commitment to bringing residents along: offering opportunities for education, deliberation, and information-sharing about climate-related decision-making.

My primary case site is Half Moon Bay, California: a Peninsula city that was the location of the first proposed ordinance that would require homes to electrify their appliances (heating, cooling, cooking devices) upon burnout in the United States. Half Moon Bay is a relatively diverse and divided small city: it is home to just above 11,000 residents, 70.8 percent of whom identify as white, and 31.9 percent as Hispanic or Latinx. The median household income is $137,346, and about a quarter of the residents are "foreign born."[2] Half Moon Bay is home to a vital agricultural sector. It is also located on stunning

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[2] "Quick Facts: Half Moon Bay City, California." *United States Census Bureau*.
https://www.census.gov/quickfacts/halfmoonbaycitycalifornia

coastal property with notable beaches and famous Ritz-Carlton location. Like many California cities, Half Moon Bay struggles with inequality and housing cost/access issues, as well as pressing environmental challenges like coastal erosion, sea level rise, and wildfires.

Half Moon Bay has five city councilors, including the Mayor and Vice Mayor.[3] As I demonstrate in this paper, they differ in how they conceive of themselves as representatives, how they articulate their role to the public, and the duties they think they have to represent public opinion or public interests. This is not a causal argument about self-conception decisively shaping climate policy stance or vice versa; rather, it's an examination of how self-conception relates to a representative's understanding of their responsibilities vis-a-vis their present constituents and the future of the city.

Theories of Representation

Key to Hanna Pitkin's classic and influential theory of representation is the idea that representation is inherently paradoxical: the representative is tasked with advancing the *preferences* of their constituents and the *interests* of their constituents—acting on behalf of their constituents but also acting independently of them (Dovi 2015, 2). This paradox has generated a debate about whether representatives ought to be "delegates" (acting on behalf of constituent preferences) or "trustees" (acting on behalf of constituents' best interests) (p. 8). The paradox is heightened in the case of climate change, an issue for which the costs of inaction will largely accrue in the future, whereas the costs of action accrue to those

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[3] Two councilors did not respond to requests for an interview. I interviewed three city councilors, including the Mayor and Vice Mayor, and gained additional data from watching video recordings of city council meetings.

living in the present; such an issue can amplify the divergence between delegates and trustees.

Pitkin concludes that representation requires somehow preserving the autonomy of both the representative and the represented; representatives must act with both independence and accountability. If representatives only act using a census of the opinions of their constituents, "representatives are merely the mouthpieces of the mob" (8). But, if representatives act with total independence from their constituents, representation loses its democratic character. Judging the quality of representation, therefore, is dependent on the context and issue area, according to Pitkin. She does not provide a clear answer to what is the "right type" of representation, but rather asks "whose interests and well-being are served by existing representative processes"? (12). It is an open question, then, what is the normative dictate of representatives; how they handle and execute their role is a contextual decision that has implications for democratic politics, and for the government body's ability to take action on issues like climate change.

Urbinati and Warren (2008) note that contemporary times called for more attention to the topic of representation, due to the "growing complexity of issues," complicating factors like campaign finance, increasing competition over legitimacy, and "strains [on] the power of representative agents" (Urbinati and Warren 2008, 390). Here, we see clear resonance with the challenges affecting representatives in the era of climate change. Urbinati and Warren's review essay ends with a call for attending to "new forms of representation that are capable of representing latent interests, transnational issues, broad values, and discursive positions" (407). Such forms of representation would be better at addressing diffuse and complex contemporary challenges like climate change; yet, there is

still work to be done in identifying these new forms of representation, and evaluating them on their ability to address current challenges while upholding democracy.

Saward (2010) took up the call for addressing new forms of representation in his seminal work, *The Representative Claim*. In this book, he articulates a theory of representation as claim-making, whereby representatives (broadly conceived, elected or otherwise) make a "claim to represent or to know what represents the interests of someone or something" (Saward 2010, 38). He conceptualizes representation as an "event" rather than as a fact, during which political figures creatively compose claims to be representing – claims that I document city councilors in Half Moon Bay making, by either purporting to represent their constituency's best interests or to represent their views and opinions.

Saward advanced our understanding of representation as a multi-dimensional, dynamic process, which has been influential in the work to follow. Dovi and Severs (2018) further complicate the notion of representation, and more specifically the relationship between representation and democracy, to contend that not all representation is good for democratic health. Rather than acting as vessels for the input of constituents, representatives can also shape the input process itself, affecting "the capacities of the represented to mobilize and advance certain claims" (Severs and Dovi 2018, 310). In this way, the style and format of representation affects the quality of democratic deliberation and debate, which we will see play out in the real-world case of Half Moon Bay, where city councilors disagree on what constitutes "public opinion," and what role the public's input should play in their decision making process.

Many scholars following Saward continued developing constructivist theories of representation; far too many to overview here. Disch 2011 developed a "representation as

mobilization" theory in an attempt to take on the "dilemma of democratic competence," a challenge whereby "citizens' capacity to form preferences depends on the self-interested communication of elites" (Disch 2011, 100). According to Disch, we cannot use responsiveness to citizens' preferences as a way to gauge the quality of representation because citizen preferences are shaped by discourse from political elites themselves. There exists a circular process of preference formation and preference sharing. Preferences might always be in flux, shaped by new information or by framings handed down by political elites, whereas interests are somehow given and more enduring. The distinction between shorter-term preferences and more abiding interests echoes the temporal tension wrought by climate change and other existential issues, whereby the costs of inaction will mostly accrue to populations far away in time or space. Climate change, therefore, is a key area in which to monitor and evaluate representational styles.

How should we evaluate the quality of representation in the era of climate change, an existential threat to humanity? Taking Disch (2011)'s concerns seriously, we need to identify ways that residents can share their opinions and ask questions more frequently throughout decision-making processes to amplify opportunities for genuine preference sharing and preference formation. This process will require time on the part of residents, time that they should be compensated for. Another factor of constant concern in climate change policy is communicating local relevance: although detractors are mathematically correct that emissions in Half Moon Bay are just a "drop in the bucket," acting locally can have policy implications for the wider region,[4] and, it can help address localized environmental concerns, such as sea level rise in Half Moon Bay.

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[4] Tom Kabat Interview, January 11, 2022.

In the following case study of electrification debates in Half Moon Bay, I show that one major challenge to representation was the lack of citizen engagement until the latter end of the decision-making process, as well as the limited number and type of individuals who were able to share their opinions with council; instead of feeling like they had input into the process, many public commenters felt blindsided, weakening the ordinance's legitimacy. This setting widened the gap between the town's "trustees" and "delegates": those who feared going ahead of "public opinion," and those who were most concerned with advancing the long-term needs of the population, regardless of their current stances and priorities. I also highlight the representational work of one councilor who tried to bridge this divide by balancing the needs for bold climate action with deepening democratic involvement of residents. This chapter extends questions posed in the introduction about the role that aggregate public opinion does and should play in climate policy decisions. Why and towards what purpose do representatives use public opinion to make or justify decisions? And, what implication does this have for democratic politics and for the prospects of strong climate action?

Representation and Existential Policy Issues

In 2021, the city council of Half Moon Bay faced an important question: would this small coastal town be the first to require its homeowners to only use electric appliances in order to cut down on carbon emissions?

Many advocates believe that climate change must be acted upon quickly, which presents unique and serious challenges for representatives who agree and who also represent constituencies concerned about climate change, but who face competing concerns

over cost, quality of life, and policy priorities that may compete with climate change. This raises a set of unique representational problems, including how representatives do and should balance input from constituents with information from scientists and policy experts and the democratic valence of various types of representation—the extent to which they bring residents in.

The relegation of climate change to the realm of scientific or technical elites at once separates it from the space of policy and public deliberation (Blue, 2015), while also resting future hopes on the prospect of "future-making technologies" that will save us (MacKenzie 2021, 39). The large scale of the issue and its future orientation—the idea that the worst effects will be felt in the future—allows politicians (especially in the Global North) to pass the buck on serious investments in the present (MacKenzie 2021; Incropera 2016). The distribution of costs and benefits to addressing climate change—as well as the costs and benefits of investing in climate mitigation and adaptation—are highly uneven. All effects and solutions will have multiple consequences for different stakeholders in the global system (Incropera 2016). Climate change presents problems to ethical and policy imaginations; it is a phenomenon that has never before been experienced, and it is unfolding in real time. The nature of the challenge requires that we act before we are sure of the consequences of both action and inaction (Groves 2010). Meanwhile, dominant media communications about climate change generate demobilizing fear about a future disaster that is already present, placing us on the precipice of an ever-unfolding apocalypse (Swyngedouw 2018, 98).

Nevertheless, studying what climate change requires of representatives has potential implications for other large-scale challenges; it can illuminate information about

how representatives position themselves differently when faced with issues of the commons or of the future of human society. This "bucket" of existential policy issues is defined by mounting challenges that continue to build and impose themselves to a greater extent as time passes. The complexity and scale of climate change can render it a "test case" policy area for studying how representatives might respond to similar problems. My reasons for focusing on climate change and representation are two-fold: first, many representatives and their constituents are committed to grappling with the problems and are seeking policy solutions that raise challenges for politicians about how to be the best representatives they can be. Second, how representatives solve these challenges are likely to apply to other types of existential policy issues, such as racial justice, inequality, and housing.

A few scholars have taken on the question of how to reshape democratic representation in order to amplify "future-regarding" potentials (MacKenzie 2021). Some have argued the need for appointed representatives to advance the interests of future generations, with empirical examples of "future guardians" in Israel, Hungary, New Zealand, and Wales (MacKenzie 2021, 168). Others have devised creative institutional fixes to disincentivize representatives from pursuing short-term or narrow interests, including longer terms or adding elected "representatives of the future" (Dobson 1996; Ekeli 2005). The political scientist Michael MacKenzie advocates that the best institutional fix is to initiate randomly selected representatives to make up a second legislature. He argues that paid representatives drawn from the public at random might promote deliberative decision- and future-making because they will lack partisan affiliations, be more representative of the diverse general public, and remain democratically accountable

to their fellow citizens (and less likely to be swept up by interest groups) (MacKenzie 2021, 175-7). Rather than proposing fixes to the format of representative institutions, I look at the representatives themselves and ask how their self-conceived model of representation reflects their behavior when faced with climate mitigation policy. I find that while there is a divide between representatives that prioritize public opinion and those that prioritize expert assessment of climate change, one representative in particular is able to balance these divides in an effort to advance climate policy with citizen buy-in.

Representative Forms in Half Moon Bay

Unsurprisingly, different councilors embody different types of representation. Pitkin reminds us about representatives: "What they do and how they do it depends upon how they see themselves and their world" (Pitkin 1967, 1). Arguably, this is the case especially for representatives who are charged with making decisions on climate change: the single largest scale issue with most far-reaching impacts in the contemporary political space. But it is also likely applicable for other existential policy issues, where representatives are tasked with balancing their own priors, self-conception, input from residents, and information from experts and city staff.

Climate change makes us think about who we are and what we want for the world. It presents sweeping, potentially uncomfortable questions related to legacy, personal responsibility, and systemic change. One could see how such a challenge could activate different types of representation for elected officials. Due to the high-profile nature of climate change, it could activate promissory representation (the extent to which representatives follow through with campaign promises), because social movements and

activists may try to hold representatives to account on climate action via the ballot box or via protest. In the same vein, it can activate anticipatory representation (the extent to which representatives support what they think constituents will respond well to in the next election), as representatives try to strategize what action on climate might garner them electoral support. Because climate change action or inaction can have deeply moral or cultural underpinnings, it might activate gyroscopic representation (a representatives' decisions made based on their character or morals). Finally, American representatives' policy stances can be affected by the influence of interest groups and lobbyists, who activate a type of surrogate representation (Mansbridge 2003).

In the small city of Half Moon Bay on the Pacific side of the Peninsula, councilors expressed aims of achieving all of these types of representation during a debate on electrification. Half Moon Bay was the first city in the state, and the country, to put forth a building electrification ordinance in 2021. The original ordinance would require all new building construction to contain solely electric power with the ultimate goal of phasing out all gas-powered buildings no later than 2045. This was a significant piece of city-level climate legislation; according to research conducted by city staff, 48 percent of the city's greenhouse gas emissions come from buildings.[5] A local climate activist from a few towns over told me to watch what was happening in Half Moon Bay, "because that's a pivotal point in our history now."[6]

The public outreach period for the proposed home electrification ordinance occurred from April to September 2021, led by the city's Sustainability Manager, Veronika

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[5] City of Half Moon Bay. (2021). Ordinance No. C-2021. Ordinance Amending the Half Moon Bay Municipal Code to Add a New Chapter 14.06 to Title 14 Entitled "Electrification of Buildings."
[6] Tom Kabat Interview, January 11, 2022.

Vostinak. The ordinance's first reading was on December 7, 2021, the second reading on December 21. The council's second reading resulted in a revision of the ordinance, which was then debated on and passed on February 1, 2022. The original ordinance suggested that all new constructions must be built all-electric *and* all gas appliances that burnt out must be replaced with electric ones in order to shut down the gas lines to city residences by 2045. The final passed ordinance, however, did not include the replace on burnout clause, and it made exceptions for commercial greenhouses, which would not have to electrify their operations.

My analysis follows the debate over this ordinance, profiling city councilors and the type of representation they embody throughout this significant climate policy debate. Although the roles of "trustee" and "delegate" are broad, simplified categories, they remain useful for describing the different ways that representatives see their role vis-a-vis their constituents and their city.

Half Moon Bay's Trustees

"It seems as though she really took, as you know, like 'my constituents voted me in because of my skills. And because I have the ability…my thought process and they agree with my views overall. And it's my job to take a look at all sides and make a determination based on having all this information.'"[7] This is how the city's Sustainability Manager characterized how Councilmember Penrose thought about how she was representing her community. Here, we can see an illustration of the challenges facing representatives confronted with climate legislation: whether to act according to the preferences of their

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[7] Veronika Vostinak Interview, April 18, 2022.

constituents, or whether to take advantage of expert information and council sessions to act in the "best interest" of the future of the community. These approaches have different implications for democratic representation—the extent to and conditions under which constituents are brought in on debate around the climate mitigation ordinance.

Throughout the debate, Deborah Penrose, Vice Mayor of Half Moon Bay, exercised her discretion and expertise to learn about the issue and act as a trustee for her constituents. The type of representation that Penrose exercised was characterized by disinterest in anticipating public opinion and the electoral impacts of her decisions, a high tolerance for working outside of the status quo, and a willingness to learn and change her stance overtime. Penrose constitutes what I would term a "deliberative decision-maker" – someone who "listen[s] to others and adjust[s] their positions or opinions in response to persuasive arguments" (MacKenzie 2021, 46). Her views and ultimate stance were formulated through the process of listening to arguments from city staff, experts, and community members and shifting her own in response.

One of the major axes of differentiation in the types of representation is the credence that representatives pay to "public opinion."[8] Amongst elected officials in the United States, city councilors are unique in the type and quality of their exposure to their constituents. In my interviews with councilors in Half Moon Bay, I learned that the primary avenues for assessing public opinion come from: 1) public comment sessions (all city council meetings include time for public comment during the meetings and through email

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[8] I use scare quotes around "public opinion" to hint at the complexity and slipperiness of the term. Public opinion can mean a variety of things; how one determines public opinion depends on the avenues for the public to express their views. It also depends on how the "public" itself is conceptualized: who is able to express an opinion and via what modalities? How accessible is the process of making one's views known? How councilors understand "public opinion" can be revealing.

or mail correspondence); 2) daily interactions with constituents as a result of residing in the same area; and, 3) online feedback via social media platforms like NextDoor. Each avenue for assessing public opinion comes with its own set of potential biases. For example, we know that the opinions shared during a public comment period can differ systematically from the opinions shared by the population at large (Williamson 2014). Residents willing to share their thoughts during city council sessions are distinct from the general population and more informed about, interested in, or affected by the issue at hand.

Penrose displayed a disinterest in public opinion consistent with a trustee type of representative. She told me, "Public opinion is not helping us because…I believe we do not have a well-informed public when it comes to understanding the issues around such things as electrification."[9] As an elected official, Penrose has access to information and expertise that the general public does not. Considering electrification to be a somewhat technical issue, Penrose states that the public lacks the information and education required to make an informed decision. She places a premium on coming to decisions based on the *intake of information about the issue*, rather than information about public opinion. In fact, Penrose's stance on electrification shifted over the course of the April 2021 to February 2022 issue debate period, from being dubious to being one of the strongest supporters of the ordinance. According to the city Sustainability Manager, "I really think she took that to heart as like, 'I'm the decision-maker; I'm taking all of the information and making a decision as to what I think is the best call.'" In contrast, "some of the other council members may have taken a bit more of a political, like, 'Oh, I can't support this because my constituents don't support this.'"[10]

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[9] Deborah Penrose Interview, February 8, 2022.
[10] Veronika Vostinak Interview, April 18, 2022.

By her own account, Penrose conceives of herself as an information-gathering expert who tries to act outside of the "political process." She is distressed that an issue as important and technical as electrification has become "a political issue." Reflecting on the feedback she was getting from her constituents, Penrose said,

> "I think that my guess is that it's tied up with local politics, period, and the fact that an election is coming up in November, and that there are some people that want to see a change on City Council. I'm not sure who they are because they don't talk to me. But that may be because they want me gone. I don't know."[11]

Here, Penrose admits awareness of the upcoming election, but deliberately distances herself from the demands of the electoral season and "politicization" of the issue. She expresses distrust in the idea of public opinion—who decides to reach out to her is "tied up with local politics"—because it is influenced by the election cycle.

When I asked Penrose about the outcome of the ordinance—which was passed in a watered-down form to exclude industrial greenhouses and home remodels from having to electrify—she expressed disappointment but an understanding that the process was led by local councilors, who each have different leadership and representation styles. Referencing the mayor's decision to exclude greenhouses from the ordinance, she said, "I think that's shortsighted, but that's where we differ…I respect her opinion. She is much better versed in politics and how to get things done. And as a great believer in process, is the way she puts it. I'm a great believer in shaking things up."[12] Penrose contrasts herself with the mayor by saying that Mayor Ruddock is influenced by the dictates of the political process, while she is more willing to change the status quo. Frustrated but respectful, Penrose acknowledges that leaders come to decisions via different means.

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[11] Deborah Penrose Interview, February 8, 2022.
[12] Ibid.

Harvey Rarback was the second councilor who I would characterize as a "trustee" in the context of the electrification debate; his self-conception as a climate defender was so strong that he ended up being the only "no" vote for the final ordinance, which he considered to be too weak in the face of the dictates of climate mitigation. A PhD in physics, Rarback grasped the more technical requirements of climate change and of building electrification. Throughout the debate, he was unequivocal about the necessity of passing the strongest ordinance possible. During the second reading, he said, "I'm not a fool, I know it will be expensive….but we don't have a choice….we need to take action, we need to be the leaders."[13] While Rarback understood and articulated the "tension" that elected officials face between what Pitkin called the necessity for representatives to advance constituent opinions and interests, he concluded, "if all we cared about was what our constituents wanted, we could govern just by taking polls, based on that, decide what to do. But I think a responsible public official needs to do more than just listen to the public."[14] Here, Rarback articulates his self-conception as a trustee of the public, not a mere "mouthpiece of the mob" (Dovi 2015, 8). He brings his own personality, experience, knowledge, and expertise to the decision-making table: reflecting some form of Mansbridge's gyroscopic representation. There is a temporal element to representational style; another way to frame Rarback's stance is to say that he was more concerned with the future condition of Half Moon Bay and the region, and therefore willing to take on present costs for future benefit.

While Penrose prioritized information-gathering through the electrification debate process, Rarback articulated that "having a background in science makes me think more

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[13] Harvey Rarback, Half Moon Bay City Council Meeting, December 21, 2021.
[14] Harvey Rarback Interview, March 7, 2022.

analytically than some people."[15] Penrose was concerned with the influence of the upcoming council election on the process, but Rarback also pointed out how the concerning influence of interest groups could be affecting the debate and shaping "public opinion" in Half Moon Bay. During the months of the public process, "a lot of that time was just spent by real estate agents and homeowners complaining about the effect on their pocketbook."[16] He had his own reasons for being disinterested in collecting information on "public opinion": with his background and understanding of energy, Rarback was particularly sensitive to the corrupting role of misinformation on the debate. In reference to some public comments casting doubt on the effectiveness of electrification, he said, "a lot of them were from really misinformed people…And you know, people just had no idea that Peninsula Clean Energy was supplying them with 100 percent clean energy."[17] Steeped in what he considered to be the facts of the issue, Rarback remained unmoved as the debate proceeded.

Delegates in the City Council

Two councilors seemed to embody the role of delegates in the Half Moon Bay electrification debate; their stated stance was influenced by a fear of going ahead of public opinion: moving too fast or too far on climate mitigation without the requisite support amongst residents. Most succinctly, according to Councilor Jimenez, "as elected officials, we follow the community."[18]

During the second reading of the ordinance, Councilor Brownstone articulated his opposition to the ordinance as written because "it's not on us to impose our value

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[15] Harvey Rarback Interview, March 7, 2022.
[16] Ibid.
[17] Ibid.
[18] Joaquin Jimenez, Half Moon Bay City Council, December 21, 2021.

judgments."[19] Here, we see Brownstone conceding that while the council recognizes climate change to be an important issue, the councilors themselves should not act according to their own understanding of the issue without consulting the public. According to Brownstone, the city council is elected to serve the public interest, and the public was not interested in an ordinance that required major home renovations to include electrification. Brownstone said that the debate concerned "not just what the city *needs*, but what it *wants*."[20] Here, Brownstone is articulating a distinct type of representation from the councilors I profiled earlier: he understands his job as that of a delegate, someone who seeks to understand the public's desires and advance them in council. In stronger language, he said, "it's derelict to ignore what the majority of people want."[21] For Brownstone, being a responsible representative of the people means advancing and reflecting "public opinion." His colleague, Councilmember Jimenez, takes a similar approach; referencing conversations with community members and constituents, he said, "I will not force our community to spend this money."[22] He defers to the community to "make the transition on their own," at their own pace and "on their own time."

Brownstone's stance is also characterized by a distrust of surrogate representation, which he positions himself in opposition to. During the December 21 debate, Brownstone contended that the majority of people supporting electrification do not live in Half Moon Bay, based on the demographics of people providing public comment. The primary currency of his position as a delegate requires trust from the immediate community: the group that he claims as his constituency. He referenced a potential "trust gap" between the

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[19] Robert Brownstone, Half Moon Bay City Council, December 21, 2021.
[20] Ibid.
[21] Ibid.
[22] Joaquin Jimenez, Half Moon Bay City Council, December 21, 2021.

council and residents; he fears that residents do not trust council to not use the ordinance as a slippery slope to require more expensive and onerous housing remodels of them in the future. Referencing the potential to later require residents to replace their gas appliances with electric ones on burnout to meet the 2045 full electrification goal, Brownstone challenged, "if you're so sure [that residents will support replace on burnout], let's put it on the ballot."[23] Here, Brownstone is further exemplifying the idea that representation on council should act according to referendums of public opinion. The implication is that if councilors do not act on public opinion, and do not act as a "mouthpiece of the mob," then trust will erode between the city council and the public. Brownstone seemingly discounts his own expertise and positionality as a community leader; he takes himself out of the decision-making process to advocate for "what the people want."

Councilmember Jimenez underlines that his questions about the ordinance and fears of moving too far on electrification derive not from a disregard for environmental concerns, but rather from a hesitancy to place burden on the community. He grounds his opposition to forcing greenhouse electrification in community concerns. During the hearing on the revised draft of the electrification ordinance, he said, "I have a lot of other things I have to think about, about helping our community survive right now."[24] These comments bring to the fore questions about temporality and representation: depending on who you consider to be your constituency and how you believe you must act vis-a-vis their "interests" or "opinions," you have different obligations. Jimenez sees the current struggles within the farming community and articulates a need to preserve their present interests and survival, rather than advancing longer-term goals. Here, again, we see the temporal and geographic

[23] Robert Brownstone, Half Moon Bay City Council, December 21, 2021.
[24] Joaquin Jimenez, Half Moon Bay City Council, February 1, 2022.

scope of climate change inflecting a city level debate. Essentially, in mining the differences between "types" of representatives, I locate different positions on the question: What should our city's responsibility be in the face of climate change?

The delegate position embodied by Councilmembers Jimenez and Brownstone is one that has generated some frustration for climate activists in Half Moon Bay and beyond, which speaks to the impact that one city's decisions can have on a regional and even state level. Tom Kabat, a leader in nearby Menlo Park's Environmental Quality Commission and Menlo Park Climate Action Team, watched the electrification debate with frustration and dashed hopes. He told me, "Politicians and leaders and actually the folks in Half Moon Bay, they got pretty succinct at explaining that…they're not there to lead, they're there to follow the public and the public wasn't ready yet. And so, you know, that was kind of disappointing, because this is a problem that does require leadership, not followership, from the politicians."[25] Kabat, recognizing that leadership on the part of one Peninsula city can spark others to up the ante of climate action, bemoaned the loss of Half Moon Bay as a leader. While the delegates in council feared going ahead of public opinion and taking on too much cost as a small city, climate activists throughout the region looked at it quite differently. They recognized that "what one town needs to do is demonstrate a new way to act, a new steppingstone on the path that others can look at and adopt."[26]

Other Forms of Representation

Mayor Debbie Ruddock defied easy categorization throughout the electrification debate. Both a strong believer in the importance of climate change and an expert in legislative

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[25] Tom Kabat Interview, January 11, 2022.
[26] Ibid.

processes, electrification was an issue she personally cared about and took seriously. However, in my interview with her, she expressed concern with the bigger picture—getting residents on the same page about a broader climate mitigation agenda—and with institutional barriers to cities leading on climate. While outside climate activists expressed disappointment that she did not push for a stronger electrification ordinance, and that she allowed for key exclusions like greenhouses, her sights were set on improving public outreach in order to pass an effective and strong climate action plan for the city.

Ruddock's decisions were motivated by a nuanced understanding of public opinion and how it does and should shape city council decision making. From evidence from online forums like NextDoor and her daily interactions with residents, Mayor Ruddock concluded that while people "seem to understand the issues," the majority failed to engage with the electrification debate "until it reached city council, and people, you know, understood that they might have to trade their gas stove for electric induction range, that's when people kind of went crazy and started getting involved." While there were ample opportunities for residents to engage with the council during the months-long debate period, the ordinance failed to capture attention until the "last minute," "despite all this outreach and communication."[27] Here, we see Ruddock express concerns that the public opinion the city was able to capture during the process was minimal and potentially biased.

Ruddock also feared that community members who were most educated about electrification failed to show their support in time to bring their more hesitant neighbors along. Ruddock understood that public opinion is not a monolith; some community members "had more technical knowledge," are more "engaged in the climate change

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[27] Debbie Ruddock Interview, February 17, 2022.
All quotes from this section are from the same interview.

conversation," and have "made their own personal decisions to electrify." Disappointingly, however, "there's very little direct engagement from those [more educated] people" in city council meetings and debates. The Mayor believed that the silent support slowed the ordinance. From her vantage point, "I actually believe that there's a lot of support for [the electrification ordinance] in the community. But the people who have issues with it tend to also be the screamers." The direction of "public opinion" on electrification in Half Moon Bay was obscured by the hidden supporters and more vocal detractors.

Mayor Ruddock, therefore, questioned the guiding light of "public opinion" that fueled delegate responses to electrification. Similar to the more trustee-style representatives on the council, she questioned whether the public had what it needed in order to make an informed decision on the proposed ordinance. Specifically, she worried about the lack of financial information that they could provide to constituents to help them make electrification cost calculations. As a staunch environmentalist in her personal life, "I spent many years dealing with climate science and stuff, cost is not so much a factor for me." However, the Mayor still recognized that cost information is vital to most people; without solid information on costs, rebates, and feasibility from the state, residents could not be expected to come to a conclusion about electrifying their homes. She balanced personal commitments, knowledge of the issue, and understanding of community challenges to take a long view of where this ordinance fell in the larger climate mitigation policy space.

Climate activists were disappointed in Ruddock's support for exempting commercial greenhouses from the electrification ordinance, but the Mayor did not make this decision lightly. In fact, rather than being easy on polluters or soft on her environmental

commitments, she expressed hope to build support for stronger and more comprehensive action down the line. And, this decision displayed sensitivity to concerns voiced by Councilmember Jimenez and others about supporting the agricultural community. For Mayor Ruddock, the major reason she "backed off a little bit" was fear of generating "backlash." She said, "I want us to move in a fashion that will bring everybody along," particularly ahead of Half Moon Bay's upcoming climate action plan. Significantly, her hesitancy to move faster than what "public opinion" dictated was *not* based on considering herself beholden to the public's wants; rather, she envisioned that more comprehensive climate change legislation would require a thorough and interlinked process of public education and advocacy. In this way, she articulates that climate legislation necessitates a special kind of policy process: "a balance between leading and mission and reality." She does not fit squarely in the delegate or trustee model of representation. Unlike the trustees, she echoed community concerns about cost and feasibility rather than dismissing them as unfounded or unimportant: "I'm not backtracking on electrification," but wants to do it in a way that makes sense to the community. In this particular community, this meant special consideration for commercial plant nurseries, a large employer, and amplifying incentives for the members of the community who are ready to move forward.[28]

Electrification and other climate mitigation strategies depend on technological advancement and trained professionals to carry out the nuts and bolts of home electrification. Ruddock did not put the brakes on home electrification because she considered it unimportant; she worried about the availability of contractors, financing, and solid cost data. She told me, "it's a really hard thing for me because knowing what I know

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[28] Debbie Ruddock, Half Moon Bay City Council, December 21, 2021.

about climate science, I think we just…keep [gas] in the ground. But I have to deal with people where they are…it's a campaign. It's a program that takes time and you can't rush it."[29] While for Penrose and Rarback the "specialness" of climate change necessitates fast action at any cost, for Ruddock, it requires a long game that is attentiveness to technological realities, the fiscal and legislative positionality of city governments, and the diversity of public awareness and opinion. Electrification, according to Ruddock, is part of an "ecosystem" of interrelated issues that should be best addressed in tandem.[30] She contended that climate change requires a special policy process and considerations: a coordinated effort that uses city staff and public supporters to bring all residents into the fold on the necessity of broad and concerted climate action.

Figure 1.

	Climate change requires *special* policy consideration	Climate change requires *normal* policy processes
Climate change policy requires *public support*	**Moving Together for Climate (Ruddock)**	**The People's Delegates (Brownstone and Jimenez)**
Climate change policy requires *expertise*	**The Trustee Scientist (Rarback)** **The Deliberative Decision-Maker (Penrose)**	

[29] Debbie Ruddock Interview, February 17, 2022.
[30] Debbie Ruddock, Half Moon Bay City Council, February 1, 2022.

Penrose and Rarback positioned themselves quite squarely in the camp of believing scientific evidence on the existential importance and threat of climate change to the extent that it demands special policy action, as I have documented through interviews. On the opposite end, Brownstone and Jimenez relied on the lack of purported public support to oppose strong climate mitigation: just like any policy proposal, it cannot go forward without being backed by the will of the people. In my study of Half Moon Bay, the bottom right quadrant is empty, but that does not mean that it's a position no one takes. However, it is theoretically rarer in the American context, where elected politicians tend to rely (at least rhetorically) on the support of the public to push policies forward. If I were to add another dimension to this chart, it would have to do with time and space: in general, the trustees are more willing to take on present, local costs for more diffuse, future-facing benefits, while the delegates are more concerned with the interests of present residents.

Discussion

So far, I have demonstrated that city-level representatives advance different ideas about what it means to be a representative. These self-conceptions and ideals inform how each of them spoke and acted on the proposed electrification ordinance in Half Moon Bay in 2021-22: a policy proposal that would have significant impact on the city's ability to meet its greenhouse gas emissions targets.

Along with differing in how they think about and respond to "public opinion," the representatives I have highlighted differ in the extent that they think climate change is a specific type of policy area that necessitates a distinct approach. For Brownstone, climate change is a known entity that requires response, but this response cannot go forward

without the support of the people, no matter the level of urgency expressed by the scientific or technocratic elites. Brownstone articulated support for public education, incentives, and a plan for communication so that residents understand each step of the electrification process.[31] In this way, Brownstone advocated for a "normal" policy process with steps, deadlines, and a plan for community input and information-sharing. In contrast, the councilors who saw themselves as trustees were much more willing to support an accelerated timeline—with or without broad community support—*because of* the urgency and importance of climate change as an issue. Their vantage point allowed them to see the necessity of certain climate actions, and they therefore supported them in the name of the city's greater interest. Mayor Ruddock attempted to bridge the democratic deficit of the trustees with her expert assessment that climate change requires serious action; her style of representation defied easy categorization.

On one hand, it can be tempting to conclude that climate change necessitates trustee representatives who act based on expertise, information-gathering, and scientific evidence: representatives like Deborah Penrose who believes that "it's probably the top priority of any governing body today to deal with it in whatever way we can," and who are willing to learn and allow evidence to shape their opinion[32] Certainly, in this case the "trustees" were those who supported the strongest electrification ordinances.

City councilors have the benefit of multiple sessions, input from the public, and research from city staff. Their job requires that they have time portioned out to discuss issues like city electrification. Trustee representatives activate a different type of situated, localized expertise than delegates do; rather than expressing the desires of the local

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[31] Robert Brownstone, Half Moon Bay City Council, February 1, 2022.
[32] Deborah Penrose Interview, February 8, 2022.

populations, they bring awareness of the needs for climate adaptation and mitigation in the particular locality. Allowing councilors to exercise expertise overcomes some of the challenges of relying on public input for making city policy decisions, including inconsistencies in the modalities for public input. It is fairly well-documented that the type of people who are vocal in city council meetings are not average representatives for the population as a whole. Explaining why it seemed like more opposition was coming from inside the city, while the strongest proponents of the ordinance came from outside of Half Moon Bay, Vostinka figured, "if you don't like a policy and you don't live in the city, you're not going to go to another city and tell them that you don't like it….And also, I think you're much less likely if you like the policy of the city council, you're less likely to go in your own city and say, 'Hey, I support it.'"[33] City council meetings are long, and voicing your opinion requires some degree of public speaking confidence and fluency with the local government process. Yet, advancing trustee-type representation for climate change can have anti-democratic effects and ignores the importance of public buy-in for the success of climate policy.

Mayor Ruddock brings in the important consideration of resident buy-in to the larger climate struggle. Advancing trustee representation on climate continues to relegate it to the realm of elites and outside of the zone of democratic deliberation. Deliberation, especially on existential societal issues like climate change, is incredibly important for its capacity to facilitate citizen learning and changing of minds (Landemore 2022). Giving the example of national climate change policy in France, Helene Landemore shows how the state's "expert solution" of enacting a carbon tax resulted in the yellow vest protests and

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[33] Veronika Vostinak Interview, April 18, 2022.

mass upheaval by those who would be disproportionately affected by the higher cost of fuel. The carbon tax policy, while lowering emission through market mechanisms, was regressive and not attentive to the social equity considerations required of sound, sustainable climate policy. In response to this failed program, France attempted national-level deliberative solutions proposed through the Citizens' Convention for Climate, a group made of 150 randomly selected citizens charged with developing proposals to reduce greenhouse gas emissions in line with equity considerations. "The people know where the shoe pinches," which is why expert-developed and imposed climate solutions will often fall short on considerations that affect the long-term viability of the policy. Even so, we cannot do without representation: the scale and complexity of modern-day countries, and even cities, requires division of labor, with some selected to do the representing and the legislating (Landemore 2022). According to Landemore, the solution to the roadblocks imposed by contemporary representative democracy "is not to eliminate representation altogether, but instead to rethink it" (Landemore 2020, 17). Rather than proposing institutional fixes the question of this paper is how representatives should conceive of and embody their role in order to advance climate mitigation policy. The case of Half Moon Bay demonstrates the tensions between forms of representation—even within a small group of city councilors—and points to the necessity of balancing "expertise" and popular input.

Another primary challenge of allowing a small group of elected or unelected elites to exercise trustee-type representation is fears about accountability; differential vulnerability and climate risk complicate accountability. Urbinati and Warren, in their 2008 review essay, draw from Castiglione and Warren's unpublished manuscript to outline the process of representation: "Political representation involves representative X being held

accountable to constituency Y with regard to good Z" (Urbinati and Warren 2008, 396). What does it mean to be held accountable to climate change policy decisions? Of course, city councilors in Half Moon Bay are accountable to their constituencies in the electoral sense, a fact that is particularly salient just ahead of the city council election. And, they might be held accountable to the constituents that they encounter on a regular basis through living in the city, city council meetings, or online fora like NextDoor. However, climate activists argue that we need to activate a deeper, people-focused accountability in regard to climate action. Climate change will largely affect future populations and will affect them unequally—a challenge for contemporary styles of electoral representation.

Because formally elected representatives can make credible claims to represent or stand for interests, needs, and preferences of a specific constituency in politically acceptable ways (Saward, 2010), they play an important role in advancing or holding back legislation on climate mitigation. Therefore, specific attention must be paid to how electeds' self-conception as representatives affects their action on important policy decisions. As Dovi and Severs (2018) conclude, not all representation is good for democratic health; we should evaluate representatives by their impact on democratic institutions. While the case of Half Moon Bay shows that trustee-style representatives are generally more willing to enact swift and strong climate mitigation policies, they tend to sequester climate decisions away from spaces of democratic discussion spaces, keeping these decisions within circles where the price of admission is access to expertise, staff reports, and scientific information. In contrast, I highlight the work of one city councilor to bridge the divide between trustees and delegates in order to foster community buy-in for more thorough climate legislation.

Recommendations and Conclusion

In this paper, I find that city councilors' conception of their role as representatives affects how they approach climate policy decisions: the extent to which they seek input from their constituents, as well as the degree that they consider climate change to require specific types of policy action that necessitates a distinct approach on their part. Delegate-type representatives justified their opposition to the electrification ordinance by contending that their constituents were not ready to comply with the ordinance or take on the costs of electrification, while the trustees said that people have to do this, even if they do not want to or are not prepared. While delegates perhaps downplayed the importance of climate mitigation for the coastal community, the trustees downplayed the significance of community trust and buy-in.

Public input—as conceptualized by the city councilors in Half Moon Bay and likely by other representatives—is a flat and partial view of the wide spectrum of resident views, concerns, and priorities. On the other hand, deliberation would bring residents into the decision-making process, rather than just the decision-making phase (Landemore 2020, 14). In this way, I land on the side of the scholars who argue we need more democracy, not less, to deal with the climate crisis. More learning, debate, and co-generation between residents and elected officials might ameliorate some of the representational challenges I document in Half Moon Bay, and improve the legitimacy of strong climate legislation when it is proposed.

I argue that the best way to get residents and elected officials on a more even playing field in making climate policy decisions is to advance learning, debate, and

information sessions for both groups: co-education and deliberative decision-making, instead of elite manipulation (Mansbridge 2003). Through this process, I would hope to see a breakdown of figure 1, a chart that separates the councilors who prioritize the role of experts versus those who value public input. In Half Moon Bay, I saw a divide between expertise and public input, as conceptualized by councilors, but does this separation have to hold?

"Bringing the citizens in" could dull the divide we see between climate delegates and climate trustees in the case of the Half Moon Bay electrification debate; if regular residents and city councilors both had equal access to information, expert assessments, and opportunities for deliberation, we could close the gap between what the city "wants" and what it "needs" (a gap that Councilmember Brownstone pointed out and wielded as justification for slowing the ordinance). It would also help address one of the challenges that Mayor Ruddock pointed out: that residents may lack the information they would need to make informed decisions and participate in policy debates. Of course, while city councilors are compensated to participate in lengthy and regular sessions, and to debate the implications of proposed measures, citizens have fewer automatic opportunities to learn and debate climate policy issues in the course of their everyday lives. City councilors also have access to city staff, whose primary occupation is to provide council with detailed information to allow for cost and benefit analysis, which contributes to uneven access to information.

In the subsequent chapter, I will examine one instance of a citizen climate assembly in the Peninsula—the Mountain View Environmental Task Force—to explore how a group of dedicated residents worked amongst themselves and with city staff to learn about

environmental issues and advance climate policy on the city scale. In the next chapter, I ask: How does participating in the policy process—interacting with city councilors, city staff, and the wider public—on climate change policy affect citizen activists? What do they bring to the experience, and how does it shape their future engagement?

Chapter 2:

Citizen Climate Groups and the Challenges to Long-Term Resident Engagement

Abstract

Government units at different scales have been recently finding ways to involve residents in decision-making around climate priorities. Cities, states, and countries have convened climate assemblies and task forces as a way to get information about how residents think they should address the problems posed by climate change. As these institutions become more common, it is important to understand how the participants experience the process, and how their experience affects their chances of staying involved in government-led climate work. Using surveys and individual interviews with participants in the Environmental Sustainability Task Force in Mountain View, California, I chart participant stories about their involvement in city sustainability initiatives before, during, and after the task force. I identify two distinct groups: citizen-advocates who were involved in such initiatives before the task force and continue after, and new participants, who come from a variety of backgrounds but who, as a whole, experience the task force as a one-off engagement. Although the task force does influence city policy and does reinforce participation amongst the citizen-advocates, it fails to bring new actors into the climate fight. These findings suggest potential limitations to the use of one-off deliberative engagements for fostering long-term participation of residents in climate policy planning.

Introduction

In 2017, the city of Mountain View, California called a second Environmental Sustainability Task Force, which convened 35 interested residents to help the city craft an updated sustainability plan. Four years after the Environmental Sustainability Task Force ended in Mountain View, I spoke with members of the task force about their experience working with their fellow residents, city council, and city staff to build actionable proposals for the city to decrease its carbon emissions. I sought to learn: How do residents experience this form of entering into the decision-making process on climate priorities? How does their interaction with city staff and electeds affect the way they continue to engage (or not)

in both climate action and city government? These questions are increasingly significant as the use of climate assemblies and task forces grows in response to pressures to integrate citizens in climate decision making processes and the dual pressure of placing more resources and attention to climate policy in general. It is normatively important for climate action to keep engaged residents involved, but do discrete events of resident participation lead to longer-term engagement?

Climate assemblies and task forces have become increasingly popular as a way to get more diverse and representative populations involved in climate policymaking and to facilitate bottom-up development of solutions. While more common in Europe,[1] climate assemblies are coming to the United States, with some early experiments in Washington State and California at the state and local levels. Following my analysis of the ways that representatives deal with the (sometimes competing) forces of public opinion and expert advice, this chapter explores one example from the same geographical area of how residents can be integrated into climate policymaking, working with city staff and city councilors, and what the experience of this interaction is like from the perspective of residents. While mini-publics are meant to be "schools of democracy," the task force in Mountain View does not follow this broad trajectory. Though the task force impacted local policy, there was no democratic spillover or lock-in effects from this state-citizen interaction. Rather, the task force reinforced participation amongst a small group of citizen-advocates – who were involved in climate work before the task force and continued to engage afterwards – but did not encourage long-term engagement amongst its new members.

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[1] See list of European national climate assemblies here: https://knoca.eu/national-climate-assemblies/

Using individual interviews with former task force members, city councilors, and city staff, as well as a survey, I examine the interactions between residents and government staff and officials during Mountain View's task force. I find that the most decisive factor that shaped participants' interpretation of the task force was their prior experience with city-level activism. Those who had worked with the city government—even on issues not directly related to climate change—expressed a different flavor of disappointment in the slowness of the city to respond to task force recommendations: though they could be dismayed by the outcomes of the task force, they expressed more understanding of the city government process and therefore more hope for future engagement. Many participants were disappointed in the process or outcome in some respects, but for the group that I identify as citizen-advocates, disappointment was a reason to keep pushing on climate change issues in the city, but for the new participants it was a reason to withdraw back to individual action. I identify an axis of differentiation between those that perceive slowness and inaction as distressing and irredeemable, and those who consider it to be "part and parcel" of the process of working with city bureaucracy.

In addition, I note an important difference between citizen interpretation of task force outcomes and process; many of those who look fondly on the experience tell stories of how the process of engaging with fellow residents made them feel connected or empowered. While this is distinct from whether or not the task force had any meaningful outcomes in shifting climate policy, the fact that some participants recollect the democratic or communal benefits of deliberation suggests normative benefits of convening such groups. Even so, newcomers who had positive experiences of the task force process have largely refrained from continual engagement with the city and with climate work. One-off

communal and democratic benefits do not necessarily lead to longer-term resident action, limiting their efficacy on climate and democratic benchmarks.

Citizen Engagement and Political Efficacy

There is a large body of literature in comparative politics about the relationship between citizen participation – involvement in governmental or state-convened initiatives – and their experience with the state. Conventionally, citizens will continue to participate when they feel that they are being listened to or when their actions affect government responsiveness or policy. The public is less likely to continue participating if their past efforts were discouraging (Irvin and Stansbury 2004). In essence, people need to feel like their participation will be worth the time and effort spent: the bureaucrat will respond to their service delivery request; their comments will be recorded at city council meetings; their participation in a citizen assembly will meaningfully shape the policy outcomes.

The scholarly literature linking participation to citizen experience of the state is mixed. Some earlier scholars find that in the context of an under-performing state, citizens have more incentive to voice their opinion and dissatisfaction (Hirschman 1970). Kruks-Wisner 2018 documents how citizen experience of *uneven* service delivery can spark mobilization. On the other hand, Ianniello concludes that "the involvement of citizens is often time-consuming; it may be pointless if it's ignored, or even backfire creating mistrust and hostility."[2] Studying participation in citizen review panels in U.S. state child protection administration agencies, Buckwalter 2014 finds that there is often disappointed expectations in terms of the speed of change: "such disappointment can lead, in turn, to

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[2] Ianniello, Mario et al. "Obstacles and solutions on the ladder of citizen participation: a systematic review." *Public Management Review* 21(1), 2019, 22.

frustration when participants possess especially strong feelings or personal clarity about what they think should be done by an agency but do not see as clearly the nuanced reality of what is feasible."[3]

However, other scholars propose disjunctures in the conventional logic that disappointment leads to withdrawal. Some research suggests that even when the public is only "superficially" involved in the policy process, they can still derive benefits. Studying renewable energy policy in U.S. states, Roundtree and Baldwin (2018) find that some stakeholders "may play a long game, building coalitions, relationships, and knowledge to position themselves to influence decisions later on."[4] Participating in policy processes allows opportunity for networking, learning, and building capital, but repeat participation requires even more of the public than one-off consultations. This leaves public participation in a bind: while "expert stakeholders" are more likely to experience "meaningful participation," and everyday citizens are more likely to be included "superficially," the expert stakeholders are those who are better resourced to participate in the iterative long game of influencing policy. Therefore, it is important to understand under what conditions residents involved in government decision making processes are able to enter this "long-game" and remain involved in the cycle of policy development and implementation.

More recent academic scholarship calls into question whether mistrust or disappointment are the most decisive factors shaping citizen engagement with state institutions. Hilbink and co-authors (2022), in a comparative study of Chile and Colombia,

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[3] Buckwalter, Neal D. "The Potential for Public Empowerment through Government-Organized Participation." *Public Administration Review* 74(5), July 2014, 578.
[4] Roundtree, Valerie and Elizabeth Baldwin. "State-Level Renewable Energy Policy ImplementationL How and Why Do Stakeholders Participate?" *Frontiers in Communication* 3(6). February 7, 2018, 1.

conclude that "Even when people view justice system institutions as generally unfair, corrupt, and inefficient, and when they assess the chances of a successful outcome as unlikely, they are sometimes driven by expectations, indignation, and/or aspirations to turn to the justice system."[5] The path from disappointment to withdrawal is not a linear one; residents can push beyond disappointment when they have other emotive drivers, and when they have a certain degree of capacity that allows them to engage. This argument resonates with Whitney Taylor's finding in Colombia that "citizens turn to the courts because there is no alternative" and "every other option is less promising."[6]

Other than their experience with the state, scholars find that a number of individual or group attributes shape the willingness of citizens to participate in government processes. Poverty is a factor that is expected to decrease citizen participation (Verba, Schlozman, and Brady 1995), while groups that are more educated are more likely to participate in active citizenship (Wolfinger and Rosenstone 1980). Intuitively, those who report more interest in politics are more likely to participate (Verba et al. 1995). Another important factor that many scholars underline is how connected a citizen is to social networks and how often they interact with their neighbors and other citizens (Leighley 1990; Rosenstone and Hansen 1993). Context matters in terms of socio-economic and geographic landscape: neighborhoods that are rich and not diverse are less likely to have engaged citizens (Oliver 1999). Resident experience with state participation depends on how they feel they are treated and whether they feel listened to, which is influenced by contextual factors such as

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[5] Hilbink, Lisa, Valentina Salas, Janice K. Gallagher, and Juliana Restrepo Sanin. "Why People Turn to Institutions They Detest: Institutional Mistrust and Justice System Engagement in Uneven Democratic States." *Comparative Political Studies* 55(1) 2022.

[6] Taylor, Whitney K. "Ambivalent Legal Mobilization: Perceptions of Justice and the Use of Tutela in Colombia." *Law & Society Review* 52(2) 2018.

racism, sexism, or other forms of prejudice that can affect citizen-official interactions. Inequality within a group can also degrade participation. For example, one of my interlocutors who considered herself to be less educated than other task force participants "didn't feel too sure that [the city] took us seriously," and therefore became disengaged and disaffected.[7]

Of course, the issue area at hand also impacts the likelihood of citizen engagement. Problems with more local salience are more likely to generate mobilization (Weaver 1991) and subsequently provoke government responsiveness (Bromley-Trujillo and Poe 2020). Intuitively, Marschall 2004 finds that residents who think that crime and school quality are more important are also more likely to contact public officials about these issues. Climate change specifically is an issue that is often perceived to be of existential importance, which could affect citizen engagement. While negative experiences with advocating for certain policies or services can lead to citizen retreat, withdrawing from the fight against climate change is too costly, and there is no alternative or work-around. Therefore, engaged residents are willing to put up with more disappointment and expend more effort than they might for other issues.

Importantly, political participation and engagement with the state is highly sensitive to context: the performance of the state, the characteristics of the residents, and the issue area at hand. The clearest finding in the extant literature is that participation is fueled by citizen self-efficacy, which they cultivate through prior positive experience with participation; education about the issue or the political process; and/or access to social networks and information. In the following paper, I will chart how, despite disappointment

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[7] Interview with former ESTF-2 Task Force Member, November 29, 2022.

with the state (in the form of the city government), residents with prior experience working with the city continue to engage on climate issues; their prior work has mediated their expectations and thus affected their experience of the task force.

Prior research has focused on citizen interaction with state institutions in either one or two case study countries. And, of course, this literature review is state-centric in its focus on how factors shape citizen-state interactions; this is forgivable in the case of climate change, where most all resident activation occurs in the hopes of governmental policy at some level. Due to the scale of climate change and the extent to which mitigation and adaptation rely on regulation, it is reasonable to conclude that most activism, even if it does not engage with state institutions directly, intends to eventually influence policy. In my paper, I track how resident experience of the Mountain View task force shapes their future engagement with the city (city government or city-level institutions) and with the climate change issue more broadly (either with the government or through civil society action). I take a localized view: examining the micro-workings of prior experience, positionality, and disappointment. I use individual interviews with participants in the citizen task force to inquire into the shape and nature of disappointment. I find that residents' prior experience with the city mediates their experience of the Task Force outcomes and the nature of their disappointment, shaping how they view the prospect of engaging in the future.

Citizen Assemblies

Previous research has examined the impacts of citizen assemblies – what they are able to get done and how they influence policy – but little has focused on the experience of residents, although their perspectives are important for judging the future possibility of

promoting productive citizen involvement in climate policy. Past research has largely focused on the democratic consequences of using mini-publics (Lafont 2020, Wells et al. 2021); the proper scope of issues covered by assemblies (Elstub et al. 2021); and, the impact of design on outcome (Boswell et al. 2022; Cherry et al. 2021). This latter body of work concludes that the format, size, mandate, and timescale of deliberative bodies affects their potential impact: factors that are important in the case of Mountain View, which is distinct from other climate assemblies convened at the national level. Further, citizen choices are constrained by the options that they are presented with at the outset of the meeting. As I will explore more thoroughly later on, the ESTF-2 in Mountain View was a discrete assembly given a particular mandate and timeframe in order to conduct their work and provide recommendations to city council. It was therefore more focused and less open-ended than some other endeavors. Also important was the fact that task force members applied to join rather than being randomly selected; this was a self-selected group of passionate citizens who were interested in sustainability and/or city governance enough to volunteer their time to the effort.

Political theorists are especially interested in the prospects for and conditions under which citizen assemblies can benefit democratic practice. For example, Helene Landemore, in her most recent 2020 book, argues in favor of using the "open mini-public" – a randomly selected group charged with making certain types of decisions – to enhance democracy (Landemore, 2020, 13). In contrast, Cristina Lafont expresses concerns that mini-publics can be detrimental to democracy because of the way they separate out a select group of residents to receive the benefits of deliberation, thereby moving further away from the position of the average citizen in the broader society (Lafont 2020). The Mountain View

Task Force is distinct from the mini-publics that these and other theorists engage with because it was made up of residents that applied to be a part of it rather than a random selection. Therefore, this group has no claim to being representative of the wider population, but they still benefit from the opportunity to engage in meaningful deliberation amongst themselves and interaction with the city staff and city councilors. In this paper, I am less concerned with the democratic valence of the task force group as a whole, but rather with how individual participants experience this direct form of involvement with city-level policymaking, and the implications for future engagement.

Popular involvement in climate decision making is important normatively from the perspective of enhancing democracy and resident buy-in to stronger climate policies. When citizens are asked to weigh in on an already-formulated piece of legislation—as in Half Moon Bay's electrification ordinance, discussed in-depth in the previous chapter—they are confronted with an either/or choice that activates cost/benefit calculations: Should I support this ordinance that will have X benefit but require me to do Y? In contrast, when residents are brought in at the early stages of legislating, before a document has been drafted, they are able to activate more creative and truly deliberative modes of engagement. Instead of binary choice, the individuals involved can engage in complex arguments about preferences, priorities, and choices (Landemore 2020, 6). It gives them a chance to shape policies, rather than reject or accept them (8).

But what is specific about the issue of climate change, and how does the nature of the issue itself impact resident involvement? When citizens become disappointed with local government actions or services, they can respond with "apathy, patient endurance, alienation and substitution of private sector consumption for public goods," as well as the

classic options of "exit, voice, and loyalty."[8] But when the citizens who demand actions on climate change do not get their way, their viable options for redress shrink. While private companies can take sustainability actions, they cannot make policies that hold all other actors in the economy to certain standards. When citizen advocates understand that certain climate mitigation can only happen by the hands of a government body, they cannot "substitute" their public-facing advocacy for private work and still be effective in achieving their goal. In some ways, this echoes Taylor (2018)'s finding that citizens will continue to engage in institutions, even when they do not function well, when there is no better option. Further, evidence suggests that deliberative assemblies of citizens are more likely than other decision-making bodies to propose transformative change (Willis, Curato, and Smith 2022) and to bridge scientific and popular discourses (Wells, Haworth, and Brand-Correa 2021).

Diverse Resident Experience in Mountain View

Mountain View is a city that, in many ways, exemplifies challenges that are present or mounting in other areas of the country. It is one of the most diverse areas of California's relatively wealthy Santa Clara County.[9] What makes it distinct is its historical and present relationship to tech companies; it has housed semiconductor companies, Google, Alphabet, and Microsoft. The advent of the tech boom in Mountain View has exacerbated inequality, housing access issues, rent control debates, and mounting carbon emissions from commuters: challenges increasingly facing other parts of California and the United States

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[8] Sharp, Elaine B. "'Exit, Voice, and Loyalty' in the Context of Local Government Problems." *Political Research Quarterly* 37(1), March 1, 1984, 67.
[9] Thida Cornes Interview, March 31, 2022.

as well. Among variables that might affect the political participation of its residents, Mountain View scores quite high; on average, it is a highly educated community with relatively high median income.[10]

Mountain View boasts a mild, Mediterranean climate, with the majority of rain falling in the winter.[11] Temperatures are typically moderate, although climate change has affected both temperatures and precipitation patterns; like elsewhere in the region, Mountain View has become more susceptible to periods of drought and heat. Interviewees told me that climate change came on their radar in a new way when they first felt the effects of wildfire smoke on their air quality.

The city of Mountain View, California has convened two citizen climate task forces (the Mountain View Environmental Sustainability Task Force and the Mountain View Environmental Sustainability Task Force 2: hereafter referred to ask ESTF and ESTF-2). The first occurred in 2008, and the second a decade later. The city decided to convene a second task force in response to the failure of the city to decrease its emissions in line with its targets.[12] In both cases, the city selected citizens who applied to participate in the task forces. Both task forces were tasked with proposing recommendations for the city's environmental sustainability plan, including cost estimates and assessments of the recommendations' impact on the city's greenhouse gas emissions.[13] Each task force concluded with a final report and presentation of the report to the city council, who then

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[10] According to the 2020 U.S. Census, over 72 percent of Mountain View residents have a Bachelor's degree or higher, with a median household income of over $158,000. https://www.census.gov/quickfacts/fact/table/mountainviewcitycalifornia/IPE120221#IPE120221

[11] "Mountain View Climate." *Climate Data*. https://en.climate-data.org/north-america/united-states-of-america/california/mountain-view-1204/

[12] Steve Attinger Presentation, Mountain View City Council, June 26, 2018.

[13] Bruce Karney Email Interview, March 21, 2022.

incorporated their recommendations into the city's climate action plans. The first task force resulted in 89 citizen recommendations for sustainability, while the second highlighted a shorter list of 36, ranked in order or priority.[14]

My research focuses on the most recent ESTF-2, as it provides a more updated assessment of where the city is in terms of climate mitigation. In addition, the second task force is in more recent memory for its members, which makes it easier for them to recall the process and how they experienced the time during and after the task force meetings.

ESTF-2 was made up of 35 selected residents who participated in 17 meetings and 11 public events that involved over 750 city residents.[15] Their final report (318 pages long), outlined 36 recommendations around five thematic areas of sustainability, ranked in order of priority (which was determined by votes by task force members). On June 26, 2018, the city council held its first study session on the ESTF-2 proposals.

I spoke with former members of the ESTF-2 almost four years after the Task Force completed their official work for the city in June 2018. During this meeting, the elected citizen leader of each of the five issue areas presented their findings to the city council. Then, there was public comment and questions from the council. The public comment was incredibly supportive of the task force's work; it was dominated by task force members and highly concerned members of the public. The city councilors echoed this support and emphasized their desire to lead on climate. While there were some questions about cost and feasibility, many councilors expressed a desire to get started and take early action.[16]

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[14] Ibid.

[15] Steve Attinger Presentation, Mountain View City Council, June 26, 2018.

[16] Mountain View City Council, June 26, 2018.

The next step, however, involved turning over the ESTF-2 report to city staff to verify the cost and effectiveness estimates that the residents had outlined in their report. The council met again on December 4, 2018 to discuss the findings of city analysis and chart the way forward. According to the Mountain View city staff findings, the estimated cost of implementing ESTF-2 recommendations would be $82.4 million through 2030, with an estimated five to six additional staff needed to support implementation. City staff supported 21 of the task force's recommendations, would consider supporting 11 (depending on the outcome of further research), and did not support four. The city sustainability manager emphasized that "staff understands the urgency and wants to proceed as efficiently and effectively as possible," and that they want to be "as responsive to the task force as possible." Of the ESTF-2's top 12 recommendations, the only one that the city staff did not support was number five—"solve the local solo-trip problem: Pilot discounted pooled ridesharing"—due to questions about its effectiveness as a climate mitigation measure.[17] The city put forth an early action budget of half a million dollars to support immediate measures, including installing more electric vehicle chargers around the city.[18]

In the almost four years since this evaluation and planning period, some of the proposed solutions have been implemented, but not all. Notably, the city had just hired a full-time chief sustainability officer as I began engaging with former task force members in the spring of 2022, which had been ESTF-2's first priority recommendation. Given this

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[17] Steve Attinger Presentation, Mountain View City Council Meeting, December 4, 2018.

[18] Mark Noack, "City scrambles to salvage sustainability goals," *Mountain View Voice*, January 1, 2019. https://www.mv-voice.com/news/2019/01/01/city-scrambles-to-salvage-sustainability-goals.

same "mixed bag" of results, former members had different emotive responses and interpretations, which came out in individual interviews and survey responses.

In my survey of ESTF-2 members, I was able to collect responses from 18 of the 26 who have shared their contact information.[19] I used the survey to test how participants felt about the process and outcomes of the task force. Survey results suggest that respondents' hopefulness about climate mitigation success in Mountain View is quite middling. The mean response was a firm "neutral," with a maximum level of hopefulness at the level of "pretty hopeful" (no one reported being "very hopeful").

I also used the survey to gauge participants' prior and present engagement with the city and with climate activism, if any. Out of the 18, 16 respondents reported that they remain engaged in advocacy around climate change or environmental issues, while only two do not at this time. The majority continue to work with local NGOs and nonprofits, including Carbon Free Mountain View (the most common convener for former members), 350 Silicon Valley, Fossil Free Buildings Silicon Valley, and Green Streets for Sustainable Communities. Others report attending and making comments at city council meetings and engaging on social media.

12 former ESTF-2 members reported that they continue to engage with the city government of Mountain View, while five said that they do not. I personally know from interviews that four ESTF-2 members have relocated during the Covid-19 pandemic, which explains their lack of continued engagement in Mountain View specifically. Those who report that they still engage with the city do so through attending city council meetings and advocating city councilors. Another member told me that she took "another appointed

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[19] An over 69 percent response rate.

position, literally right after the task force, on the Human Relations Commission….so I've stayed…deeply connected to the city since."[20] One of the former task force members who has since relocated told me that she plans to participate in municipal environmental work in her new city,[21] while others said they would if the opportunity to re-engage with their new cities presented itself.

While the survey response suggests that the majority of former participants continue to work in the city, and even more continue to work on climate issues, I needed to triangulate these findings with more fine-grained information from interviews in order to trace personal histories of how participants came to the task force, how they experienced it, and then what they've continued to do since.

The Different Flavors of Disappointment

The participants in the Mountain View ESTF-2 share passion for environmentalism or sustainability and a willingness to devote time to address these issues in their community, but they come from different backgrounds and had various reasons for joining the effort. Like with any group of people, the meaning they give to the experience and the stories they tell are diverse and complex. From this diversity, this paper draws out trends, identifying how members' prior experience with the city government informed their reading of the task force's impact. I highlight the experiences of 14 Mountain View residents who responded to request for interview: 11 members of ESTF-2, two city councilors at the time of ESTF-2, and one member of city staff. These individuals offer a range of experience with the task force from various vantage points and backgrounds: from the parent who got

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[20] IdaRose Sylvester Interview, April 11, 2022.
[21] Marna Schwartz Interview, July 13, 2022.

involved in the environment through playground safety, to the graduate student in sustainability hoping to put their studies into action. After conducting each interview, I transcribed the interview and used open coding techniques to trace each interview along the trajectory of their prior experience, their reason for joining the task force, their experience with the task force, and, finally, whether they continue to engage with climate at the city level.[22]

Through the interviews and open coding process, I identified three important axes of difference between the task force members: their prior involvement in city-level activism, their response to the task force and its outcomes, and their level of engagement after the task force. These axes intersect in important ways; I traced the dynamics over time for each individual participant and was able to group them into three distinct trajectories.

Citizen-Advocates

The first subset of ESTF-2 members I want to highlight are those I would categorize as established "citizen-advocates." While critical of some aspects of the process, these members had prior experience with city-level work and were therefore less surprised about setbacks and shortcomings they experienced; this contributed to a flavor of disappointment that was mediated by hope for future action and a strategy to keep pursuing climate action

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[22] Interview questions included:
1) Why did you join the Task Force?
2) How were you involved in climate issues prior?
3) How did you feel about the Task Force experience and its outcomes?
4) What was your perception of your role on the Task Force? (What did you think the city was calling on you to do?)
5) Where do you place blame for the failures of the Task Force (if any)?
6) How have you remained active in city government and/or in climate issues in the four years since?

through city channels. This trend is of course related to their expectations of the process; because their expectations were shaped by comparable experiences working with the city government in the past, they understood the challenges and opportunities present in the task force to a greater extent than the newcomers. All citizen-advocates who I interviewed and surveyed continue to engage with climate activism at the city level because of expectation of future responsiveness; overall, while many advocates have been disappointed in the pace of progress, they still find the city to be *responsive* and therefore have hope for future engagement. One task force member explained: "all the ideas [we] put forward [were] received as intended. There was no vehement opposition from the city for the ideas, but obviously the priority of implementation and what would happen was different."[23] Another anonymous survey respondent in this group wrote: "Council is open and interested in doing the right thing based on the task force input."[24]

One example of a citizen-advocate is Thida Cornes, a Mountain View resident who first became involved in the Parks and Recreation Department of the city after a personal experience with playground safety concerns; this experience led to more opportunities to learn about city sustainability activities. She joined the ESTF-2 after building engagement with the city around environmental and sustainability concerns. With this level of prior exposure to city activities, she concluded from the results of ESTF-2: "I just feel in general, the city is looking at the recommendations and is moving at the speed that cities do…it went more slowly than we would have liked…but I guess there are a lot of pressures on city council."[25] Here, we see disappointment paired with understanding of the process,

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[23] ESTF-2 Member Interview, July 21, 2022.
[24] Anonymous survey response.
[25] Thida Cornes Interview, March 31, 2022.

which helps Thida avoid long-term hopelessness that could lead to disengagement. In fact, Thida continued her community work by running for school board in 2022. Even though the citizen advocates were some of those who displayed the most disappointment in the outcomes or process of the task force, they were less likely to disengage than the new participants.

Bruce Karney was another regular member of the environmental scene in Mountain View; in 2007, when solar panels were a relative rarity, Karney organized a group buying collaborative for purchasing home panels. This successful effort bolstered his continued involvement in environmental action. He also, vitally, took part in the first ESTF in 2008. When it came to the second task force, he admitted that "the process was a little more convoluted than the members of the task force were hoping for." While some of his task force fellows considered the fact that the city hired a consultant to verify their findings an insult to the group's hard work, Karney noted "the wonderful outcome" that the consultant verified the need for dedicated sustainability staffers, ultimately leading to the city hiring on a full-time paid employee.[26] Karney is now on the board of Carbon Free Mountain View and continues to collaborate with colleagues from the Mountain View task force and from other cities towards lowering the region's greenhouse gas emissions. Here, we can see illustrated the significance of getting residents involved in the "long game" of climate policy development and implementation: successful interactions can lead to continued engagement, while disappointing outcomes can dissuade newcomers.

New Participants

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[26] Bruce Karney Interview, February 21, 2022.

The second distinct group of individuals were "new participants": those who did not work as city-level advocates prior to ESTF-2. New participants told me that they had little or no experience with political activity; that they joined the task force because it "sounded like something important"; that they wanted to meet their neighbors and foster community connections; or, that they saw this as an opportunity to build off of their personal sustainability practices. This group went in two directions: most felt pride and contentment with the experience of the ESTF-2, but some others were so frustrated that they refrained from similar commitments in the future. I find that after the conclusion of the task force, this group has returned to being inactive in city-level activism: there were no participants for whom the task force changed them from inactive on city climate issues to active. One such individual reported in the survey that, "I am in something of a holding pattern right now, trying to figure out how to re-engage, thinking of solutions that can at least partially bypass city processes."[27] This group of residents is demographically diverse; it includes a younger, recent graduate wanting to put their academic study of sustainability policy to action, as well as some long-term residents who see it as a way to get involved in a new way.

IdaRose Sylvester is one resident who had "kind of given up activism" until the political turmoil of the recent years prompted her to "become extremely involved in a whole bunch of political causes."[28] She was in general, then, open to increasing her civic involvement. Sustainability was one concern, which led her to join the task force when it was advertised. After putting in the time and energy to lead the ESTF-2's outreach team, IdaRose experienced "a multi-year disappointment, as these things sort of got turned into

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[27] Anonymous survey response.
[28] IdaRose Sylvester Interview, April 11, 2022.

council actions…they slowly talked about them, they slowly have study sessions on them, they slowly start to plan for some of them and then some I felt like just get completely forgotten."[29] Here, we see a former participant articulate long-term disappointment that has caused her to conclude that, if the city were to convene it, she would not participate in an ESTF-3.

Another member of ESTF-2 told me that she applied to be on the task force because of her relevant professional experience as an environmental engineer and experience doing small-scale sustainability activities through work and school. In contrast to IdaRose, this resident had a "great experience" on the task force and especially enjoyed the opportunity to network with other "dedicated people" and spend time with her neighbors; regardless of the outcome, she enjoyed the process of being a part of ESTF-2. Yet, after the task force, she retreated back to individual and professional sustainability work—"the little actions," such as "eliminating single use plastic at home and composting"—rather than getting involved in more organized follow-up activities to the task force.[30] This member's positive reaction rests on an interpretation of the process rather than the outcome. Even though her experience was generally a positive one, as documented in our interview, she returned to similar types of environmental engagement as she had carried out prior to the task force.

Marna Schwartz was another new participant who had a long interest in sustainability and "mitigating the effects of climate change as much as possible." She heard about the task force because she was working in Mountain View at the time and recalls, "I remember it just sounded like something important, that it was a good idea." Once she was in the task force and part of the outreach team, she wished that she saw more diversity at

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[29] Ibid.
[30] ESTF-2 Member Interview, July 21, 2022.

their events, but still enjoyed engaging with the community and found the "breath of ideas" brought up by community members "inspiring." But on working with the city, she was less positive: "The amount of bureaucracy and tape maneuvering is not conducive to the transformational process that is warranted at this time." Schwartz has since moved away from Mountain View and has not had the bandwidth to engage in municipal activities since; although she still considers environmental issues paramount, she has not yet reengaged with them in an organized manner.[31]

Both the seasoned citizen-advocates and the new participants witnessed first-hand the slowness, bureaucracy, and red tape involved in city government work to burden their progress; however, their prior experience (or lack thereof) with working at the city scale influenced their interpretation of red tape. Expectations, therefore, shape the "flavor of disappointment'' that each group participants experience, rendering disappointment either mobilizing (for citizen-advocates) or demobilizing (for newcomers).

In my study of former ESTF-2 participants, I found that the experience of participating in the task force did not drastically alter their future trajectory; those who were previously engaged in citizen-activism remained so, while those who had focused on individual efforts continued to do so. We cannot observe the counterfactual—whether new participants who do not experience the shortcomings of the city process would have become life-long activists; however, I was able to trace through qualitative interviews how newcomers entered the experience with hope and passion and then retreated to individual action.

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[31] Marna Schwartz Interview, July 13, 2022.

The importance of continued community engagement around climate is evidenced by the impact of sharing information in Mountain View, where personal sustainability actions can advance community-level change when they are organized. Connections through an institution like the task force or follow-on groups like Carbon Free Mountain View are helpful – if not necessary – conduits for information-sharing and impact-amplification amongst climate-conscious residents. Hala Alshahwany, a longtime Mountain View resident, remodeled to have an electrically powered home due to her personal commitment to environmentalism, and they were "remodeling anyway." She told me that she hosted an open house for task force members and city councilors to visit to learn about the practicality of home electrification. According to Alshahwany, "neighbors and friends actually converted after seeing our example."[32] Like Karney's solar power work prior, home electrification is gaining ground in Mountain View due to the relatively high level of human capital and attention paid to climate change.

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[32] Hala Alshahwany Interview, April 21, 2022.

Figure 1:

Cohort	Reason for Joining	"Flavor of Disappointment"	Outcome after Task Force
Citizen-Advocates	History of involvement in city action on climate/sustainability	Disappointment mediated by prior experience and expectations	Continued work on city-level sustainability/climate objectives
New Participants	General interest in quality of life or political causes	Disappointment in feeling unheard or not listened to; unmet expectations	Avoiding participating in similar city-led efforts
	Personal or professional interest in sustainability	Contentment, feelings of camaraderie or increased ties with neighbors/community	Individual-level sustainability actions

Interpreting Democratic Possibilities for Climate Action

The Mountain View Environmental Sustainability Task Force is one of the few early examples in the United States of convening a group of residents with the express mandate of determining climate priorities for the city. But, on a broader level, it is an attempt to harness the democratic power of deliberation and the diversity and depth of resident skills and experience towards informing public policy.

The case of the Mountain View ESTF-2 exposes some inherent challenges of dealing with climate change through democratic channels. Many of the members explain the failure of the task force to enact all of its goals—or the slow pace of implementation— as reflecting the shortcomings of democratic bureaucracy in the context of U.S. city government. Despite the hard work and expertise of dedicated Mountain View residents, they failed to get all their priorities enacted, and many of them blame issues baked into the

system. In many ways, Mountain View is a city that is well-positioned to act on climate change due to high levels of human capital, financial resources, and technological resources. But the perspectives of those who had not had prior experience with the city are particularly damning in regards to city performance. "Even when we know that's what the community wants, what needs to be done so that the governments act the way the public demands—you know, not just science—but the public demands? Where is the disconnect and why do communities move so slow?"[33] IdaRose Sylvester, one of the leaders of outreach during ESTF-2, expressed great disappointment in this failure to translate community will to government action. In her case, disappointment takes the shape of unresolved and long-harbored frustration.

While some task force members, like Sylvester quoted above, were distressed by the barriers between citizens and city policy, those with more prior exposure to the workings of city government explained the slowness and disconnect as part and parcel of the process and were therefore less concerned. Her fellow task force member said, "I mean, that's how democratic systems work. Things are slow and city staff has to do a lot of research and refine, you know, recommendations and so forth."[34] The former mayor echoes this sentiment: "in a city like Mountain View, it's true for housing as well as climate activity, you just run into bureaucracy."[35] Councilmember Showalter corroborates that all city issues, no matter how pressing or important, require a certain amount of planning and bureaucratic process. In reference to sea level rise planning initiatives, she said,

> "It's not that everybody doesn't want to do it, but it's like 'Okay, well, what's the governance issue going to be? Who's going to staff it? Because…even if you have

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[33] IdaRose Sylvester Interview, April 11, 2022.
[34] Hala Alshahwany Interview, April 21, 2022.
[35] Lenny Siegel Interview, April 11, 2022.

a very modest agenda on things like this, you've got to have somebody schedule it, you've got to have somebody staff it, somebody has to write up the minutes. I mean, it's just all this stuff."[36]

The reality of city government is that there is process and bureaucracy—"all this stuff"—regardless of whether the issue is new fencing or a seawall to protect against sea level rise; the color of the new civic center or the sustainable building requirements. This case presents the characteristics of an oft cited and perhaps insurmountable tension between democracy and bureaucracy: increasing inclusion of citizens into the policymaking process slows it down and makes it less efficient (Buckwalter 2014).

The frustration of activists in Mountain View who fail to advance their complete climate agenda despite overarching support from the general public echoes other studies that show that public opinion does not lead seamlessly to policymaking. Kinnunen (2021) undertook a study of national-level, parliamentary energy and climate policy in Finland. They find weak congruence, and even opposed decisions, between public opinion and policy outcomes, suggesting "that not even strong support from citizens on specific and concrete policy measures guaranteed the implementation of these measures."[37] Possible explanations for this gap include the number of competing interests in the energy space, the political/economic inertia involved in energy decisions, and the low electoral priority of energy. Residents are not lobbyists, and their opinions—especially presented in aggregate via survey—might be less likely to influence policymaker choices. Kinnunen hypothesizes that "as the main role of politicians is to promote the interests of their own

[36] Pat Showalter Interview, April 13, 2022.
[37] Kinnunen, Markku. "Weak congruence between public opinion and policy outcome in energy and climate policy – Is there something wrong with Finnish democracy?" *Energy Research & Social Science* 79, September 2021, 10.

stakeholders [strong partisans, organized interests, or corporate supporters], it may be that they already have a strong personal opinion on the outcome of the process before the formal decision-making process."[38]

Other scholars have echoed these findings in the American context. Gilens and Page (2014), for example, conclude that "mass-based interest groups and average citizens have little or no independent influence" on government policy in their large-N statistical study of how different groups shape federal government decisions. We cannot rely on broad public support for climate mitigation to move the needle; even when such support exists, there is momentum within the political economy and within the strategic calculations of decision-makers themselves that makes them unlikely to be strongly swayed by aggregated survey results on energy and climate issues. This is an important finding to keep in mind when exploring the possibilities for climate mitigation action in different contexts. Instead of relying on broad support, institutions like the ESTF in Mountain View leverage the passion and commitment of a small group of residents to inform city policy.

A Note on Working at the City Scale

For the cohort of citizen-advocates, why did they continue to engage with climate work at the city scale, rather than devote their energies to the state, federal, or international levels, or withdraw from public action completely to the realm of private social movement work? The answer has to do with the motivating question of this dissertation: In what spaces can we move climate work forward in the context of stalled action in higher levels of government?

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[38] Ibid., 13.

According to former members of the task force, they continue to work at the city scale because it is actionable, effective, and visible in their everyday lives. One member of the ESTF-2 told me that she focuses on sustainability work in the city where she resides and the company where she works because there are accessible avenues for her involvement. She does not focus her energies on the state or national level because "I do not have the access or I do not have an opportunity to do that."[39] Another interviewee emphasized that local climate work is "tangible," "rewarding," and "it just feels like you could get something done."[40] Former task force members acknowledge the efficacy of working at the city scale, especially in contrast to national-level movements. Another interviewee compared the possibilities for municipal action to the vacuum in environmental action during the Trump Administration; when the President withdrew from the Paris Accord, "municipalities stepped forward and said, 'Well, we're entering the Paris Agreement.'"[41] Cities retain room for maneuver despite any political stalemates at the federal level, especially when they're cities that are home to the level of climate support we find in Mountain View.

Interviewees emphasized that working with the city made them feel closer to their neighbors and to their local elected officials. One member of the ESTF-2 outreach team told me that the most inspiring and impactful part of the process was gaining community input. She told me, "Even if you have a book of all the answers already….[you would miss] the crucible of collecting the ideas from the community, [which] creates a sense of ownership within the community that you can't falsify."[42] Here, we see some evidence that

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[39] ESTF-2 Member Interview, July 21, 2022.
[40] ESTF-1 and -2 Member Interview, July 21, 2022.
[41] Marna Schwartz Interview, July 13, 2022.
[42] Ibid.

city-level action feels more accessible and hopeful than at other scales from the point of view of citizen activists. The task force was able to balance using the technical and scientific expertise of its members with opportunities for broader community input and engagement. There is also evidence of closer community between activists and city councilors. A former member of the first task force who continues city-level climate work told me, "It's not like Congress. You know the people on city council; we absolutely know which of them are stronger advocates, but it's not always obvious."[43] He continued to recount how, unlike in federal-level politics, city councilors act less predictably and are more open to new ideas and willing to make compromises for progress. "I haven't seen anybody on the current council who has been sort of a stick in the mud or has gotten in the way of anything."[44]

Another reason for working at the city scale, at least in Mountain View, is that members of the ESTF-2 reported positive experiences working with city staff in particular. In the survey, I asked respondents to rate how supportive various groups were of the task force's recommendations. Respondents suggested that both the broader public and the city staff were quite supportive, with the city council slightly less so.

[43] Bruce England Interview, August 17, 2022.
[44] Ibid.

Figure 2:

How supportive were the following groups of the task force's recommendations?
(1 being the least supportive, 5 being the most supportive)

	Minimum	Maximum	Mean	Std Deviation	N
The Public	2	5	3.88	0.76	17
City Council	2	5	3.67	0.88	18
City Staff	2	5	**3.94**	0.91	18

One task force member in particular stood out for his insistence of the urgency of climate mitigation and his frustration in the slowness of governmental responses. Even so, he has remained involved in the fight for local climate action since about 2006 through leadership in ESTF-1, ESTF-2, Carbon Free Mountain View, and other organizations. He told me about one particularly salient memory of a co-worker who asked how anything can be done in relation to the behemoth of climate change. Mr. Karney responded, "That *is* the question: if you want to prevent climate calamity, how are you going to do that? And the ESTF-2 report is essentially an attempt to answer that at the level of one city."[45] In a pragmatic approach, Karney utilizes and builds on his relationships with city council and city staff to build advocacy networks. And, he uses the fundamental challenge of city council work: although there are about 80,000 people in Mountain View, "most of the time [councilors] hear from five or 10 or 15 people." While acknowledging that this small group is never an accurate microcosm of the larger community, Karney says, "you use it"-- you

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[45] Bruce Karney Interview, March 24, 2022.

use the limitations of the format to your advantage by organizing climate interests to turn out and dominate the public comment sessions.[46] Karney believes in getting things done where and when you can, bringing a terrifyingly large issue like climate change down to an actionable scale.

Lessons Learned from the Case of Mountain View

There are some factors in the Mountain View case that may not have broad applicability outside of relatively affluent and educated population centers in the United States (for example, the residents who elected to participate were able to do so because their financial or professional flexibility allowed them to take on a significant volunteer task, and, they had access to residents with specialized training in technology, engineering, etc). However, my study of the environmental sustainability task forces suggests some lessons for wider application. These findings are particularly important due to the documented challenges to fostering broad-based public support for climate policy, as well as the increased usage of task forces and assemblies as a method to foster stronger action.

First, one cannot overstate the importance of a small group of passionate and dedicated residents for advancing climate action. According to one member of both task forces held in 2008 and 2017, and who continues his work under the auspices of Carbon Free Mountain View, "that's one of our strengths is that…we're focused on facts and actually move things effectively. Whereas trying to outreach to the 80,000 people in Mountain View is not easy. And, behavior change is not easy."[47] In his experience, it pays to focus on organizing a small group of passionate individuals to lobby city council to

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[46] Ibid.
[47] Interview with former ESTF-1 and -2 Member, July 21, 2022.

change their ordinance, rather than trying to communicate the benefits of behavior change to the entire city population. The results have been astounding. Today, Mountain View uses "100% carbon free energy" because community choice energy (one of the efforts of task force members) has allowed them to decarbonize the grid.[48] Especially considering how this matches up with prior academic findings about the shortcomings of broad support for environmental action (Gilens and Page 2014, Kinnunen 2021), this should direct our attention towards understanding how *smaller and more focused* groups can work strategically to enact strong policy. Yet, this has important implications for democratic politics; political philosophers have pointed to the ways that using micro-deliberation can exacerbate divides between participants and the broader public, leading to decisions that do not have democratic accountability (Lafont 2020). In this way, it is important to understand whether moments of citizen engagement in government-convened mini-publics can lead to longer-term engagement, which I find no evidence of in the case of the Environmental Sustainability Task Force in Mountain View. Broad and sustained participation is important from a democratic perspective, and it is something that task forces fail to initiate. In Mountain View, I found that those who continue to engage in city-level climate action after the task force were those that had a history of activism already; climate action, therefore, remains in the realm of a small group of citizen-advocates.

On a more positive note, time-bounded, resident-led climate groups can act with a certain level of urgency and nimbleness that other types of elected officials and bodies cannot. Bruce Karney, a former member of both ESTF and ESTF-2 and current board member of Carbon Free Mountain View, told me that "many of the medium-to-large cities

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[48] Ibid.

in the Bay Area, and some of the smaller ones, have Environmental Committees or Commissions that are formal, permanent bodies."[49] Notably, these permanent committees host a smaller number of residents, usually 5-7, and suffer from low meeting attendance. Karney pointed to their lack of deliberative potential; he told me, "They exhibit little urgency toward achieving anything important and the Commission's primary real purpose is to allow the Environmental Staffer (there is usually only one) to tick the box that says they have solicited public feedback."[50] Comparing the Environmental Sustainability Task Forces in Mountain View to other permanent environmental commissions in the region, Karney told me,

> "We were intent on doing big work in a hurry. We knew we weren't permanent, so, we just had a different sense of the pace. And we were much more in control of our own process and agenda. We literally made up the process, we made up the schedule and frequency of our meetings, and we met far more frequently than any other environmental commission does; they typically meet once a month for an hour and a half or two hours. We were meeting many times a month and often the meetings were four or five hours long. There was homework, there were subcommittees…so, it's just, it was more intense."[51]

While permanent environmental commissions maintain a charter that may lose its relevance overtime,[52] task forces are convened for a particular reason for a discrete amount of time, which can offer advantages in achieving concrete goals, like establishing a city climate action plan.

At first glance, part of what makes the ESTF-2 process potentially inaccessible to other populations was its intensity and the level of commitment it required of its members.

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[49] Bruce Karney Interview, March 21, 2022.
[50] Ibid.
[51] Bruce Karney Interview, March 24, 2022.
[52] Tom Kabat Interview, August 17, 2022. See, for example, Menlo Parks' Environmental Quality Commission charter, whose official charter has maintained a focus on trees, despite the current members' priorities on climate mitigation.

However, the process also revealed that "normal people" might be more interested in participating than one might suppose. Of course, the ESTF-2 application process was competitive, and not everyone who applied to join the effort was accepted by the city. But also, the public consultation process suggested broad support for the effort beyond those admitted. According to a member of the outreach team, everyone who showed up for the public events was engaged, asking "How do I reduce my footprint? How do I minimize plastic use?"[53] People want to know what they can do to help; they want to feel effective. So, when you have a passionate and dedicated group researching how the rest of the population can exercise efficacy, you can create change that empowers everyone in the community.

The leeway and the support that the city gave to the ESTF-2 also served to empower the members. This position activated members as "citizen experts" to the extent that some reported feeling disappointed or even insulted when the city brought in a consultant to verify their findings.[54] Instead of the model that prevails in most cities whereby climate activists lobby the city for legislative action, Mountain View reached out to resident advocates and experts to share their thoughts—making a claim on their citizens, rather than the other way around. *There was more trust in the city taking their recommendations seriously because they had been specifically recruited for this role*. In essence, the city of Mountain View let itself be led and advised by the most passionate and informed members of their community, resulting in some of the strongest climate mitigation practices in the

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[53] Interview with former ESTF-1 Member, July 21, 2022.
[54] This echoes findings from other citizen climate assemblies, where participants express disappointment in not having more control over their agenda. See the case of the French Citizen Assembly for Climate: https://grist.org/international/citizens-assembly-convention-climate-france-macron/.

country. The city pre-expressed its desire to enact climate policies by convening the task forces in the first place. This model differs from both the activists making claims model and the model of most citizen climate assemblies. Unlike in citizen climate assemblies—which have been popularized by cities in the United Kingdom especially in recent years—Mountain View relied on the most informed and passionate residents, rather than a random selection, and gave them a great deal of control over the process: allowing them to literally set the agenda and "grapple with the hard issues of what could a city do that makes a difference?"[55] This made it a cheaper and less labor intensive venture for the city government. But, it still did not convert new participants into long-term city partners.

One major shortcoming I identify in my study of the environmental task force – and which forms the crux of my argument – is that such engagements fail to spark long-term participation amongst members. While climate task forces like this one are able to channel the dedication and willingness of involved citizens, they may not be able to generate new, bigger groups of such residents. There is a concern, therefore, that they can reinforce inequalities in access to decision making by buttressing engagement amongst those who already engage, who are already "joiners" on city sustainability processes. Citizen-advocates who were engaged in city climate advocacy prior to the task force find new avenues for continued engagement after, but the task force fails to convert the less participatory residents into active climate champions. This latter group cites frustration with city bureaucracy and non-responsiveness as an insurmountable barrier preventing them from further engagement, which causes them to retreat back to individual- and

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[55] Bruce Karney Interview, February 21, 2022.

household-level action. Of course, these findings could be bolstered through future study of additional cases of city-level task forces.

In order to build and improve on this institution in other cities, it would be beneficial to remove some of the barriers to participation that we saw in Mountain View (long meetings, "homework," unpaid labor) by paying resident members of city environmental task forces or enacting paid time off policies for those who volunteer. In the context of capitalism and time and resource scarcity, it is essential to compensate citizen experts for their time. It is important to note how citizen groups like the Environmental Sustainability Task Force can replicate and reinforce existing inequalities in the wider community, and to study how payment and innovative recruitment strategies could mitigate this. A couple interviewees in particular mentioned issues of misogyny within the groups and concerns that the voices of women, Spanish-speaking residents, and non-white community members were not being heard. This is a problem not just with the ESTF-2, but with many forms of civic engagement broadly. If we are to decrease inequality in environmental decision-making, more needs to be done in Mountain View and beyond to make the process more genuinely inclusive. Resident retreat from the climate fight is often caused by feelings of inefficacy and being ignored; my findings conclude that new participants that have a negative experience with the process and the outcomes will withdraw from action in the future. The path to becoming a citizen-advocate has to start somewhere, and we are more likely to foster these types of residents through inclusive, genuine partnerships with city officials, where residents feel listened to and respected for their time and contributions.

Chapter 3:

Making Progress Through Disagreement:
Meeting Residents Where They Are on Climate Change[1]

Abstract

While it is clear that Americans don't agree about climate change—its existence, severity, or what must be done to address it—how to overcome this disagreement remains a topic of scholarly debate. In the realm of climate communications, researchers warn that messaging must address the challenges of communicating scientific information to lay audiences, the uncertainty inherent in scientific predictions, the growing impact of partisan divides, and the massive scale of climate change in order to be effective at mobilizing a large population to action (Nisbet 2009, Sandstrom 2011). Such work focuses on "top-down" communication of what the scientific reality of climate change requires of citizens: essentially, how to get them in line with what needs to happen to prevent catastrophic warming. But this literature ignores the importance of bottom-up engagement and communication that reflects the local lived realities of climate change.

In this chapter, I focus on a third group of actors, "professional" activists and advocates, to develop a theory of how non-governmental (NGOs) and community-based climate organizations (CBOs) make progress on climate action by facilitating two-way dialogue between citizens and policymakers. Environmental organizations in the Bay Area of California act as translators to both communicate the benefits of climate action to communities, like the residents I cover in chapter 2, *and* express community environmental priorities to government officials, including city councilors (chapter 1). I argue that, instead of focusing on achieving climate consensus, these effective organizations rely on frames and narratives around the local experience of environmental disruption to spur communities and policymakers to action.

Introduction

Climate change is one of the most pressing issues of our time. As such, a vast array of organizations has cropped up in the past decades to address different aspects of the issue, including climate change mitigation, adaptation, and justice, and environmental conservation and natural resource management. This multifaceted ecosystem includes organizations operating from the level of neighborhood or town, region, state, country, up to groups like the United Nations that set international climate guidelines and goals.

As I discussed in the introductory chapter, large, national-level surveys presenting aggregate public opinion data suggest that a lot of Americans are disengaged from climate issues. But as my preceding chapters have shown, there is significant engagement if we look in the right places. People care and do act – but perhaps in ways that are not captured in aggregated poll results. This chapter therefore asks what might explain this gap between perceived apathy in climate public opinion data and evidence of *local* climate action. I argue that locally embedded climate activists play an intermediary role in translating information and ideas about climate, both from the top-down (technical and scientific expertise to local communities) and from the bottom-up (lived realities of citizens up to policymakers). This two-way communication is key in facilitating local climate action among both policymakers and residents. The NGOs and CBOs that I highlight in this chapter are more effective at generating community and sustaining climate action than the time-bounded citizen task force discussed in chapter 2; we need to support engagement with existing organizations that service communities.

For the purposes of this dissertation, I define a local climate organization as one that 1) deals with climate change as a pillar or intersectional issue core to their work, and

2) operates in and for a specified, sub-national constituency. Organizations on the ground use different language to frame the focus of action, often not using "global warming" or "climate change" to mobilize citizens, but events with more local resonance, including flooding, sea level rise, extreme heat, canopy coverage, conservation, housing scarcity, and instances of climate injustice. Concerned and engaged citizens and activists are working in their neighborhoods, cities, regions, and states to translate between communities and policymakers. Not all actors involved in the climate change fight speak the same language or use the same frames or strategies; however, it is this diversity that lends the most hope in being able to engage the diverse populations that make up the American landscape.

In this chapter, I build a theory of how climate organizations act as translators between citizens and policymakers, fostering both "top-down" communication of science to people and "bottom-up" local experience to government officials. Scholars often miss their vital climate action because it does not always look or sound as they expect. Rather than using the technocratic language of Climate Change,[2] non-governmental organizations at various levels are fluent in localized manifestations of the global challenge. I seek to document *how* climate activists and organizations do their work and how they conceive of their role. I argue that Climate actors operating on different scales are able to meet residents where they are and provide avenues for action that make the most sense to them.

I will first outline existing literature on organized issue mobilization, including theories of mobilization and issue framing. Then, I engage in a discussion of the research methods I use to gain a foothold on the role of local organizations in fostering climate action and understanding. What follows is documentation of my findings: I analyze my

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[2] I use the capitalized term "Climate Change" to refer to the large-scale phenomenon—dealt with by the likes of the IPCC—rather than the local experience of environmental disruption.

interview data to document how organizations engage in productive multi-directional climate communications to speak to different constituent groups "in their own language" of interests. Finally, I present caveats and conclusions about framings and types of organization activity that cut off climate change from intersectional issues and opportunities for growing the cause.

The Puzzle: Challenges of Climate Mobilization

There are particular challenges to organizing activity around climate change, including great variance in how the phenomenon is experienced and understood by differently situated actors. Social science and public opinion research in the United States and abroad shows that citizen understanding and experience of climate change differs widely across populations based on proximity to climate change effects (Zanocco et al. 2018; Demski et al. 2017; Broomell, Budescu, and Por 2015; Yusuf, St. John, and Ash 2014); partisan identification (Benegal and Scruggs 2018; Bolsen and Druckman 2018; Boudet et al. 2020); exposure to media frames about the issue (Kinder 1998; Olausson 2009; Ross and Rivers 2019; Lück et al. 2016); and, socioeconomic status and inequality (MacLean 2019; Ballew et al. 2020). With this wide range of experience across communities and individuals, it makes sense that citizens require different framings and options in order to engage in the issue. This is where climate organizations operating at various scales step in.

Yet, scholars point out that many forms of climate communication have so far failed to mobilize mass support. "Traditional frames" have been focused on communicating climate science to increase Americans' understanding of "the problem's technical nature," under the assumption that action will follow from education (Nisbet 2009). Using text

analysis of organizational press releases, Wetts (2020) finds that technocratic, elite-oriented, and post-political framings about climate change predominate across all types of organizations in the American context. But, information on climate change based in scientific language can alienate non-experts (Moser and Berzonsky 2014). Framings that rely on images of catastrophe and apocalypse create fear and demobilization brought on by the idea that "we're doomed no matter what we do." Another unhelpful narrative around climate change is that of uncertainty, that we cannot know "for sure" how our actions might impact the future; this holds people back from taking urgent action in the present (Morton et al. 2011). On the other hand, narratives that paint climate change as post-political, or beyond debate, close off opportunities for deliberation, new ideas, and alternatives to the status quo (Pepermans and Maeseele 2014). Narratives based on scientific or political consensus foreclose options for citizen engagement and input, relegating climate change to the realm of the policy and scientific elite.

The latest IPCC report on climate change serves as an example of a technocratic, top-down approach to climate communications. A press release on the ongoing Sixth Assessment Report declares: "The report provides new estimates of the chances of crossing the global warming level of 1.5 degrees C in the next decades, and finds that unless there are immediate and large-scale reductions in greenhouse gas emissions, limited warming to 1.5 degrees C or even 2 degrees C will be beyond reach."[3] In this simple summary, we see a reliance on disembodied warming as *the* benchmark with which to anchor and witness climate change. This global averaged temperature of course obscures huge diversity in how the warming will be experienced across the globe, not to mention the socially-generated

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[3] "Climate change widespread, rapid, and intensifying – IPCC." August 9, 2021.
https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/

factors that affect different populations' vulnerability to such warming. On top of the flattening of human experience, there is a measure of alarm meant to spur action. The idea of targets being potentially "beyond reach" without "immediate and large-scale reductions" offers no path forward for the concerned individual or small community, for whom enacting "large-scale" action is impossible. Such communications can generate frustration and despondency. Of course, perhaps the best intended audience for IPCC reports is high-level policymakers such as those who engage in international agreements like the COP: actors like U.S. government representatives who have a chance of actually affecting large-scale change. But, the widespread publication and almost myopic focus on the IPCC in media spreads this technocratic, fear-oriented communication beyond those who can benefit from and act on its pronouncements.

There is, in sum, disagreement about how best to engage people in climate action – but growing evidence that current approaches focused on aggregated, global data and technocratic communication of climate science, is failing. Some scholars, in response, propose the need to emphasize narratives about *local* experiences of environmental change, which are more attentive to differentiated experience and equity concerns (Hulme 2010; Swyngedouw 2010; Adger et al. 2011; Smucker et al. 2015). Climate change is not just an indisputable scientific reality but is refracted through the lens of culture -- how we think about climate change and its impacts is shaped by contextual conflicts and divisions existing within society (Hulme 2010). It is this attention to the particular that drives me to drill down to the regional level in order to trace the interactions between professional activists, residents, and government officials.

A key, but to date underexplored, theme in this emerging body of work is the central role for local-level activists and organizers to act as *translators* of climate change. However, the majority of the existing literature on environmental issue framing misses the iterative interactions between organizations, citizens, and policymakers, instead focusing on uni-directional frames originating from one particular type of actor (the scientist or the state). In what follows, I argue that local climate action rests upon effective two-way communication, not just from the scientist or state to the community, but from local residents to activists, and from activists to the state.

Theory

In the classic text *Power in Movement*, Sidney Tarrow explains that social movements play an important role in framing events for the public in order to mobilize people (Tarrow 1994). The literature on social movements suggests that locally-resonance frames are essential for sparking action (Snow et al. 1986). Frames contain two elements: factual information about an issue, and critically, valenced interpretation that offers support for a particular side or conclusion.[4] Successful frames resonate with potential constituents: they solve problems that the community recognizes and prioritizes.[5] They may also reflect narratives that already exist and circulate within that community.[6] Doug McAdam also suggests that the emotional resonance of frames matter. Social movements organized around an issue will have difficulty gaining traction unless they build on multiple emotive

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[4] Nelson, Thomas E. "Issue Framing," in *The Oxford Handbook of American Public Opinion and the Media* (Oxford: Oxford University Press, 2011), 189.

[5] Snow, David A. et al. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review*. 51, No.4, (August 1986): 477.

[6] Autesserre, Severine. "Dangerous Tales: Dominant Narratives on the Congo and their Unintended Consequences." *African Affairs* 111 no. 443 (February 2012): 207.

pathways, including fear, anger, and, vitally, hope. According to McAdam, too much reliance on fear as motivation can de-mobilize people, preventing them from gaining wide support.[7] Moving beyond the classic social movement literature, I look at everyday actions and quotidian operations of local NGOs and CBOs to see how these theories play out on the ground as organizations navigate the complexity of environmental change and how it intersects with other local issues.

More recent literature shows us how NGOs, as organizations, also engage in framing issues to attract attention towards certain causes, often in ways that seek to mobilize more "everyday" forms of action. In the words of Merry and Levitt (2017), non-governmental organizations "vernacularize" globalized problems (in their case, human rights) via "translation within context."[8] They bridge the "universalism" of the globalized discourse around an issue and the "relativism" of local experiences, values, and belief. In Merry and Levitt's study of women's rights NGOs in India, China, Peru, and the United States, they find that the NGOs "may make little reference to human rights in [their] day-to-day work," instead preferring frames with more resonance in their "countries and settings."[9] While NGOs deploy "human rights" language strategically with donors and international organizations to advance their cause, in their local work, they tend to focus on more specific issues such as violence against women, reproductive rights, or lesbian rights.[10] In this way, NGOs situated in particular settings play an important role in re-

[7] McAdam, Doug, "South Movement Theory and the Prospects for Climate Change Activism in the United States," *Annual Review of Political Science* 20 (2017): 189-208.
[8] Merry, Sally Engle and Peggy Levitt, "The Vernacularization of Women's Human Rights," in *Human Rights Futures* (Cambridge: Cambridge University Press, 2017), 213-15.
[9] Ibid., 215.
[10] Ibid., 233.

framing and re-deploying global problems—like human rights or climate change—to gain support from local audiences, funders, and other types of organizations.

Well-placed individuals can also play a key role in translating issues to mobilize action, in part through "interlocution," or the process of speaking between audiences (Fox 2015, Gallagher 2017; Kruks-Wisner 2022). In a 2022 paper on citizen claims for essential services in India, Gabrielle Kruks-Wisner describes how local intermediaries, who are both embedded in communities and engaged with government agencies, can act as "social brokers" by engaging in both vernacularization (framing issues to give them local grounding) and interlocution, which requires them to work with and between officials and citizens. This complex relationship also gives us insight on the roles of smaller-scale climate activists. In this paper, I provide qualitative evidence of the role that they play in communicating the necessity of climate action to differently positioned actors.

Mobilizing around Climate

Together, the preceding bodies of work emphasize the role of communication, and framing, in grounding issues to mobilize action. However, climate change is a uniquely fragmented issue area, which presents particular complications to the functioning of this process. In the spectrum of voices between strong support for climate mitigation strategies and straight denial of the problem, there are actors who believe in and advocate for a wide swath of strategies and solutions with various levels of rigor, investment, and timeframe. These actors are responding to climate change at different scales—from addressing the Climate Change problem wholesale, to focusing on adaptation to or resilience against specific threats like sea level rise, flooding, or drought. Some organizations and activists focus on

climate change exclusively, while others wrap it into existing programming on other issues and identify areas of intersection and common cause.

I argue that climate actors and organizations working on a smaller and more local scale are able to (1) translate climate change science and impacts; (2) communicate the benefits of behavior change and offer options for action; and, (3) liaise between government actors and communities to press for policy change. Beyond top-down communication of climate impacts, climate organizations also engage in bottom-up translation by conveying citizen needs and priorities to local government officials. These organizations often engage with the politics of climate change deliberately by acknowledging the unjust distribution of burdens associated with climate change, pushing for climate justice for their unique constituencies, and lobbying local government officials for stronger legislation and equity measures that push against the status quo. This kind of situated climate change engagement is often overlooked in studies of climate communication and mobilization because it is not articulated in a globalized language of "Climate Change," but instead relies on locally-inflected narratives about human resilience, technological adaptation, or individualized experiences of changing weather patterns or exposure to danger. This ability to locally ground the dilemmas of climate change, I argue, are what make local climate organizations powerful intermediaries and key actors in shaping climate action.

Methods

My research relies on individual interviews with climate activists, organization leaders, and local government officials; textual analysis of organization reports and press releases

and local newspapers; and participant observation in organization meetings and presentations. To date, I have conducted 46 individual interviews—ranging from half an hour to two hours in length—with people working in 22 different climate-related organizations in the Bay Area. The majority of the interviews were with staff at explicitly climate change or environment-related organizations.[11] Fewer of my interviews were with local government staff (who work on many issues including the environment)[12] and staff at organizations that focus on a number of community quality of life issues.[13] The smallest organization I engaged had two staff, while larger ones like the Greenlining Institute employ 30. Amongst these organizations, there is variation in the scale at which they work and their intended constituencies, which are not always narrowly geographically based, but can be focused on particular demographic populations as well (such as Black or brown residents, the Spanish-speaking community, etc.) While the West Oakland Environmental Indicators Project operates primarily at the sub-city level, the Greenlining Institute conducts research and advocacy state-wide. The size and constituency of the organization points to their focus – more localized issues versus state-wide fights for low-carbon power – and their positionality vis-a-vis funders and policymakers. My inclusive conceptualization of a local climate change organization includes organizations that highlight environmental concerns in their work and focus their attention on a defined, sub-national community. I chose to highlight organizations that advanced climate change as an

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[11] Including Climate Resilient Communities, Acterra, the San Francisco Bay Conservation and Development Commission, West Oakland Environmental Indicators Project, Factory Farming Awareness Coalition, Plastic Free Future, Carbon Free Silicon Valley, and the Menlo Park Climate Team.

[12] I have conducted interviews with city staff in East Palo Alto, Palo Alto, North Fair Oaks, and Half Moon Bay.

[13] Including Palo Alto Forward and the Greenlining Institute.

intersectional issue – rather than those that pit environmentalism against other important local issues like housing – to explore how they make these connections clear to their constituents and to government officials with whom they communicate.

I began my research by focusing on the neighboring cities of Palo Alto and East Palo Alto—adjacent cities with different demographic profiles and environmental priorities. I was initially interested in the contrast between Palo Alto, which is relatively resilient due to its distance from the coastline and relative wealth, and East Palo Alto, which is far more socio-economically and ecologically vulnerable to sea level rise and heat. I started by mapping how activists and organization leaders there navigate and frame the relationships between these issues to garner local support for climate initiatives. From initial contacts at climate justice organizations operating locally in these areas, including Climate Resilient Cities and Acterra, I used "snowball" techniques to interview activists and organization leaders in organizations operating for various constituencies in other parts of the region. In these interviews, I asked my interlocutors about the priorities of their community, the successes and challenges of their work, their framing and communications strategies, and collaborations with other organizations in the region. As I continued my research, I started to grasp the diversity of environmental experience and organizing practices, and snowball techniques automatically resulted in an expanded scope outside of my initial two cities of interest. I focus my research and analysis on organizations that local activists point out as positive examples of advancing community priorities.
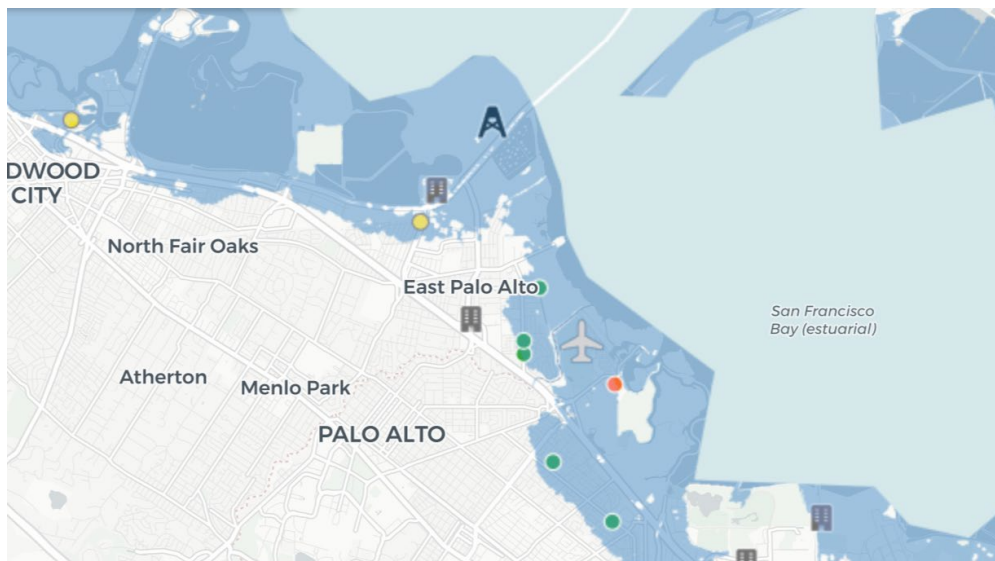
Figure 1. Map projecting potential sea level rise in the Palo Alto area by 2050, from KQED. Green dots are schools, yellow dots are hospitals, and orange dots are sewage treatment plants. (https://www.kqed.org/science/1973624/maps-see-which-bay-area-locations-are-at-risk-from-rising-seas)

My interviews were semi-structured. Although there were some questions that I asked all interviewees,[14] I let the interviews flow in a conversational manner, drawing additional data from the topics my interviewees chose to mention during our talk. After each interview, I transcribed the conversation (as long as the interviewee consented to being recorded, which all but one did). Then, I conducted qualitative coding using Dedoose to track major themes and narratives that arise. My (partially realized) goal is to conduct

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[14] My basic interview schedule included:
1. Can you tell me a bit about yourself and how you got involved in this work?
2. What are the most important issues in your community?
3. What role does your organization play in your community? What role would you like it to play?
4. What strategies have you found successful for getting others involved in this work?
5. What other organizations/institutions do you like to collaborate with? What organizations/institutions are difficult to work with?
6. What about your setting in the Bay Area makes your work harder or easier?
7. What are the biggest challenges associated with your work?
8. Is there anything important about your work that I haven't asked you yet?
9. Who else should I speak to?
Follow-up questions flow naturally from the conversation and differ from interview to interview.

interviews with more than one staff member at each organization in order to get a more complete picture of their goals and strategies.

Along with these interviews, I gathered data from the organization websites, press releases, Twitter pages, podcast recording, and reports to learn about their broader goals and programming. I listened to about a half dozen podcast interviews of environmental activists in my case study cities. I also attended as many meetings as possible with organizations that consented to my participation. For example, the Menlo Park Climate Team invited me to attend and take notes on their monthly meetings; I also attended trainings on climate change that the Team gave to groups like the Menlo Park Rotary Club. The degree of access I had to organizations differed greatly depending on their constituency, size, and comfort with outside researchers.[15] I also attended meetings convened by World Affairs, Bay Adapt, KQED, the Alliance for Housing and Climate Solutions, 350 Silicon Valley, the California Climate and Energy Collaborative, the San Francisco Bay Conservation and Development Commission, the Sustainability and Climate Action Committee of Palo Alto, the City Council of East Palo Alto, and the City Council of Half Moon Bay.

My research is also informed by trips to the field in September 2021 and August 2022, during which I learned more about the spatial layout of the cities and municipalities in the Peninsula. While the covid pandemic limited my in-person interactions, I primarily

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[15] It is worth reflecting briefly on the potential impact this has had on my research. I generally had less access to organizations working in socio-economically disadvantaged settings; for example, some community-level organizations working in East Palo Alto that I reached out to did not have the time or staff bandwidth to participate in interviews. This is an unfortunate reflection of the difficulties these organizations have in generating funding. On the other hand, organizations that had higher budgets, more full-time staff, and/or relied on volunteers positioned in privileged areas of the Bay had more time to devote to interviews and to sending me resources and documents.

focused on observing the environment, photo documenting the coastline, and participating in volunteer opportunities.

Activists as Translators

Public opinion on climate change, and support for specific climate policies, are particularly sensitive to question wording and framing (Basseches et al. 2022). In Menlo Park, for example "85 percent of people are in strong support of local leaders taking climate action," at least in the abstract. But when more concrete proposals come down the pipeline that are perceived to present cost and inconvenience, "then that number is likely to drop a lot."[16] This fluctuation according to perceived costs and framing effects is difficult to capture in surveys. According to Diane Bailey, one of my interlocutors and the Executive Director of Menlo Spark, "there's public opinion and there's public opinion."[17] Because understanding climate policies involve technical knowledge about physics, energy, urban planning, and earth systems, the public relies on information from various media sources, government officials, non-governmental organizations, activists, neighbors, and other sources to form an opinion when climate policies are presented. The public is vulnerable to "manipulation" from opposing interests, including the impacts of decades of corporate-funded ad campaigns. The gas industry, for example, "has many decades of advanced work telling people that natural gas was natural and clean, which it is neither."[18] Environmental advocates, therefore, are often facing an uphill communications battle against powerful corporate interests and the manifold beneficiaries of the status quo. It is in this context that

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[16] Diane Bailey Interview, February 21, 2022.
[17] Ibid.
[18] Ibid.

translation is especially important so that community needs and concerns are not entirely subsumed under stronger, more organized interests in the corporate space.

Translating Climate Change

While climate change is a global phenomenon, it is experienced *locally* by communities under specific political, economic, social, and environmental conditions. Climate change is not only a scientific reality, but a social one as well. Reactions to environmental disruption are grounded in and activated by cultural beliefs, risk perception and tolerance, and social attributions of value (Hulme 2009). Climate organizations and social movements that do climate work play an essential role in grounding scientific facts with narratives that resonate with communities and foster understanding.

Smaller organizations that focus on a defined constituency are able to tailor their messaging to speak to local audiences. Violet Wulf-Saena, the founder and leader of Climate Resilient Communities (CRC) in East Palo Alto explains,

> "We don't go in [to the community] and say, OK, what is climate change?...It depends on the community that we're engaging. So it may start off with the most important issues like water. We talk about droughts. Then, when we talk about droughts, then we can get to climate change and how it's more frequent."

Wulf-Saena sees her objective as "help[ing] [the community] connect the dots" between changing precipitation patterns and climate change.[19] Organizations like CRC see their work pay off when their constituents demonstrate increased fluency around climate change. According to Wulf-Saena, "A lot of people don't understand the term climate change…that

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[19] Violet Wulf-Saena Interview, August 3, 2021.
"Connecting the dots" is a role that many of the climate organizers I spoke with take on. It is a common objective that I heard from other interviewees in Menlo Park and Palo Alto as well.

was another big issue that I had to create a lot of programming around." When people start engaging with CRC programming or speaking with Wulf-Saena, they may not be very conversant around Climate Change, but they do understand their own experiences with changing weather patterns, extreme heat in the summer, and the threat of sea level rise.

Rather than aiming to achieve consensus on the climate issue, smaller climate organizations are tolerant of the variation in belief and understanding amongst their constituents. Instead of expecting automatic support for "climate change mitigation" efforts—or blaming residents for their lack of prior understanding and support—they are tolerant of the different baggage, language, expectations, and prior beliefs of community members. In fact, local climate organizations use the community's questions as the starting point for action. "We're also very aware of the…all the questions that the public has…there are a number of aspects of climate change that are concerning to residents or that residents want clarified," one Menlo Park climate activist told me. "We're not only open to those types of things, but we also want to use…those questions that people have…to create our projects and create our communication." For example, her organization focuses on the health benefits of home electrification to get their health-conscious audience on board. The Menlo Park Climate Team focuses on reaching broad audiences in the city, who they know come to the climate change fight with a range of beliefs and levels of experience. While some audiences are receptive to scientific information about climate change—and can wrap their heads intellectually and psychologically around the necessity to cut emissions by a certain percentage to prevent a certain amount of heating—"that's only one audience."[20]

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[20] Menlo Park Climate Activist Interview, November 30, 2021.

The same activist also noted that her organization's communication strategies are not a fit for the entire region. Belle Haven is a community within Menlo Park that borders the Bay and has a different demographic profile—lower income and more Spanish-speaking—than other parts of the city. Belle Haven has recently developed its own Climate Team to address their unique challenges and vulnerabilities to climate change. In describing the different strategies of the two separate groups, the Menlo Park activist noted, "the way that we're tackling [climate communications] from the get go, you know, for electrifying buildings, say, and the electric vehicle transition—that doesn't resonate in the other parts of town."[21] The knowledge of community priorities and ability to speak to those needs is a reason why community-level climate work is so necessary. Rather than duplicating efforts, their parallel efforts are generative towards attracting citizen attention to climate change. In this way, activists and organizers who live and work in the same community participate in co-generating frames for action by consulting their fellow residents and responding to their priorities and perceptions (Small 2004).

This tolerance and adaptability make smaller-scale climate actors so valuable. While national-level polls and statistics rely on a binary belief or non-belief—or support/non-support—in climate change, it is organizations that are more understanding of people's diverse perspectives that may actually help move the needle in climate support. While many scholars and journalists place blame on Americans for not believing in the urgency of climate change enough,[22] local-level, non-governmental organizations and

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[21] Ibid.

[22] Kahn, Brian. "You Need to Care About This." *Gizmodo*, November 18, 2021. https://gizmodo.com/you-need-to-care-about-this-1848042385.

activists step in to meet residents where they are in climate understanding, linking Climate

Change to local experiences and communicating the needs and benefits of taking action.

Communicating the Benefits of Climate Action

There is a significant need for communicating the benefits of climate mitigation to

individuals and communities in a way that overcomes collective action problems.

Organizations operating at the local level in the Peninsula find success mobilizing

constituents around the following primary frames. I illustrate some brief examples drawn

from qualitative interviews below and expand on a few in further detail.

Figure 2: Framing Devices at the Local Level

Frame	*Examples*
Personal empowerment	"But we also know that people need to be brought into the solution…There are tons of solutions that individuals can do to create change and feel hope around the future."[23]
Technology and innovation	"Silicon Valley, you know, this is supposed to be a global center of technological innovation. And so there is a strong sense of 'we can solve this. If we can't solve this here, where can we solve it?'"[24]
Human resilience	"The communities are the heroes of our story. The things that they're experiencing don't have to be this way."[25] "I don't know a polar bear. I've never seen an ice cap, but like, I know my neighbors. I know my community."[26]
Intersectionality	"..and just bringing the point of how important it is to recognize that all fights are similar. Every single issue that our society is fighting right now, racial inequity and financial inequity, environmental crisis. All of

[23] Lauren Weston Interview, September 1, 2021.
[24] Diane Bailey Interview, February 21, 2022.
[25] Molly Tafoya Interview, October 15, 2021.
[26] Ibid.

	these are rooted in the same issues."[27] "And we, if we realize anything, is that we cannot disconnect those issues to environmental issues because we know the healthier the planet is, the healthier our communities will be."[28] "The housing crisis. Right. That's an environment thing, too, because people can't afford to live here, but they have jobs because what they do, they drive all the way to Tracy, to the Central Valley, to Stockton. They spend two or three hours and two gallons of gas every day to or from."[29] "I feel like many organizations working with the Latinx community are too busy with the struggle, the day-to-day struggle: paying for rent, finding food. And we, if we realize anything, is that we cannot disconnect those issues [from] environmental issues because we know the healthier the planet is, the healthier our communities will be."[30]
Interconnection	"So that was a lot about, like, talking to people about how everything is interconnected, because…we didn't want people to think, well, I'm not on the shoreline, I'm fine. So we've talked a lot about the interconnectedness, especially in the Bay Area. That's where the Bay connects us all."[31] "Because if we all treat the Earth that way…we all suffer. But if we all work together to clean up pollution and we all breathe cleaner air, and we're healthier for it."[32]
Feeling and experience	"So when you give studies that say, 'Oh, CO2 levels give up 400, you know, 400, you know, four megatons, 400 million megatons per year,' someone who has a job, who is just worried about, you know, two jobs with kids are going to be like, 'What the hell does that mean? I don't know. I can't fathom that.' But the people can fathom that it's getting hotter. People can fathom that gas is expensive and people can definitely feel when there's wildfires..."[33] "But then we reflect on how we did it before, people are thinking, 'Yeah, that's the way I used to live, and I can go back to that, and it's more kind to my family and to nature, to the planet.'"[34]

[27] Alejandra Warren Interview, November 9, 2021.

[28] Ibid.

[29] Antonio Lopez Interview, August 27, 2021.

[30] Alejandra Warren Interview, November 9, 2021.

[31] Dana Brechwald Interview, September 14, 2021.

[32] Diane Bailey Interview, February 21, 2022.

[33] Antonio Lopez Interview, August 27, 2021.

[34] Alejandra Warren Interview, November 9, 2021.

Consistent with the literature, I find that the community climate organizations I spoke with rely on leveraging hope and personal empowerment to bring residents into the fight (McAdam 2017). Acterra, which focuses on electrification as a key pillar of climate mitigation, holds clinics to spread the word about how residents can apply for grants to cover electric car purchases. They then use these success stories to keep bringing more people into the fold. According to Wendy Chou, the Communications and Outreach Manager at Acterra, "Just hearing a story of 'this person did it, so you can too'" is a powerful motivator. People who go through their electric vehicle financing or tax credit clinics are "so excited when they have a car that they didn't think they could afford."[35] Here, we see environmental communications staff building on the well-established technique of connecting climate action with *positive gains* rather than losses or deprivations (Levine and Kline 2019).

Beyond material gains, though, we also see the positive benefits of simply bringing people into the decision-making process. This is a different though still effective form of empowerment. According to Lauren Weston, the Executive Director at Acterra, "the individual piece is still a heavy part of [our work] because policy can feel very top-down. It can feel like people don't have agency or control, and we don't want them to be feeling that way."[36] With this in mind, Acterra deploys a two-pronged strategy of targeting policymakers to effect more systematic changes, while also tailoring a lot of their

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[35] Wendy Chou Interview, November 8, 2021.
[36] Lauren Weston Interview, September 1, 2021.

programming towards individual behavior change. Providing community-members with actionable measures can go far towards advancing self-efficacy and hope.[37]

Menlo Park activists follow a similar playbook. Sandra Slater's organization Cool Block provides participating neighborhoods with action "recipes" in an easily digestible format that allows people to participate in climate mitigation. Rather than relying on the neoliberal frame of individual "citizen-consumers" whose only latitude for action derives from their consumption choices (Barr, Gilg, and Shaw 2011), organizations like Cool Block focus on neighborhood connections, community accountability, and social networks to amplify their impact. Instead of only recruiting residents with a pre-established interest in climate mitigation and adaptation, Slater focuses on the community aspect, and brings people from all different backgrounds and beliefs into the fold. She testifies, "the number one reason why people join is to get to know their neighbors…there's a hunger for that kind of community-building."[38] And it works. Using the strategy of gathering neighbors to take action and formulate plans for sustainability and disaster preparation, she found that "we lower carbon about 30 percent per household when they go to the program."[39]

Plastic Free Future is a smaller-scale organization that focuses on sustainability education in East Palo Alto. One of their founders, Alejandra Warren, started the organization to meet an unmet demand for including Latinx and Spanish-speaking communities in environmental action and decision-making. Beyond just offering trainings in Spanish—the bare minimum of inclusion—Warren's organization focuses on training communities on "how they can actively participate in these issues, not only learning and

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[37] See Acterra's website, which includes actions that people can take, depending if they are elected officials, municipal staff, or residents: https://www.acterra.org/code-red/#Individual.
[38] Sandra Slater Interview, December 15, 2021.
[39] Ibid.

doing and not only understanding the law and following the law, but [being] a part of the conversation and a part of developing the systems that are necessary to make this world a better place."[40]

Another way to bring people into the fold is to call upon their memories of more sustainable ways of life. Working with Latinx communities, many of whom are from parts of Central and South America, Warren has found that people have historical and cultural connections with sustainable practices. She told me, "I'm from South America, so I know the way we live our life there is a little bit different. We have a lot less access to cheap plastic because everything is more expensive there." When she talks to fellow community-members, they recognize this same feeling and say, "Yeah, that's the way I used to live, and I can go back to that and it's more kind to my family and to nature, to the planet."[41] In this way, Warren is building on pre-existing beliefs and experiences about disposability and environmental stewardship (Tarrow 1994). She is also confirming for residents the value of protecting their shared neighborhoods; East Palo Alto is worth keeping safe, beautiful, and livable for residents (Small 2004). Because Warren is located within this community and has a shared background with many of her fellow residents, she is uniquely positioned to communicate the benefits of behavior change.

Bridging Governments and Communities

After and along with educating communities about climate change effects and informing them about actions they can take, NGOs and CBOs play an important role in connecting citizens to local governments by fostering *two-way* exchange of information: filling a

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[40] Alejandra Warren Interview, November 9, 2021.
[41] Ibid.

community need for communicating interests to governments *and* local government demands for input from communities.

Violet Wulf-Saena remembers experiencing the disconnect between the needs of her fellow residents in East Palo Alto and the state-level climate priorities when she began her activist work. The California government was "really focused on [the] mitigation of climate change" by "reducing greenhouse gas emissions," but "I didn't come across any program addressing the immediate needs, which is [that] climate change is already happening."[42] While the state financed electrification programs, they were neglecting climate *adaptation*: the needs of vulnerable communities, like East Palo Alto, that were *already* experiencing sea level rise. At the time, CRC operated as an arm of the larger organization Acterra. Wulf-Saena tried to communicate the needs for adaptation funding at Acterra board meetings, but "no one understood what I was trying to do…So I kind of did it alone [with] support of donors who…understood the issue."[43] CRC has been working in East Palo Alto and Belle Haven since 2016, and in 2020, it became its own independent 501(c)(3). In the past few years, Wulf-Saena and her team have made great progress in highlighting adaptation needs. Now, they have a Climate Change Community Team, conducted a Community Vulnerability Assessment, and partnered with Stanford on implementing community climate change surveys.[44] While CRC at first relied on "anecdotal data," they now have the capacity to quantify and report on the priorities and attitudes of East Palo Alto residents. Wulf-Saena's approach relies on flexibility: working with partners who understand her objectives—whether it's philanthropists, academics,

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[42] Violet Wulf-Saena Interview, August 3, 2021.
[43] Ibid.
[44] See "Community-Based Adaptation," https://www.climatercommunities.org/communitybased-adaptation.

other NGOs, or government actors—and remaining vigilant about "prioritiz[ing] what the community [is] prioritizing."[45] In this way, Wulf-Saena and her organization act as a go-between, changing the conversation over time to meet community needs.

Along with being translators, many of these organizations operate as connectors and interlocutors. Organizations working on environmental justice, like the West Oakland Environmental Indicators Project (WOEIP), take on the role of learning about and making connections with government offices so that they can direct community members to the appropriate officials who can solve their problems. Brian Beveridge, the Co-Director, hears from a lot of residents who feel "blown off" by the city when they try to report environmental issues in their neighborhood. He sees his role as helping connect them with officials who can actually help: "It's always been important to us, for ourselves and our community, to ask the right questions of the right people."[46] The other side of the coin is "also helping the regulators or the government person…translate what the people are saying." Beveridge emphasizes "we want the community to be understood….we are really translators and facilitators of dialogue."[47]

Beyond expressing concerns about immediate environmental quality, climate-related NGOs communicate "upwards" to policymakers about different community conceptualizations of climate resilience. According to staff at the Greenlining Institute, one of the challenges of working with policymakers at the state level is the lack of staff diversity in these agencies, and therefore the limited view they have on climate resilient encompasses. The government's current conceptualization, according to the Climate

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[45] Violet Wulf-Saena Interview, August 3, 2021.
[46] Brian Beveridge Interview, October 6, 2021.
[47] Ibid.

Equity Associate Director, is "very much focused on wetlands protection or natural resources protection, which we absolutely need…but we don't want to do it at the expense of protections for *people*, especially those who have been [and] continue to be hit hardest by different climate disasters"—who are primarily people of color or poor people.[48] Therefore, Greenlining finds itself doing similar translation work that WOEIP does, "on education and helping our policymakers understand what's actually happening on the ground that they may not be aware of."[49] One of Greenlining's major goals is to share diverse perspectives with policymakers in order to promote policies that have a better chance of protecting their constituents.

I find that some activists have become reluctant communications professionals. They may feel ambivalent about taking on this role and express frustration with the dictates of two-way translation, even as they understand the necessity. One Menlo Park activist who has leadership roles in multiple environmental organizations recounted her experience with advocating the city council for natural gas bans. She was told, "if you use the term 'gas ban,' it's dead on arrival" because it's "off-putting." The city councilors expressed support if she called the measure something else, "so this policy came to be called the all-electric reach code. It's wonky as could be, but it effectively is a gas ban…it's so funny to me to watch the cities that adopt a gas ban by that name."[50] While on some level it is, in her words, "silly" to have to argue about words and labels in the face of the impending climate crisis, framing strategies are a powerful tool for getting communities and government officials on-board with climate action. Communication is the tool of the realm

[48] Sona Mohnot Interview, December 3, 2021.
[49] Ibid.
[50] Diane Bailey Interview, February 21, 2022.

of activism. Being fluent with communities and with gatekeeping policymakers is essential for moving policy forward.

On the receiving end of these translations, government actors notice the difference in how they can be more approachable and communicative to communities. Dana Brechwald at the San Francisco Bay Conservation and Development Commission (BCDC) notes how they have tried to make the language of their recent reports on sea level rise "more approachable. Basically, we try really hard not to be ourselves and talk about things in a way that we're used to talking about things,"[51] meaning, through 700-page policy documents riddled with scientific jargon (the current Joint Platform is a more manageable 45 pages).

Of course, there is still a long way to go in terms of making their work fully inclusive of the diverse perspectives in the Bay Area—one of the challenges continues to be the domination of the larger cities at the expense of smaller ones, another the underrepresentation of underfunded community groups from lower-income areas—and report length and language is only one simple indicator of attempts at inclusivity. But community engagement is a benchmark for BCDC's work in a way that it hadn't been in earlier years. The Joint Platform on sea level rise attempted to include more diverse actors than any prior project, including a special Environmental Justice Advisors group made up of CBO representatives who participated in extra briefings. Brechwald reflects, "one thing about community groups is that they don't speak the same language as government. And so they need a lot more handholding to kind of get up to speed and get into the jargon and be able to provide meaningful feedback. So that was very, very, very high-touch and not

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[51] Dana Brechwald Interview, September 14, 2021.

always successful."[52] The fact that inclusion of community representatives constitutes such a challenge for regional programs shows how wide the divide in language, communications, and strategies has become. Yet, community activists and organization staff continue to agitate for a seat at the table *and* for diverse perspectives on climate mitigation, adaptation, and resilience to be integrated into policy (and funded).

Climate Accountability

Going beyond facilitating two-way communication between governments and communities, climate change organizations help create lines of accountability between actors at various levels. Once local officials consult the community and set down agreements and ordinances, non-governmental actors and activists continue to play a role in binding them to these agreements. While some scholars find that the global and diffuse nature of climate change can allow for blame-shifting between actors operating at various levels (Bar, Gilg, and Shaw 2011), I find that the complex ecosystem of climate organizations in the Bay Area allow different types of organizations to hold each other accountable, leading to a "race to the top" in enacting strong climate provisions, in some cases.[53]

The Menlo Park Climate Team consists of four working groups: two focus on electrification (of buildings and of vehicles), one focuses on communications and outreach, and the last, called the "cap monitor," seeks to hold city council accountable for hitting milestones in decarbonization objectives. Again, the cap monitor operates in two

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[52] Ibid.

[53] Further exploration of why some neighborhoods and cities "one up" each other in enacting climate policy, while others wait for mandates by the state government, will be the subject of a future paper.

directions: they try to "understand what milestones [city council] is hitting or why they're not hitting milestones, and keeping the residents abreast" of what they find.[54]

Brian Beverige, the Co-Director of WOEIP, describes the relationship that he envisions between the government and community as "solution partner, as opposed to a unilateral solution provider."[55] To him, the title "solution partner" means that the government is accountable to citizens, who are empowered to engage with the government on decision-making. Here again, we see climate organizations working towards both "top-down" and "bottom-up" communication and accountability ties with government officials. In the absence of two-way communication, Beveridge notes that government officials take action without community input. The simple answer, he says, is to "come and ask us what our needs are, then do the research and figure out some solutions and bring it back to us and, you know, let us decide on which kind of solutions ift in our situation in our community, our cultures."[56] For this to work, there needs to be latitude and flexibility in how policymakers and scholars propose climate solutions. The work and strategies of these Bay Area organizations suggests that inclusive climate policy must undergo "deep translation": it must be attentive to not only language (terminology as well as multilingualism), but also to a community's priorities, prior beliefs, fears, hopes, and desires to be convened and considered *as a community* with unique history and attachment to their neighborhoods.

Accountability on Climate Justice

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[54] Menlo Park Climate Activist Interview, November 30, 2021.
[55] Brian Beveridge Interview, October 6, 2021.
[56] Ibid.

Along with commitments for decarbonization and electrification, an essential piece of strengthening climate policies includes attentiveness to climate justice: ensuring that the most vulnerable communities—ecologically, economically, politically—are taken into account in climate policies. Attentiveness to climate justice includes electrification programs that provide vouchers and incentives, multilingual marketing and communications tools, and intentional inclusion of vulnerable or marginalized populations in the policy-making process to make sure their needs are met. Alejandra Warren, the Co-Founder of Plastic Free Future who has also worked as a sustainability consultant in the Bay, notices,

> "When there's a need for language inclusivity, there's [often] just a quick translation [on a] poster or a flier to communicate a message to [Latinx] communities. But if we're talking about the Bay Area, we have a really high population of Latinx communities, right? We're not talking about one percent, or ½ a percent. We are talking about members of our society and our community that have a significant impact on the way we live our lives."[57]

Her point is that equity and inclusion efforts must go beyond quick translation, towards "deep translation," substantive inclusion in decision-making processes, and consideration of the steps that would allow the Bay's diverse population to participate in climate mitigation. Plastic Free Future lives these values by engaging in conversations and feedback processes with their constituents.

As grassroots and local climate justice organizations are given seats at the table in regional decision-making processes like "Bay Adapt," many of them take on the burden of holding regional actors to account on environmental justice standards. Bay Area activist Phoenix Armenta, who was invited to speak on a BCDC panel about the Bay Adapt

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[57] Alejandra Warren Interview, November 9, 2021.

platform, told me, "I think it's my job to always say that we're not there yet and push the envelope a little bit farther."[58] On the panel, Armenta was very open about the shortcomings to Bay Adapt's inclusivity, including the fact that the platform doesn't provide enough funding for CBOs, include tangible ways for disadvantaged communities to be consulted, or do enough to protect vulnerable communities. There were only a small handful of CBOs consulted in the drafting of the document, and they were only invited to participate after the structure of the collaboration had been set up. Armenta notes that there is a need for explicit lines of accountability in documents like this to ensure that organizations like BCDC "have a responsibility to the community and…certain ways in which that responsibility holds forth." Although imperfect, the Bay Adapt process at least gestured towards inclusivity and equity—"a huge word that's kind of thrown around that people know they need to work on." Activists and CBOs continue the fight to publicly push them further to improve their processes, "which is not always the most fun thing to do,"[59] but it is a valuable and necessary service.

I also heard accounts from city officials who hold regional actors to account on issues of housing and climate justice. East Palo Alto City Councilor Antonio Lopez told me, "if we see that regional actors are not doing their due diligence or not going above and beyond as they should and work with us, then we have to be very candid and saying 'so-and-so person is not doing the work,'" referencing holding regional and state-level officials to improving access to housing for people of color. Lopez has a keen eye and ear for times "when people talk about equity and they don't walk the walk."[60] Talking about equity and

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[58] Phoenix Armenta Interview, October 18, 2021.
[59] Ibid.
[60] Antonio Lopez Interview, August 27, 2021.

inclusivity goals is now the norm, but taking substantive action towards achieving climate justice is something else. Activists and organizers know the difference, and they do difficult and important work towards holding other actors to account on climate policy and climate justice.

Other Types of Local Climate Organizations

While this chapter focuses on demonstrating the potential benefits of diverse language and action around environmental issues, I should make it clear that not all framings are beneficial to advancing climate policy and climate justice. For instance, some actors in local government and individual residents use environmentalism to justify anti-development, anti-housing measures in the Peninsula. Adrian Fine, in his former position as Mayor of Palo Alto, expressed his frustration with constituents who "weaponized [climate change] in a really nasty way, like…Oh, don't build the housing because what about the water? Or like, what about the embedded carbon in buildings? And I don't think those are good faith arguments [against new infill housing]."[61]

Other Palo Alto activists are also concerned about how local citizens and institutions—including, at least in the past, the local Sierra Club chapter—use their genuine or performative environmental commitments to oppose development that could make the city more livable and equitable. Elaine Uang of Palo Alto Forward explains, "they also try to couch it in climate terms, like we have to preserve open space and we need more parks because that's the sustainable thing to do."[62] Yet, the more holistic question of "sustainability" is a thorny one in areas like the Bay, which have become increasingly

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[61] Adrian Fine Interview, December 21, 2021.
[62] Elaine Uang Interview, November 28, 2021.

unlivable due to the compounding forces of gentrification, housing shortage, rising sea levels, and wildfire risks. Uang's concern speaks to the nested power relationships within which climate organizations operate. While I focus on documenting activists navigating local issues as intersectional, there are other interests that seek to benefit from pitting environmentalism against other quality of life issues in the Peninsula.

Conclusion

It's well-documented that, despite scientific consensus, Americans don't agree about climate change or what should be done about it. While the scientific evidence that carbon emissions generated by human activity are the cause of global climate change is now beyond debate,[63] the literature on climate communications suggests that closing off the issue to deliberation is deleterious for citizen engagement and the production of creative solutions to ameliorate the problem (Pepermans and Maeseele 2014). Behind Americans' disagreement about climate change are diverse experiences, perspectives, and languages. Fostering all types of organizations working on the issue from different angles—instead of placing all of our hopes in the realm of the "elites"—is where climate action optimism lies. Instead of deriding the lack of consensus, we should focus our scholarly and policymaking energies towards meeting residents where they are on climate change.

In this paper, I build a theory of how diverse organizations in the Bay Area of California do just that. Using evidence from individual interviews and participant observation in meetings, I document how NGOs and CBOs translate climate change and

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[63] Ramanujan, Krishna. "More than 99.9% of studies agree: Humans caused climate change." *Cornell Chronicle*. October 19, 2021. https://news.cornell.edu/stories/2021/10/more-999-studies-agree-humans-caused-climate-change.

the importance of climate action to citizens. They also engage in "upwards" translation, communicating community needs and priorities to government officials. Finally, they do important work in engaging local officials to hold them accountable to climate agreements and commitments to climate justice. One of the areas of diversity that this paper draws out is in the scale, size, and constituency of different organizations working on climate issues. In fostering "bottom-up" climate solutions, policymakers must be cognizant of the different "bottoms": organizations differ in their groundedness to communities, the vulnerability of their constituents, and their access to sources of funding. I seek to highlight activists and organizations that advance an equitable climate agenda that is explicitly inclusive of other social and political challenges, rather than pitting them against each other. They serve as models that document the diversity of organized activism and opportunities for involving more people in the climate change fight.

CONCLUSION

> "Change is most likely not going to come from big ocean liners like the United States, or the European Union for that matter, or any other large political entity too entrenched in its ways and at a scale at which it is extremely costly to try new things. Instead, as is often the case, change is likely to emerge at the margins, in small countries, or at the level of cities and regions without much global visibility and with less to lose" (Landemore 2020, 22).

This dissertation documents the possibilities and challenges involved in advancing climate mitigation policy on the city level. Beyond intervening in the debate about the most appropriate and efficacious scale for climate action by highlighting the dynamism of local actors and communities, the dissertation also examines questions related to how city councilors, advocates, and regular city residents interact during important debates around city environmental and climate priorities, and the consequences of those interactions for the policymaking process and for democratic engagement. In the three preceding chapters, I discussed how differently-positioned actors in the policy ecosystem articulate their positions and priorities: how councilors position themselves as representatives; how residents decide to engage with the city on climate issues; and, how seasoned advocates move between constituents to move the conversation forward on equitable climate solutions. To conclude and extend beyond these cases, I offer thoughts on how cities – and even more specifically, city employees – are vital and engaged actors on climate policy.

City Power and Climate Policymaking

Recent scholarship has begun to turn once again to the city as a potentially powerful political actor (Savitch and Kantor 2004, Schragger 2016). In his book *City Power*, Richard Schragger debunks the conventional wisdom in American politics that city power

– what cities can do – is limited by the need to attract and retain capital and labor.[1] He argues that, instead of narrowly focusing economic development and so pursuing policies that limit redistribution and attract investment, cities can undertake ambitious and progressive policies like setting higher minimum wages, and lowering carbon output limits. While economic theory has downplayed the potential role of cities in policymaking, scholars like Schragger contend that cities are able to respond to the preferences of their residents – perhaps better than the larger states in which they are embedded – by carving out areas of jurisdictional independence. Cities increasing wage floors is one such example of labor movements "using the channels of municipal law-making to gain labor rights that would otherwise be political nonstarters at the federal level."[2]

Like labor rights, serious, effectual provisions to limit greenhouse gas emissions have also largely become "nonstarters" at the federal level in the United States. One of the manifold reasons that federal level climate legislation, like the "Build Back Better Bill," stalled is the overriding influence of interest group politics at the Congressional level in the United States. In contrast, "the scale of the city economies makes them fruitful and appropriate sites for negotiating the relationship between polity and economy."[3] In other words, policymakers at the city scale have a better chance of arbitrating between the opinions and needs of their constituents and the dictates of economic growth. Environmental politics are a core site through which we observe "a defining political anxiety of our time": "the real or perceived mismatch between our political institutions,

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[1] Schragger, Richard. *City Power: Urban Governance in a Global Age*. (Oxford: Oxford University Press, 2016), 137.
[2] Ibid., 141.
[3] Ibid., 169.

geographically bounded as they are, and the scope of our policy problems."[4] It is difficult

and unwieldy to contend with climate change—arguably the largest scale problem of them

all—from the vantage point of a particular locality, with its own priorities and political

economic dictates. As Schragger notes:

> "The problem is that smaller political units allow for more participation, but only over a range of policies that are relatively inconsequential, while larger political units are much less participatory, but can actually do something about things that matter."[5]

This dissertation has reflected on this challenge and attempts to refute it, by highlighting

areas of progress at the city and regional scales. Cities are potentially powerful sites for

climate action – even and expressly when larger political units fail.

Whether and how this occurs, I argue, hinges in large part on the political meaning-

making of local actors, who interpret and engage the challenges of climate change and

policy change in different ways. The preceding chapters each explored climate

policymaking in cities from the vantage of a different group: city councilors (chapter 1);

ordinary residents, or non-professionals (chapter 2); and professional activists (chapter 3).

Each of these respective actors looks at climate change through the lens of their lived

experiences and expectations of the political environment in which they are embedded.

Spaces for action are shaped not only by actors' perception and understanding of the threats

of climate change, but also by their understanding of "politics": actors in different parts of

the policymaking system ascribe different meaning to notions of representation (chapter

1); governance and participation (chapter 2); and activism (chapter 3). These

understandings, in turn, shape the avenues for change that different sets of actors identify

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[4] Ibid., 168.
[5] Ibid.

and pursue. Reflecting on lessons from across the three chapters, I argue that attempts to understand climate issues as technical policy problems will fall short without sustained attention to local meaning-making.

Broader Lessons: Cities and Beyond

The cases studied in this dissertation offer important insights into how and when residents, activists, and city councilors work together to advance strong climate policy in California: America's climate policy laboratory. The lessons learned are far reaching, from the Peninsula of California to other urban areas facing similar challenges in the age of climate change and heightened inequality, highlighting the power and potential of cities as sites for climate activism and policy change. Despite concerns that localities are too small, too insular, or too focused on local issues, I find – across the cities studied in this dissertation – ample justification for excitement about climate progress on the city scale, and beyond. Indeed, major takeaways from my study of local-level, democratic climate policymaking in California is that actions on the city level are never just that: we see spillover effects in how cities learn from and adapt other cities' policies to make them stronger, better, and more locally resonant. There is no such thing as a "drop in the bucket" – small changes can make waves.

An important part of my learning on this subject was informed by how my interlocutors led me to different "cases" of climate policy debate across the Peninsula. For example, it was a clean energy advocate in Palo Alto who told me to turn my attention to the electrification debate happening in Half Moon Bay. He told me, "We've seen a great effort of cities building upon what each other has done. And that's why I was so excited

about Half Moon Bay which, essentially [was] almost two years behind where Menlo Park was and was about to make that step the furthest down the path."[6] Climate advocates in other parts of the Peninsula eagerly watched the electrification debate – not because of how it would impact emissions in the small town of Half Moon Bay, but because of how it would send a signal to other regional cities about what was politically and technically possible in cutting emissions.

While it's easy to see policies jump along cities throughout the Peninsula area, can they bridge farther distances and have more far-reaching impact? The answer is certainly "yes." One example is in formulating and instituting a climate action plan. By early 2022, 35 of the 50 biggest cities in the United States had climate action plans. 17 of the 35 were adopted or updated in the period between 2020 and 2022. And, importantly, most of the 35 are members of a climate resource-sharing or commitment-holding organization, such as C40 Cities, 100 Resilient Cities, Local Governments for Sustainability, Cities Race to Zero, the Global Green New Deal, the Mission Area for Climate-Neutral and Smart Cities, and the Global Covenant of Mayors for Energy and Climate.[7] [8] Therefore, there is evidence that policy learning between cities is happening, inspiring the proliferation of climate commitments at the sub-national level.

Closer to my home institution of the University of Virginia, I spoke with Gabe Dayley, the Climate Projection Program Manager at Albemarle County, about the process

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[6] Tom Kabat Interview, January 11, 2022.

[7] "Climate action plans in the 50 largest cities." *Ballotpedia*. https://ballotpedia.org/Climate_action_plans_in_the_50_largest_cities.

[8] Abdullah, Hannah. "Becoming global climate governors: How cities are moving from climate ambition to coordinated action and delivery." *CIDOB*. May, 2022. https://www.cidob.org/es/publicaciones/serie_de_publicacion/notes_internacionals_cidob/273/becoming_global_climate_governors_how_cities_are_moving_from_climate_ambition_to_coordinated_action_and_delivery.

of climate action planning in the county. He told me that the plan in Oakland, California was the primary inspiration for the county's. His office also consulted the plans in Washington, DC; Portland, Oregon; and Richmond, Virginia during the process of drafting the plan, adapting these pieces of legislation to a context where equity, the urban/rural divide, and different levels of commitment from residents are priorities.[9] With climate action plans digitized and readily available via platforms that collect them (such as the C40 Knowledge Hub), sub-national governments do not have to "reinvent the wheel" when it comes to replicating and building from policies passed in other parts of the country.

Project Extensions

As my research advanced, my interlocutors warned me that I had failed to sufficiently highlight the agency of another key climate player: city employees. Looking back at my interviews, I indeed found evidence that climate advocates consider city staff to be agentive, sometimes decisive, in defining the contours of policy possibility in a city as well as determining the speed of change.

In Mountain View, my contacts told me that the number and availability of dedicated staff people determined the city response to the Task Force's recommendations. First, city staff were important players during this debate because they were the primary point-of-contact for members of the Task Force. According to a Mountain View employee, "It was mostly just with the city staff members….the Task Force didn't…address council in a more formal way until they were presenting their recommendations."[10]

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[9] Gabe Dayley Interview, September 13, 2022.
[10] Mountain View City Staffer Interview, April 27, 2022.

On the side of the city councilors, staffing loomed large during their engagement with Task Force recommendations. Whether or not this was a genuine concern – although it likely was due to the genuine dearth of dedicated sustainability staff – council gave "one reason or another" for denying certain recommendations, including "budget, staffing, you know, nobody knows how to do this kind of work..."[11] Here, we can see that city council has staffing limitations and requirements front-of-mind when they are engaging with proposals from advocates.

When advocates or city-convened assemblies present their recommendations to the city council, these new priorities can shift power arrangements amongst municipal actors, which can prompt dissent or confusion. One long-time Mountain View council member told me that one challenge involved in integrating the Task Force's recommendations was that they suggested changes to city staffing; specifically, "having a sustainability officer moved into a higher position in the ranking of the city." But, "city managers, they run the show and they don't like to be told what personnel is supposed to be where."[12] Existing city staff also took umbrage at the perceived shifting "goalposts" of sustainability, prompting feelings that "we've been bending over backwards to do all [of] these incredible things? How can you be saying we need to do all this more?"[13] The emotions and the material interests of city staff, therefore, must be considered when advocating for sustainability policy on the city scale. Climate policy could perhaps move faster through city approval processes if the staffing needs are carefully integrated prior to proposal.

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[11] IdaRose Sylvester Interview, April 11, 2022.
[12] Councilmember Interview, April 13, 2022.
[13] Ibid.

On a fundamental level, hiring city staff dedicated to implementing sustainability initiatives is a core benchmark for progress in and of itself. The former members of the Mountain View Environmental Sustainability Task Force told me that their biggest "win" was catalyzing the hiring of a high-ranking staff member. One person said, echoing a common sentiment that, "Things should start changing much more now in terms of implementing all the recommendations."[14] Hiring a staff member demonstrates long-term commitment to addressing an issue in the city. While city councilors' attention turns to the issues of the day or the week, staff are able to "focus on one issue."[15] Rather than being one-off proclamations, creating positions and hiring staff is a move that has momentum and provides the basis needed for long-term change.

Beyond the Bay

I argue that the Peninsula area of California constitutes a key research site because it shares many features that are either shared or mounting in other urban areas in the United States: salient intersectional issues (such as housing and inequality); heightened environmental pressures due to climate change (increased prevalence and severity of natural disasters and resource shortages); and, the presence of layered action around environmental issues (advocacy organizations, NGOs, and governments are all involved in dealing with this policy issue). California is at once a "most likely case" – in that both the challenges of climate change and the salience of the issue are relatively heightened – and a crucial case. California's size and relative political/economic importance in the United States makes it

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[14] Hala Alshahwany Interview, April 21, 2022.
[15] Interview with ESTF-2 Member, March 31, 2022.

a case to look to for lessons on which policies may be considered in other areas in the future, and how they might be debated and implemented.

Therefore, dynamics of climate policymaking that I document here remain relevant in other contexts. As I finished my dissertation, I relocated to New York City: another national leader in climate mitigation policy, and another populated coastal area at threat from storms, drought, and sea level rise. During this time, the most important and talked-about climate legislation in the city is "Local Law 97," which requires commercial and residential buildings above a certain size to meet certain carbon emissions thresholds – relatively lenient for the 2024 deadline and getting progressively more stringent towards 2030 and 2050. In many ways, this law has sparked similar conversations as the home electrification ordinance I studied in Half Moon Bay; you hear many loss-framed arguments and fear around losing access to gas stoves. The loudest negative voices are from landlords and building managers about the cost and infeasibility of making large, old buildings more energy efficient and fearmongering about the ability of the electrical grid to cope. Various proposals for watering down the law have been debated, including allowing building owners to use renewable energy credits to "offset" emissions. On the other side, there are climate and environmental justice advocates who warn against weakening the law and praise the health benefits of electrification. Would LL97 increase the cost of housing for residents, or would it make residents safer? Will New York's power supply live up to demand, or will it cause increased blackouts and unreliability for vulnerable residents?

From an observer's perspective, communications from mass mediate have seemed to overemphasize the concerns of landlords, real estate developers, and building

managers,[16] downplaying the promise of such a law to make our buildings safer and healthier for inhabitants. I have heard many of my neighbors echo these messages of infeasibility, concerns about changes in their living environment, and fears of "moving too far, too fast." Messaging in favor of strong Local Law 97 implementation has come from smaller community-based organizations like Harlem-based WE ACT for Environmental Justice,[17] which, while having a strong following, have objectively smaller lobbying budgets than the building developers of New York. While New York is a relatively welcoming policy environment for strong climate laws, this particular legislation activated monied interests who responded with loss-framed and fear-activating arguments that then proliferated in the media. These anecdotes from other parts of the country support some of my findings in my dissertation research about the importance of sustained community engagement and collecting and amplifying the intersectional benefits of climate mitigation action.

Beyond coastal cities in the United States, what might this research tell us about the potential for climate action in other municipalities? While I have focused on the specificities of place throughout this dissertation, which is narrowly focused on a small strip of land on the west coast, I have also laid the groundwork for potential future comparative study. As I noted in the introduction, the dynamics I describe between actors in the climate policy ecosystem do rely on having a political system where non-governmental organizations can operate relatively freely and interact with governmental

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[16] For example, see: Margolies, Jane. "New York Developers Rush to Reduce Emissions as Hefty Fines Loom." *The New York Times*. August 16, 2022. https://www.nytimes.com/2022/08/16/business/new-york-real-estate-climate-change.html?searchResultPosition=1.

[17] Dobens, Chris. "WE ACT for Environmental Justice Responds to the New York City Department of Buildings Proposed Rules for Local Law 97." Press release. October 21, 2022.

bodies. It also relies on the presence of municipal governments and a representative system where elected city officials operate with the expectation of seeking input from their constituents. Within these scope conditions, the dynamics between city officials, professional activists, and regular citizens described in this dissertation can shed insight on and be applicable to other contexts, setting the stage for future study of how actors' understanding of climate change and politics shapes avenues for policy progress at the local level comparatively. I propose two potential streams of comparative research: one, delving into the impacts of different institutionalized procedures for bringing citizens into climate decision-making processes. In this vein, I would incorporate additional studies of "Climate Assemblies" (groups made up of randomly selected individuals); "Climate Commissions" (permanent bodies made up of citizens who have applied); and "Climate Task Forces" (temporary, ad hoc groups made up of citizens who have applied) from different cities in the United States. This study would, therefore, explore the role of two additional variables in shaping citizen engagement: random selection (city-led) vs. intentional application (resident-led), and permanent vs. time-bounded processes.

Another direction for research involves bringing my study to additional U.S. states and country contexts to explore the impact of bureaucratic setting on citizen experience of engaging the city on climate policy. Prior to the global pandemic, I carried out substantial research on local responses to climate change in South Africa, which provides fruitful comparison to cities in the United States, which are both experiencing the dual pressures of increasing inequality and climate impacts. This research trajectory would help us learn how state features—and actors' perceptions and expectations of political possibilities in their city—shape the possibilities for policy progress in the climate era. While some past

findings are pessimistic about the prospects for democracies to handle climate change, my work takes this inquiry to the city scale to gain more fine-grained information about how residents navigate different avenues for action on this issue of existential importance.

Finally, the study of climate change policy dynamics in the United States is a worthy venture in itself because of the scale and importance of this country as a climate actor. It is well-known that the United States is both one of the largest global emitters of carbon as well as a relative climate laggard. What is accomplished (or not) by localities within the United States can have far-reaching impact on parts of the globe that are more sensitive to climate change effects. Methodologically, it is important to treat the United States as a case in comparative politics; it is but one state in a diverse global system, but it is a critical actor in many policy arenas due to its sheer geographic and economic size.

Theory to Practice: A Personal Coda

Inspired by how I could use my experience conducting research on the interests and priorities at play in navigating city-level climate mitigation decisions, I began applying for jobs in the climate policy space. My ultimate goal and hope was to become a city staff member like the ones that I spoke to and learned about; I wanted to use my training and skills to help advance climate mitigation policy in the city by applying climate communications best practices, collecting and using data effectively, and liaising between governmental, advocacy, and academic actors to help move through blockages in the policy process. I decided to work at the Mayor's Office of Climate and Environmental Justice in New York City, where I will be able to help shape and implement the City's climate policies. The specific position involves working between the New York Panel on Climate

Change, constituents, and community organizations towards effective integration of climate science in policy formation. In essence, the entire dissertation research process has led up to this opportunity to apply my learning to engage with the subject of my dissertation: climate policymaking in cities and the connections between climate science, inclusive involvement in climate decisions, and the different actors involved in moving processes forward. I hope to give back to the passionate and generous advocates, municipal leaders, and engaged citizens who have taken the time to share their knowledge with me. As I have learned from the cities leading on climate in the Peninsula, the goal of learning how something gets done is to share this knowledge, build on it, and work towards a more just and safer world for all of us.

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