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# Making it personal: Diversity and deliberation in climate adaptation planning

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#### ABSTRACT

The vulnerabilities and health burdens of climate change fall disproportionately upon lower income communities and communities of color. Yet the very groups who are most affected by climate change impacts are least likely to be involved in climate adaptation discussions. These communities face critical barriers to involvement including historical disenfranchisement, as well as a sense that climate change is distant and not personally relevant. Boundary organizations are increasingly playing an important role in bringing science to bear on policy decision-making with respect to climate change adaptation, an issue fraught with political and ideological tensions. Our project aimed to engage underrepresented communities in climate change adaptation decision-making using a neighborhood consensus conference model developed and tested in several diverse districts of Saint Paul, Minnesota. Our partnership, a "linked chain" of boundary organizations, devised a neighborhood consensus conference model to present best-available climate data as tangible, place-based scenarios. In so doing, we made climate change "personal" for those who remain outside of climate change planning discourses and opened an opportunity for them to assess their community's vulnerabilities and communicate their priorities for public investment. Our neighborhood-based model built trust and social capital with local residents and allowed us to bring new voices into conversations around climate change adaptation concerns and priorities. We believe this work will have a long term impact on local climate adaptation planning decisions.

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#### Introduction

Climate justice scholars have noted that climate vulnerabilities are distributed unevenly across races, ethnicities, classes, ages, incomes and genders. Health burdens are likely to be higher in communities of color, disproportionately located in urban heat islands with low tree canopy density and the prevalence of pavement (Jesdale et al., 2013). Similarly, the socioe-conomic inequalities experienced by urban communities of color exacerbate exposure to climate change impacts such as extreme weather events, environmental degradation, and subsequent labor market dislocations (Leiserowitz and Akerlof, 2010). Yet, climate adaptation discussions often include stakeholders who narrowly represent higher education, municipal agencies and environmental NGOs. Residents representing populations most vulnerable to climate impacts are rarely engaged in such conversations.

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Boundary organizations can play an important role in not only bringing climate information to important social groups, but also in innovating methods to discuss and deliberate local adaptation with communities, especially with residents from diverse racial, ethnic and socioeconomic backgrounds who may not perceive climate change as a threat. Our "linked chain" (Lemos et al., 2014) model of community based research brought together four partners: Macalester College, the Great Lakes Integrated Sciences and Assessments Center (GLISA), the Science Museum of Minnesota (SMM), and the Saint Paul Mayor's Office.<sup>1</sup>Our goal was to address the above described challenges by making climate adaptation "personal" for those who largely remain outside of climate change planning discourses. We focused on the emotional, social and cultural values and practices that impact public understandings of and responses to climate change. Through this project, we aimed to engage people of color and those in lower income communities in this planning work, and mobilize people to take action on the community scale.

With support from a GLISA grant, we devised and tested a neighborhood consensus conference model in four districts of Saint Paul, Minnesota, translating the best available climate data into tangible, place-based scenarios. We developed simulations and stories that facilitated underrepresented publics in assessing vulnerabilities and prioritizing public investments. We also hosted a follow-up meeting with participants and City leaders in order to track the impacts of our work. Our findings will contribute to the formation of the City of Saint Paul's climate adaptation plan.

Our partnership demonstrated that boundary organizations can build trust and social capital by innovating a model of public deliberation that brings new stakeholders into the conversation. We were able to leverage important climate information, decreasing the transaction costs of communicating that information by going straight to residents. In the long term, we believe we will make tangible changes to local climate adaptation planning decisions.

#### **Research context**

Our project was driven by the knowledge that residents in Saint Paul, Minnesota will experience two profound parallel shifts in the next thirty years: climate change and demographic transition. In addition to expected climate change related impacts, the Twin Cities metropolitan area is projected to experience growing racial diversity and continued economic and population growth. The Twin Cities Metropolitan Council's forecast anticipates that the region will continue to be an immigration gateway for the nation, with 43% of residents representing persons of color by 2040, including a significant number of international immigrants (Metropolitan Council, 2012). Similar demographic transitions are underway in other Great Lakes cities. Climate adaptation planning must consider these projected demographic changes.

This project builds upon a preliminary phase of research involving Macalester College, the Science Museum of Minnesota (SMM) and the Saint Paul Mayor's Office. In 2011, the SMM and the City of Saint Paul brought together a group of 20 local stakeholders for a two-day workshop to chart out the implications and opportunities attendant with climate change adaptation. The SMM is a well-regarded local institution with decades of experience acting as a boundary organization straddling the divides between science and the public, and facilitating the translation of "useful" science into policy. Macalester faculty participated in this workshop. In their evaluation report of this event, SMM staff noted a lack of participation from minority, immigrant and low-income residents. This project sought to address this absence by focusing on these groups.

Our project team was dedicated to fostering genuine deliberative processes. Yet, we were not naïve to the tensions implicit in representing and translating credible yet uncertain information across science and society boundaries. While our reputations aided us in building trust with communities, we remained reflexive and sensitive to the barriers of boundary work. Our hope was to model a collaborative partnership that brought together social science researchers, informal science educators, community leaders and policymakers on climate adaptation planning.

#### Literature review

The unevenness and unpredictability of how climate change will impact any specific community means there is no top-down, one-size-fits-all recipe for preparedness. Instead, community resilience depends on residents' active involvement in building capacity to collectively and creatively respond to adversity (Moser and Boykoff, 2013). Taking action on climate change, however, is a low priority for most Americans. Even among those who cite a high level of awareness and concern, the issue remains psychologically distant, intangible, and outside of everyday life concerns (Wolf and Moser, 2011). This may be particularly true for people from low income or historically marginalized communities who face other stresses that can leave little time or attention to deal with climate change. In addition, people in these communities tend to be disenfranchised and excluded from environmental efforts, including tackling climate adaptation (Taylor, 2014). If taking action on climate change is perceived as something for wealthy white communities, people outside this demographic are less likely to become engaged.

Our project is situated at the intersection of two bodies of scholarship: (1) Science, Technology and Society (STS) research on deliberation and participation; and (2) social and cognitive psychological research concerning the human perception and communication of risks associated with climate change. Both strands of scholarship address a daunting social problem: how to build greater civic capacity to comprehend, discuss and prioritize public investments in climate adaptation.

<sup>&</sup>lt;sup>1</sup> Macalester College is a nationally recognized liberal arts college, known for a distinctive emphasis on global citizenship. The College has deep connections with the diverse communities of Saint Paul, earned through decades of civic engagement.

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