

# U.S. Landmark Names

## Pre-Analysis Plan

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### 1 Introduction

Efforts to portray minority groups positively often prompts a backlash in the majority group. I consider which psychological mechanisms might create or mitigate a backlash to policies that advance the economic and social status of racial and ethnic minorities. Are there ways to discuss these policies that are perceived as fairer to the majority group? I will focus on majority group responses to positive depictions of minorities, a form of advancement where in most cases majority group members do not lose anything materially. I seek to answer three questions: (1) Do majority group members have a distaste for positive depictions of the minority group, or a distaste for elements of the processes that engender these depictions? (2) What are the psychological mechanisms that in some people provoke a backlash against action to promote positive depictions of the minority group? (3) Are there ways to discuss these policies that don't lead to a backlash? I answer these questions in the context of Indigenous-language-origin landmark names in the United States.

Indigenous American history, culture, and existence has often been subject to erasure within the classroom, media, and popular knowledge in the United States (Ehlers et al. (2013)). While symbols of Native American influence are replete throughout the United States, these depictions are often altered through colonizer influence, and are frequently pejorative caricatures (Bataille, 2001). There is evidence that this appropriation of Native American culture and imagery may be directly harmful for Indigenous Americans' mental health (Davis-Delano et al. (2020)), and indirectly harmful for Indigenous Americans by leading non-Native people to be less supportive of pro-Native policies (Davis-Delano et al. (2022)). Bolstering support for pro-Native policies among non-Native individuals is crucial for securing the continued economic and social empowerment of Indigenous Americans who, despite experiencing recent economic growth (Akee (2021)), remain one of the most economically and socially disadvantaged groups in the United States. In 2022, the median American Indian Alaska Native (AIAN) household income in the United States was 29% lower than the median U.S. income (U.S. Census Bureau), while in 2021 the life expectancy for AIAN people was 65.1 years, 11 years lower than the U.S. average (Arias

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et al. (2022)). While evidence suggests that tribes with sovereign institutions rooted in their own cultures have experienced rapid economic development since the late twentieth century (Taylor, 2008), non-Native individuals have often resisted sovereign Indigenous empowerment, particularly land claims (Mackey (2005)). Even private- and public-sector actions to redress the harms of pejorative depictions of Indigenous Americans – for example, removing slurs against Native Americans from the names of professional sports teams and town names – has been met with fierce resistance (Jimenez et al. (2023), Sanders, 2004).

One way in which activists seek to restore Indigenous visibility in the United States is through reclaiming place names. Efforts to reclaim place names include creating maps and atlases of traditional tribal homelands with Indigenous-language names (Hunn et al., 2015; Bois Forte Band and Ely Folk School), as well as applying to the federal government for official name changes, which if approved are reflected across all federal uses of the landmark name. While sports team mascots is likely a more salient example of a harmful depiction of Indigenous Americans for most non-Native Americans, I choose to focus on landmark names for two reasons. First, while divisive, the issue has been much less politicized, reducing the risk that respondents' answers default to a point of view accepted by their in-group due to self- or social-image concerns. Second, landmark naming is an opportunity to recognize Indigenous cultural contributions positively, rather than only remove harmful portrayals. A prominent example of such a name change is Mt. Denali (previously Mt. McKinley). The first documented appeal to restore the name Mt. Denali was in 1916, and the State of Alaska submitted the first name-change application to the U.S. government in 1975 (National Park Service, 2022). In 2015, the mountain's Koyukon name was restored by executive order. There have been many other applications for name changes that restore Indigenous names, to varying degrees of success.

## 2 Pilot 1

*Pilot 1 was conducted in 2023 before the writing of this pre-analysis plan. Pilot 1 was pre-registered under AEARCTR-0011742*

I conducted a 730-person online survey experiment in Prolific. Each group received an information and priming treatment. Respondents first entered their demographic information, information about their education and childhood experiences, and answered a few questions that ask their beliefs about the origin of three place names in the United States. Then, participants saw one of three messages: (1) information about the naming of state names, including a description of the linguistic derivation and meaning of the name (Historical Treatment); (2) information about the naming of landmarks, such as Mount Denali, whose names were recently chosen by Native American activist groups (Present-Day Treatment); or (3) information about the origin of geographic landmark names whose names derive from their geographic features (Control).

After the treatment, respondents answered questions about their beliefs and views. First par-

ticipants guessed: 1) the percentage of U.S. and their state populations that identifies in each racial group; and 2) the number of representatives in federal and their state government that identify in each racial group. Participants then answered questions about their support for policies and activism concerning Native Americans, including the use of Native imagery and names in sports team mascots and other forms of representation, support for Native American sovereignty, and support for the U.S. abiding by treaties with Native American tribes.

The treatment messages were the following:

**Control Message:** Did you know that many places in the United States are named for their geological features? Glacier National Park in Montana has more than twenty active glaciers. The rocks of the Rocky Mountain National Park began forming 1.7 billion years ago. Many smaller geographic features throughout the United States are also named to describe their features. For example, there are over 500 streams in the United States with the name 'Muddy' (Creek, Brook, etc.) alone.

**Historical Treatment Message:** Did you know that almost half of the state names in the United States are believed to originate from Indigenous names or words? Some states are named after the tribes who lived in the region, and other names are Anglicizations or simplifications of Indigenous words. For example, some people believe the name Wyoming is derived from the Leni-Lenape word 'maugh-wau-wama', meaning 'extensive plains'. Massachusetts, the first state with an Indigenous name, comes from the Algonquian word 'Massadchu-es-et'.

**Present-Day Treatment Message:** Did you know that many place names in the United States originate in Indigenous languages? Groups and individuals have made recent efforts to reclaim even more names in their Indigenous languages. Many places in the United States have been officially renamed to honor their original Indigenous names, including prominent places like Mount Denali, which was previously named Mount McKinley. There is ongoing activism to officially rename other prominent places to their Indigenous names, such as the efforts to change the official name Mount Rainier to Mount Tahoma.

### 3 Pilot 2

I plan to run a second experiment that will allow me to identify mechanisms that can lead to support or backlash for pro-Native policy. First, I plan to use a hypothetical list experiment to disentangle three potential mechanisms that may lead people to be against or supportive of difference landmark names, and landmark name changes: status quo bias, name-language preferences, or preferences over the rationale for a name being chosen. I then will use an information treatment to understand what types of language can provoke backlash or support, and if support leads to crowd-in or crowd-out of material reparations. I will randomize two phrases in the message that target loss aversion and distaste for activism, two mechanisms that potentially create backlash. A third treatment will identify if people are positively affected by learning about the linguistic derivation of names, a way of contextualizing the name changes,

which may suggest a policy-relevant mode of communicating that can serve as an alternative or complement to communicating about political activism.

### 3.1 Experimental Design

#### 3.1.1 List Experiment

Respondents will see 3 landmark photos with a name and a description. Each description will be comprised by a randomly selected combination of (1) a photo and geographic description of a landmark, (2) the landmark's name, (3) a description of when it was named, and if it replaced a different name or was the first official federal name, and (4) a description of the rationale behind the name.

The landmark photos and description (for example, mountain, stream, lake, etc.) will be taken from real places in the United States. While the landmark names will be real, they will be randomized such that half are English-language names, and half are Indigenous-language names. There will be two possible descriptions for when the place was named and why: (1) "This landmark was named in YYYY and was the first official federal name given to this landmark"; and (2) "This was not the first official federal name given to this landmark. This landmark was renamed to have this name in YYYY." There will be three possible rationales given behind the name: (1) "The name was given to honor the nature and wildlife around this landmark"; (2) "The name was given to honor the individuals who owned property close by the landmark"; and (3) "The name was given to honor the Indigenous people, history, and culture of the region." Participants will necessarily see each potential rationale one time each (order randomized), and the other elements will be randomized without any restrictions.

The combinations will be taken from real landmarks, meaning that it will be a real description if the four that go together in reality are randomly matched together. It will be most often be a hypothetical description, when at least one component is mismatched.

I will ask participants to answer three questions about each landmark:

1. How much do you like this landmark name? (*Likert Scale response*)
2. How appropriate do you think this name is for the landmark? In other words, how well suited do you think the name is for the landmark? (*Likert Scale response*)
3. Imagine the person who you think chose the name for this landmark. How similar to you or dissimilar from you do you think that person is? This can be in terms of demographic characteristics (age, gender, race, ethnicity, nationality, etc.), in terms of beliefs (political, religious, etc.), in terms of personality, or in terms of any other characteristics that you think would matter in determining how similar to yourself you consider somebody else to be. (*Likert Scale response*)

### 3.1.2 Information Treatment

There will be three comparison groups for my treatments. I will have a simple control group, which describes Indigenous-language-name origins *without* describing renaming. I will also have a placebo condition, which describes the origins of English-language landmark name (the Channel Islands), without making any mention of Indigenous people or languages. I will have a control placebo and active placebo – in one I will describe the landmark name without mentioning anything about renaming, whereas in the other I will discuss a renaming process it went through.

C (control): Did you know that many place names in the United States originate in Indigenous languages? Many places in the United States have names that honor their Indigenous origins, including prominent places like Mount Denali, the tallest mountain in the United States.

P1 (control placebo): Did you know that many place names in the United States **are named for their geographic features**? Many places in the United States have names that honor their **surrounding nature**, including prominent places like the Channel Islands, which have more than twenty animal species that cannot be found anywhere else in the world.

P2 (active placebo): Did you know that many place names in the United States **are named for their geographic features**? Many places in the United States **have been renamed** to honor their **surrounding nature**, including prominent places like the Channel Islands, which have more than twenty animal species that cannot be found anywhere else in the world, **and was previously called the Santa Barbara Islands**.

There will be eight treatment messages. The first randomization will identify if people are averse to activist processes, holding the outcome of those processes constant, by randomizing whether the renaming of Mount Denali is described as an active or passive change (green text). This randomization intentionally avoids buzzwords such as “activism” that are frequently used in the media and by politicians, and are likely associated with sensationalized depictions of people.

T1 (active treatment): Did you know that many place names in the United States originate in Indigenous languages? **Groups and individuals have succeeded in officially renaming** many places in the United States to honor their Indigenous names, including prominent places like Mount Denali, the tallest mountain in the United States.

T2 (passive treatment): Did you know that many place names in the United States originate in Indigenous languages? Many places in the United States **have been officially renamed** to honor their Indigenous names, including prominent places like Mount Denali, the tallest mountain in the United States.

The second randomization (loss aversion treatment, labeled treatment L) will test loss aversion as a competing or complementary mechanism to distaste for activism. For example, participants may be in favor of naming currently unnamed places with Indigenous language names, but do

not like when a name that they feel represents themselves or their culture is replaced. To test this, a random subset will see an additional clause in the message (red text):

T1L (active + loss aversion treatment): Did you know that many place names in the United States originate in Indigenous languages? **Groups and individuals have succeeded in officially renaming** many places in the United States to honor their Indigenous names, including prominent places like Mount Denali, the tallest mountain in the United States, *which was previously named Mount McKinley*.

T2L (passive + loss aversion treatment): Did you know that many place names in the United States originate in Indigenous languages? Many places in the United States **have been officially renamed** to honor their Indigenous names, including prominent places like Mount Denali, the tallest mountain in the United States, *which was previously named Mount McKinley*.

The third randomization (contextualization treatment, henceforth labeled treatment C) will try to understand if information about the linguistic process of renaming can ameliorate the loss aversion or the backlash against the political processes. Learning about the linguistic process of renaming might inspire cultural appreciation because it contextualizes the name change by conveying historical precedent and cultural tradition. Furthermore, there is a higher likelihood that Americans are aware of (or can guess) the origin of a name like “McKinley” than “Denali”, and may feel more connected to a place name when they know its meaning. To test the role of contextualizing the name change, I will randomly include a sentence that describes the linguistic origin of the name and refers to the Indigenous name as the name used before western settlement (blue text – it will be applied in the same manner, though not shown to T2 and T2L):

T1C (active + historical treatment): Did you know that many place names in the United States originate in Indigenous languages? **Groups and individuals have succeeded in officially renaming** many places in the United States to honor their Indigenous names *that were used before European settlement of the Americas*. These include prominent places like Mount Denali, the tallest mountain in the United States. *The name Mount Denali is derived from Koyukon word ‘deenaalee’, meaning ‘the high one’.*

T1LC (active + loss aversion + historical treatment): Did you know that many place names in the United States originate in Indigenous languages? **Groups and individuals have succeeded in officially renaming** many places in the United States to honor their Indigenous names *that were used before European settlement of the Americas*. These include prominent places like Mount Denali, the tallest mountain in the United States, *which was previously named Mount McKinley. The name Mount Denali is derived from the Koyukon word ‘deenaalee’, meaning ‘the high one’.*

### 3.1.3 Sample

I will use Prolific to recruit participants. Prolific users create a Prolific account, and will be notified about my study if they are eligible. Prolific will post my study and send out an email to a random subset of eligible users. There will be no eligibility restrictions for my study. Prolific will provide a link to the survey in Qualtrics, where participants will first see the consent form. After affirming consent, participants will be able to continue with the survey in Qualtrics.

### 3.1.4 Outcomes

My primary outcomes are the following (full questionnaires in Appendix):

- Support for pro-Native policy: This will be an index of answers to nine questions about if the U.S. should uphold its treaty obligations, and if Native nations should have sovereignty
- Opposition to appropriation: This will be an index of answers to five questions about the appropriateness of non-Native people doing things such as dressing up for Native Americans for Halloween
- Clicking on a link to pay a local honor tax, or learn about how to set up an honor tax in your area
- Clicking on a link for a landmark name-change petition
- MacArthur Scale of Subjective Social Status (4 questions)
  - Standard version asking about socio-economic status: now and in ten years
  - A version I have adapted for this context asking about cultural relevance: now and in ten years

## 3.2 Analysis Plan

My primary tests for the **list experiment** are the following:

1. Renamed versus original federal name: How much does status quo bias matter in determining people's taste for a name?
2. English-language versus Indigenous-language name: How much do name-language preferences matter in determining people's taste for a name?
3. Name honors Indigenous people versus name honors wildlife or land-owners: How much does the rationale for choosing the given name matter in determining people's taste for a name?

My primary tests for the **information treatment** are the following:

1. T1 vs. T2: Do people react differentially to information about active versus passive processes, even if the outcome is the same?

2. TL vs. T (pooling T1L and T2L, and pooling T1 and T2): Are people loss averse?
  - (a) Sub-hypothesis – (T2L – T2) vs. (T1L – T1): Is the backlash against activism heightened when activism is associated with losses?
3. TC vs. T (pooling T1C and T2C, and pooling T1 and T2): Do people respond positively to information that contextualizes changes?
  - (a) Sub-hypothesis – (T2C – T1C) vs. (T2 – T1): Does contextual knowledge mitigate the backlash against activism?
  - (b) Sub-hypothesis – T2LC vs. T2L: Does context mitigate loss aversion?

### 3.2.1 ITT Results: List Experiment

I will use the following econometric specification to test the hypotheses from the list experiment:

$$Y_{il} = \beta_0 + \beta_1 R_{il} + \beta_2 I_{il} + \beta_3 H_{il} + \gamma_l + X_i + \epsilon_{il}$$

where  $Y_{il}$  is the taste individual  $i$  expresses for landmark  $l$ ,  $R_{il} = 1$  if the description is of the landmark being *renamed*,  $I_{il} = 1$  if the landmark name is in an Indigenous language,  $H_{il} = 1$  if the rationale for the name was to honor Indigenous people,  $\gamma_l$  are fixed effects for the landmark photo and geographic description, and  $X_i$  are lasso-selection individual control variables (from the data collected prior to the listing experiment).

I will then fully interact  $R_{il}$ ,  $I_{il}$ , and  $H_{il}$ , to understand how these mechanisms work alongside one another. For example, it could be that people are not averse to name changes when the language is in English, are not averse to Indigenous-language names that were named in the past, but *are* averse to landmark name changes that instate an Indigenous-language name. To understand these interactions, I will use the following specification:

$$\begin{aligned} Y_{il} = & \beta_0 + \beta_1 R_{il} + \beta_2 I_{il} + \beta_3 H_{il} \\ & + \beta_4 R_{il} \times I_{il} + \beta_5 R_{il} \times I_{il} + \beta_6 I_{il} \times H_{il} \\ & + \beta_7 R_{il} + I_{il} + H_{il} + \gamma_l + X_i + \epsilon_{il} \end{aligned}$$

### 3.2.2 ITT Results: Information Treatment

I will use the following econometric specification to test my primary hypotheses:

$$Y_i = \beta_0 + \beta_1 T1_i + \beta_2 T2_i + X_i + \epsilon_i$$

where  $X_i$  is a matrix of lasso-selected control variables from questions participants answer before seeing the treatment message, and  $T_i$  will be defined in the following ways, depending on the test:

1.  $T1_i = 1$  if a participant is in T1, T1L, T1C, or T1CL,  $T2_i = 1$  if a participant is in T2, T2L, T2C, or T2CL
  - Test of aversion to activism:  $\beta_1 = \beta_2$  (control and placebo conditions as the omitted group)
2.  $T1_i = 1$  if a participant is in T1L, T1CL, T2L, or T2CL,  $T2_i = 1$  if a participant is in T1, T1C, T2, or T2C
  - Test of loss aversion:  $\beta_1 = \beta_2$  (control and placebo conditions as the omitted group)
3.  $T1_i = 1$  if a participant is in T1C, T1CL, T2C, or T2CL,  $T2_i = 1$  if a participant is in T1, T1L, T2, or T2L
  - Test of effect of more information:  $\beta_1 = \beta_2$  (control and placebo conditions as the omitted group)

To test if the backlash against activism is heightened when activism is associated with losses, I will use the following specification:

$$Y_i = \beta_0 + \beta_1 T1_i + \beta_2 T2_i + \beta_3 TL_i + \beta_4 T1_i \times TL_i + \beta_5 T2_i \times TL_i + X_i + \epsilon_i$$

where  $T1_i = 1$  if the participant is in any T1 group,  $T2_i = 1$  if the participant is in any T2 group, and  $TL_i = 1$  if the participant is in any TL group. Then  $(\beta_4 - \beta_5)$  is the object of interest to answer this question.

To test if contextual knowledge mitigates the backlash against activism, I will use the following specification:

$$Y_i = \beta_0 + \beta_1 T1_i + \beta_2 T2_i + \beta_3 TC_i + \beta_4 T1_i \times TC_i + \beta_5 T2_i \times TC_i + X_i + \epsilon_i$$

where  $T1_i = 1$  if the participant is in any T1 group,  $T2_i = 1$  if the participant is in any T2 group, and  $TC_i = 1$  if the participant is in any TC group. Then  $(\beta_4 - \beta_5)$  is the object of interest to answer this question.

Finally, to test if context mitigates loss aversion, I will use the following specification:

$$Y_i = \beta_0 + \beta_1 TL_i + \beta_2 TC_i + \beta_3 TL_i \times TC_i + X_i + \epsilon_i$$

where  $TL_i = 1$  if the participant is in any TL group, and  $TC_i = 1$  if the participant is in any TC group, limiting the sample to participants in either T1 or T2 treatments. Then  $\beta_3$  is the object of interest to answer this question.

### 3.2.3 Heterogeneity

Precisely distinguishing the reasons why people may have a distaste for activism, and why that distaste might be softened with contextualizing information, is not the objective of this project. However, I will conduct heterogeneity analysis by several baseline measures to augment my understanding of three mechanisms: differential perceived costs associated with Indigenous empowerment, differential baseline knowledge, differential status quo bias, and differential empathy.

- Perceived costs:
  - Select questions from the American Identity Scale (Martinez-Fuentes et al. (2021))
  - Zero-Sum mentality score (Chinoy et al. (2023))
  - Index of engagement with sport and Native American appropriation in sports
    - Variables: follows any sports, follows professional sports, follows professional sports team with a Native American mascot, follows college sports, follows high school sports, played sports as a child, and distance to Arrowhead Stadium
  - Un- or under-employment
  - List experiment: subjective distance between self and person naming English-language landmark names
  - List experiment: subjective distance between self and person naming Indigenous-language landmark names
- Aesthetic preferences
  - List experiment: taste for English-language landmark names
  - List experiment: taste for Indigenous-language landmark names
- Baseline knowledge:
  - Number of landmark names for which the participant correctly guessed the naming group (0-3)
  - Index of exposure to Native American history
    - Variables: learned about Native American history in school, read a book about Native American history, went to a museum on Native American history, or watched a film or documentary about Native American history
- Status quo bias:
  - Select question to the Resistance to Change Scale (Oreg (2003))
  - List experiment: distaste for names that replaced the original federal name

- Demographic measures
  - Race
  - Gender
  - Partisanship

### 3.2.4 Attrition

Any imputations discussed below will be conducted by taking the average of a participants' gender, state, and treatment group.

Control Variables: I will impute missings and include a binary variable indicating if that variable has a missing value.

Index Outcomes: If participants are missing fewer than half of the variables in either index, they will be included in the analysis. Answers will be imputed for the missing variables before the index is constructed, and binary control variables indicating which variables are missing will be included. I will also conduct an analysis dropping these participants for robustness.

Incentivized Outcome: If participants reach the end of the survey but do not click on the links, they will be automatically coded as “did not click”. If a participant does not reach the end of the survey, they will be dropped from the analysis for these outcomes.

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