

Looking Past Perceptions:

How does a changing environment impact political identity formation?

Rose Benton

amberbenton@my.unt.edu

WH131

Committee:

Dr. John Ishiyama (Chair)

Dr. Tony Carey

Dr. Glen Biglaiser

Dr. Jacqueline Demeritt

## Research Question

My research is concerned with describing the ways in which communities react to the shock of climate change and the slower effects of environmental degradation, and how those responses translate into their political behavior and identities. In attempting to understand variation in the response of these communities, a few additional questions become relevant. First, are politically salient identities (such as race, ethnicity, religion, class, etc) hardened or softened under these specific kinds of stress? A changing environment is at its heart a threat to the security of a group through their ability to access resources. In other types of security threat situations, often those which are violent in nature, we would expect most groups to come together. However, if the context of the situation involves a sharp drop in resource availability it is plausible that certain groups, especially large ones, may instead turn against each other and splinter. Many factors about that group could potentially condition this situation, such as group size, salience of ties, etc.

Another issue I hope to explore is the ways in which a government response might impact the above situation. Identity cannot exist in a vacuum and government action is a necessary condition for people to cope with climate change and environmental degradation. As such, those responses will likely be integral to understanding variation in responses from individuals and social groups. If a group with a preexisting relationship, say a strong ethnic tie with each other, is in a situation where they are struggling to cope with environmental shocks, will government aid soften those ethnic ties? If a group is heavily marginalized, will they consider a lack of assistance from local or federal agencies

as reinforcement of that marginalization? Does government action condition responses to climate change?

In particular, I am interested in marginalized groups, who have the least power in society but are often impacted to a greater extent than their more privileged peers. Rather than building upon an existing foundation of research, I came upon this question by noticing a lack of such foundation. Previous scholarship in the realm of climate politics has been overly focused on understanding perceptions of and belief in climate change and has put off understanding the behavioral effects of the phenomena. This is a major gap that needs to be addressed because these phenomena have already begun to impact various communities.

### **Literature Assessment**

While I have yet to find other scholarship investigating the impacts of environmental changes on political identity, there are four main bodies of literature which are relevant here. First, the literature surrounding environmental racism and infrastructural violence describes the distribution of environmental degradation and access to aid in overcoming its effects. Second, an overview of the main focuses of climate scholars in political science and related social sciences, with special attention paid to its lack of focus on the effects of environmental degradation. Third and fourth, findings from racial and ethnic politics scholars as well as American minority behavior describe theories of identity formation, which I will argue both apply to the case of a changing environment.

Although many places throughout the world have been degraded in some way, marginalized groups are the most vulnerable because they live within systems of

inequality. They are the most likely to live near degraded areas and the least likely to receive aid (Nagel 2012). This is due to systemic issues such as infrastructural violence, a concept that articulates the way that infrastructure should be understood as embedded within political, social, economic, and cultural contexts (Rogers & O'Neill 2012). Infrastructure is a major factor in determining the organization of a state and as such it is able to perpetuate inequality and sustain that marginalization in wide ranging aspects of life (Henderson & Wells 2021). Due to this pattern, if the political behavior of any group has been impacted by the environment it should be most obvious in groups who are marginalized.

The largest body of the literature surrounding climate politics seeks to explain variation in belief in and concern for climate change, which are highly correlated with each other and often used synonymously (Achen and Bartels 2016; Bechtel and Mannino 2021; Blankenship et al. 2020; Capstick and Pidgeon 2014; Egan and Mullin 2017; Fielding and Hornsey 2016; Harth 2021; Johnson, Brace, and Arceneaux 2005; Mackay et al. 2021). A separate branch investigates changes in climate and how they impact various individual level behavior, public opinion and electoral outcomes. For example, Natural disasters and high temperatures have been linked to decreased government legitimacy, more critical appraisal of climate mitigation measures taken by executives, voter turnout, and vote choice (Blankenship et al. 2020; Carlin, Love, and Zechmeister 2013; Gasper and Reeves 2011; Gomez, Hansford, and Krause 2007; Healy and Malhotra 2009). At an individual level, these variables are known to heighten feelings of aggression and competition and to increase support for expensive policy measures, hinting at an increasing level of risk acceptance in respondents (Anderson et al. 2000; Hazlett and Mildenberger 2019). What

this literature doesn't do is explain group level effects, such as the strength of various types of political identity.

To understand this aspect of behavior, we can turn to two groups of scholars whose theories work surprisingly well together for how disconnected they are in terms of citation. On path through which the ethnic politics literature suggests that ethnic identity can come about is the emergence of a threat to security; by creating a group of insiders to which outside groups are deemed other, they begin to construct an identity around this dynamic (Lake & Rothchild 1996). This identity is malleable and changes drastically over time as different factors raise the political salience of ethnic identity and groups adapt to meet new challenges (Barth 1969; Weber 1978; Eller & Coughlan 1993; Jesse & Williams 2011). Sometimes, identity becomes instrumental, as elites within the community start to wield ethnicity as a political tool with which to outbid each other, but can also be a symptom of modernization and interaction with a more diverse, densely populated city environment (Bell 1975; Brass 1996; Jesse & Williams 2011). The key here is that identity is context dependent and adaptive, indicating that major shocks like environmental change should precipitate some sort of change in the strength of political identity.

Americanist scholars of minority behavior see racial identity similarly, as a socially constructed method of othering certain groups. Theories in this trajectory are built upon the foundations of two concepts: group consciousness and linked fate. Group consciousness is an awareness of relative group power disparities as being connected to historical processes and an understanding of group identity as a politically relevant category (Omi & Winant 2014). A long history of identity politics and White political strategies which explicitly sought to limit access to power for non-white groups has

created a racial hierarchy surrounding power in political, social, and economic realms (Omi & Winant 2014). Because race impacts the ways in which an individual experiences politics, it can also condition the attitudes and behaviors that they adopt within political society. Linked fate, a concept originally used to describe the impact of chattel slavery on Black group consciousness, takes this one step further and articulates an assumption that whatever happens to one person within a group will impact the outcome of others and that what happens to the group will influence the fate of individuals (Dawson 1995). The minority behavior literature also provides support for my argument that government action might mitigate or intensify reactionary identity formation. While Black Americans came to their identity through the experience of chattel slavery and the civil rights era, other groups have been racialized more recently and thus their identity has been impacted by more recent political issues. For example, Vargas, Sanchez, and Valdez (2017) found that the immigration laws impacted pan-latino conceptions of racial identity, with stricter legal structures leading to stronger linked fate. Similarly, Silva et al (2020) show that local police performance is a racializing experience that impacts public opinion.

I would argue that being othered by society to the extent that group identity becomes a heuristic for the likelihood of individual success is fundamentally a security threat. Essentially, these last two fields are both pointing to the same phenomena despite their lack of integration. Some recent work has sought to begin such an integration, such as Donnelly (2021) who investigates class-based linked fate in the UK, Germany, and Canada. This is promising for my work in that Donnelly's findings support the assertion that while racial linked-fate is a phenomena unique to the United States, linked fate itself is a concept that homes up in wider contexts and can harmonize effectively with

comparative politics' understandings of political identity. I will argue that in the context of institutional violence being expressed as environmental marginalization, affected groups will respond with hardened political identities and stronger senses of linked fate, depending on the regional context.

## **Value**

Environmental degradation is a major threat to the human species as a whole in a myriad of ways and while many think of these issues primarily as problems of the future, this is not the case. Environmental degradation is closely tied to long term health outcomes and is already a factor in the lives of many people. For example, in 2015 pollution alone accounted for 16% of worldwide deaths, ranging up to 25% in low income countries (Landrigan et al 2018). This is massive: fifteen times the amount of deaths caused by warfare and interpersonal violence and three times as many people as those who died from malaria, tuberculosis, and AIDS combined that year. Furthermore, this pollution itself is a small part of the picture here: other factors such as desertification, forest loss, and others are also present and growing. It seems highly unlikely that this will not have an impact on the behavior of those experiencing it.

We also know that identity in a variety of operationalizational forms is the strongest predictor of concern for climate change and that political identities which have been marginalized by their societies are the most impacted by these phenomena. Previous literature has failed to take into account the ways in which identity adapts to climate threats which means that our current theories have little leverage in explaining the political outcomes of environmentally degraded regions. By thinking about environmental

degradation as a security threat in its own right, and by investigating the ways in which political identity is impacted by that threat, this research bridges that gap.

This is valuable academically, but it also has merit as a tool to help politicians and other actors understand the social impact that an increasingly degraded environment will have on their population. As indicated above, large swaths of the world's population have been living with environmental threats and this number will continue to snowball as time goes on until major changes have been made to the way that we as a global community structure our infrastructures surrounding agriculture and waste disposal. This research and its later developments will be a vital tool for political leaders in their attempts to inform, mobilize, and compromise with their constituents and other politicians.

### **Preliminary Strategy**

On a practical level, I am applying an theoretical argument that is already established in the literature to a new context, that of environmental degradation. In order to do so, I will be taking a quantitative approach which will be fundamentally driven by the unique qualities of environmental data. Most importantly, the argument I am making relies on proximity to said degradation so I will need to prioritize geocoded data at the lowest possible level.

Another important consideration is the nested structure of the data I will be using: in my American chapter for example, degradation and respondents are both measured at the legislative district, which is nested within states, which are nested within regions. The variation at each of these levels is not likely to be consistent, so explicitly modeling this



structure into the analysis is necessary. As such, I will rely on a series of hierarchical models in order to answer my questions.

## References

Achen, Christopher H., and Larry M. Bartels. 2016. "Blind Retrospection: Electoral Responses to Droughts, Floods, and Shark Attacks." : 116–45.

Anderson, Craig A. et al. 2000. "Temperature and Aggression." : 63–133.

Bechtel, Michael M., and Massimo Mannino. 2021. "Ready When the Big One Comes? Natural Disasters and Mass Support for Preparedness Investment." *Political Behavior*.

Blankenship, Brian, Ryan Kennedy, Johannes Urpelainen, and Joonseok Yang. 2020. "Barking up the Wrong Tree: How Political Alignment Shapes Electoral Backlash from Natural Disasters." *Comparative Political Studies* 54(7): 1163–96.

Capstick, Stuart Bryce, and Nicholas Frank Pidgeon. 2014. "Public Perception of Cold Weather Events as Evidence for and Against Climate Change." *Climatic Change* 122(4): 695–708.

Carlin, Ryan E., Gregory J. Love, and Elizabeth J. Zechmeister. 2013. "Natural Disaster and Democratic Legitimacy." *Political Research Quarterly* 67(1): 3–15.

Carpenter, Bob et al. 2017. "Stan: A Probabilistic Programming Language." *Journal of Statistical Software* 76.

Dawson, Michael C. 1995. *Behind the Mule: Race and Class in African-American Politics*. Princeton: Princeton University Press.

Egan, Patrick J., and Megan Mullin. 2017. "Climate Change: US Public Opinion." *Annual Review of Political Science* 20(1): 209–27.

EPA, US. "Future of Climate Change." <https://climatechange.chicago.gov/climate-change-science/future-climate-change#:~:text=Key U.S. projections,-Northern areas are&text=Heavy precipitation events will likely,by 2100, depending on location>.

Fearon, James D. 2009. "Ethnic Mobilization and Ethnic Violence." : 852–68.

Fielding, Kelly S., and Matthew J. Hornsey. 2016. "A Social Identity Analysis of Climate Change and Environmental Attitudes and Behaviors: Insights and Opportunities." *Frontiers in Psychology* 7.

Gasper, John T., and Andrew Reeves. 2011. "Make It Rain? Retrospection and the Attentive Electorate in the Context of Natural Disasters." *American Journal of Political Science* 55(2): 340–55.

Gelman, Andrew et al. 2014. *Bayesian Data Analysis*. Third Edition. CRC Press.

Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge University Press.

Gomez, Brad T., Thomas G. Hansford, and George A. Krause. 2007. "The Republicans Should Pray for Rain: Weather, Turnout, and Voting in u.s. Presidential Elections." *The Journal of Politics* 69(3): 649–63.

Harth, Nicole S. 2021. "Affect, (Group-Based) Emotions, and Climate Change Action." *Current Opinion in Psychology* 42: 140–44.

Hazlett, Chad, and Matto Mildenberger. 2019. "Wildfire Exposure Increases Pro-Climate Political Behaviors." *SSRN Electronic Journal*.

Healy, Andrew, and Neil Malhotra. 2009. "Myopic Voters and Natural Disaster Policy." *American Political Science Review* 103(3): 387–406.

Henderson, Sheree, and Rebecca Wells. 2021-01. "Environmental Racism and the Contamination of Black Lives: A Literature Review." *Journal of African American Studies* 25(1): 134–151

Hill, Austin Bradford. 1965. "The Environment and Disease: Association or Causation?" *Proceedings of the Royal Society of Medicine* 58(5): 295–300.

Hoffman, Matthew D., and Andrew Gelman. 2014. "The No-u-Turn Sampler: Adaptively Setting Path Lengths in Hamiltonian Monte Carlo." *Journal of Machine Learning Research* 15: 1593–623.

Johnson, Martin, Paul Brace, and Kevin Arceneaux. 2005. "Public Opinion and Dynamic Representation in the American States: The Case of Environmental Attitudes." *Social Science Quarterly* 86(1): 87–108.

Junn, Jane. 2007. "From Coolie to Model Minority: US Immigration Policy and the Construction of Racial Identity." *Du Bois Review* 4: 335–37.

Leighley, Jan E. 2001. *Strength in Numbers: The Political Mobilization of Ethnic and Racial Minorities*. Princeton University Press.

Lewandowski, Daniel, Dorota Kurowicka, and Harry Joe. 2009. "Generating Random Correlation Matrices Based on Vines and Extended Onion Method." *Journal of Multivariate Analysis* 100(9): 1989–2001.

Mackay, Caroline M. L., Michael T. Schmitt, Annika E. Lutz, and Jonathan Mendel. 2021. "Recent Developments in the Social Identity Approach to the Psychology of Climate Change." *Current Opinion in Psychology* 42: 95–101.

McCright, Aaron M., and Riley E. Dunlap. 2011. "The Politicization of Climate Change and Polarization in the American Publics Views of Global Warming, 20012010." *The Sociological Quarterly* 52(2): 155–94.

McElreath, Richard. 2020. *Statistical Rethinking: A Bayesian Course with Examples in r and Stan*. Second Edition. Boca Raton, FL: CRC Press.

McLeman, Robert. 2018. "Migration and Displacement Risks Due to Mean Sea-Level Rise." *Bulletin of the Atomic Scientists* 74(3): 148–54.

Michael, Richard P., and Doris Zump. 1983. "Annual Rhythms in Human Violence and Sexual Aggression in the United States and the Role of Temperature." *Biodemography and Social Biology* 30(3): 263–78.

Muro, Mark, David G. Victor, and Jacob Whiton. 2022. *How the Geography of Climate Damage Could Make the Politics Less Polarizing*. Brookings.

Nagel, Joane. 2012. "Intersecting Identities and Global Climate Change." *Identities* 19(4): 467–76.

Nagel, Joanne. 1997. *American Indian Ethnic Renewal: Red Power and the Resurgence of Identity and Culture*. New York: Oxford University Press.

Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

O'Connell, Heather A. 2012. "The Impact of Slavery on Racial Inequality in Poverty in the Contemporary u.s. South." *Social Forces* 90(3): 713–34.

Omi, Michael, and Howard Winant. 2014. *Racial Formation in the United States*. Routledge.

Piguet, Etienne, Antoine Pécoud, Paul De Guchteneire, and Paul FA Guchteneire. 2011. *Migration and Climate Change*. ed. Cambridge University Press.

Ramirez, A Susana, Steven Ramondt, Karina Van Bogart, and Raquel Perez-Zuniga. 2019. "Public Awareness of Air Pollution and Health Threats: Challenges and

Opportunities for Communication Strategies to Improve Environmental Health Literacy.”  
Journal of Health Communication 24(1): 75–83.

Rodgers, Dennis, and Bruce O’Neill. 2012-10. “Infrastructural Violence: Introduction to the Special Issue.” Ethnography 13(4): 401–412.

Roston, Eric. 2010. The Carbon Age: How Life’s Care Element Has Become Civilization’s Greatest Threat. Bloomsbury Publishing USA.

Sanchez, Gabriel R., and Natalie Masuoka. 2010. “Brown-Utility Heuristic? The Presence and Contributing Factors of Latino Linked Fate.” Hispanic Journal of Behavioral Sciences 32: 519–31.

Silva, Andrea, Diego Esparza, Valerie Martinez-Ebers, and Regina Branton. 2020. “Perceived Police Performance, Racial Experiences, and Trust in Local Government.” Politics, Groups, and Identities 10(3): 343–66.

Soyapi, Caiphas, and Louis J. Kotzé. 2016. “Environmental Justice and Slow Violence: Marikana and the Post-Apartheid South African Mining Industry in Context.” Verfassung in Recht und Übersee 49(4): 393–415.

Spisak, Brian R. et al. 2022. “Large-Scale Decrease in the Social Salience of Climate Change During the COVID-19 Pandemic” ed. Anat Gesser-Edelsburg. PLOS ONE 17(1): e0256082.

Stock, Paul V. 2007. “Katrina and Anarchy: A Content Analysis of a New Disaster Myth.” Sociological Spectrum 27(6): 705–26.

The Chance That Two People Chosen at Random Are of Different Race or Ethnicity Groups Has Increased Since 2010. US Census Bureau. [https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-  
racially-ethnically-diverse-than-2010.html](https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html).

Tierney, Kathleen, Christine Bevc, and Erica Kuligowski. 2006. "Metaphors Matter: Disaster Myths, Media Frames, and Their Consequences in Hurricane Katrina." *The ANNALS of the American Academy of Political and Social Science* 604(1): 57–81.

Tomaskovic-Devey, Donald, and Vincent J. Roscigno. 1997. *Sociological Forum* 12(4): 565–97.

Tyson, Alek, Brian Kennedy, and Cary Funk. 2021. Gen z, Millennials Stand Out for Climate Change Activism, Social Media Engagement with Issue. Pew Research Center Science & Society. [https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-  
stand-out-for-climate-change-activism-social-media-engagement-with-issue/](https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-for-climate-change-activism-social-media-engagement-with-issue/).

Vermeersch, Peter. 2012. "Theories of Ethnic Mobilization: Overview and Recent Trends." *Elgar Handbook of Civil War and Fragile States*: 223–39.