Final Paper: Regional Differences in Media Responses to the Katahdin Woods and Waters National Monument
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INTRODUCTION

Amidst significant controversy, President Obama established the Katahdin Woods and Waters National Monument (Katahdin Woods) on August 24, 2016. The monument covers 87,500 acres in Penobscot County, Maine, near the famous Mt. Katahdin (Warren). The land was originally privately owned by Roxanne Quimby, who donated the land along with a pledge of a $40 million endowment for the establishment of the national monument. Now managed by the National Park Service, Katahdin Woods contains opportunities for hiking, camping, mountain biking, fishing, hunting, and snowmobiling. Many praise the monument for its potential to bring in much-needed tourist revenue to the economically depressed region (Miller). Calling the monument a "remarkable gift" the National Park Service hopes that the monument will help preserve the land for future generations to enjoy (Warren).

Not everyone agrees that the monument will benefit the region, however. Roxanne Quimby faced significant backlash when she first endeavored to donate her private land in 2011. She originally proposed to turn her land into a large national park, only to face fierce opposition from the general public. Opponents of the monument voiced concerns that the park would interfere with recreation in the area and hinder local paper and logging industries (Miller). Facing an uphill battle, Quimby eventually revised her proposal and instead sought to institute a smaller national monument on her land. Again, Quimby faced opposition. Many feared that federal ownership would affect local access to the land. Some voiced personal vendettas against Quimby, maintaining that she was only donating the land to acquire personal tax breaks. In staunch opposition to the monument, Maine Governor Paul LePage asserted, "This once again

demonstrates that rich, out-of-state liberals can force their unpopular agenda on the Maine people against their will" (Miller 2016). Despite this resistance, the monument eventually passed.

Outsiders and locals appear to hold strikingly different views with regards to the new monument. To this day, some local Mainers continue to voice opposition to Katahdin Woods. By contrast, many outsiders living beyond the state praise the monument for its natural beauty and economic potential. For our analysis, we sought to further examine these regional differences in perceptions towards the monument We sought to specifically analyze how the monument is portrayed differently in Northern Maine, Southern Maine, and national media sources. We addressed the following research questions in our analysis:

> 1. Are there geographic differences in attitude toward the monument across Northern Maine, Southern Maine, and the nation as a whole?
>
> 2. How does the media portray the Katahdin Woods controversy in each of these three regions?
>
> 3. How are people responding to the media about the Katahdin Woods designation in each of these three regions?

Drawing from these three research questions, we sought to qualitatively and quantitatively analyze media portrayals of Katahdin Woods across these three regions. Understanding these geographical differences will allow us to gain a better understanding of how distinct stakeholders have engaged with the monument.

LITERATURE REVIEW

Monument Controversy

Our Katahdin Woods analysis coincides with a broader field of national park controversy research. Several other researchers have specifically analyzed media sources to gain insight as to the perspectives of different stakeholders in environmental controversies. For instance, Dustin and Schneider researched the politicization of natural resource policy in the snowmobiling controversy in Yellowstone National Park. After analyzing the distinct arguments of politicians, research scientists, and public land management agencies, the authors concluded that each stakeholder group involved in the debate approached snowmobiling in the park differently. This conclusion aligns with Campbell and Meletis' finding that stakeholder perceptions in a North Carolina coastal management controversy differed significantly. These stakeholder analyses will help inform our study of regional stakeholder perceptions towards Katahdin Woods.

Carrus et al. also analyzed stakeholder perceptions towards a national park controversy. In their article ""Local mass media communication and environmental disputes: An analysis of press communication on the designation of the Tuscan Archipelago National Park in Italy" they discussed media representations of the Tuscan Archipelago National Park designation in Italy. Their use of qualitative content analysis to examine differences in local and regional media perspectives towards the monument demonstrated the importance of qualitative methodologies in examining stakeholder perceptions.

Qualitative Analyses

A variety of recent studies also informed our use of qualitative analysis for our research. For instance, Kaefer et al.'s use of NVivo to analyze articles about New Zealand's environmental performance provides especially important background information on qualitative assessments of

media articles in NVivo. These authors demonstrated that qualitative analysis can provide significant insight as to media perceptions of environmental issues.

Rachul and Caulfield also employed qualitative analysis in their comparison of newspaper and sport website coverage of a recent high-profile stem cell case. Of particular relevance to our Katahdin Woods study, these authors also analyzed reader comments on articles. They concluded that comments on sports websites largely lamented a lack of availability of stem cell treatments, while comments on newspaper articles reported skepticism as to the efficacy of stem cells. This distinction could reflect differences in readership between the two sources. Their assessment of both online articles and user comments helped inform our methodological choice to assess both Katahdin Woods newspaper articles and reader comments in our analysis.

Quantitative Analyses

Several authors also informed the quantitative analyses in our study. For example, Altaweel and Bone employed quantitative content analysis to analyze how water issues were presented in Nebraska newspapers over time. Through a variety of word frequency analyses, correlation assessments, and word co-occurrence charts, these authors concluded that coverage of water issues differed based on date and region of the articles.

Scholarly articles employing quantitative sentiment analysis also informed our study. For instance, Caragea et al. used sentiment analysis to analyze social media reactions to Hurricane Sandy. These authors employed geographical mapping software to geotag tweets and then determined the sentiment score of the tweets using SentiStrength software. They then analyzed how particular sentiments towards Hurricane Sandy were clustered in geographic regions. This

geographical analysis informed our choice to examine the geographic distribution of articles

mentioning Katahdin Woods.

Overall, our research fits in to a broader body of work that considers stakeholder

perceptions towards environmental controversies. The mentioned literature on national park

controversies, qualitative analysis, and quantitative analysis proved especially useful as we

developed the methodologies used in our study.

METHODS

Drawing from this body of literature, we chose to analyze Katahdin Woods data both

qualitatively and quantitatively. The use of qualitative and quantitative methods allowed us to

gain a thorough, comprehensive understanding of regional differences in media portrayals of the

monument. We gathered a variety of different types of regional media data from Northern

Maine, Southern Maine, and national sources. This data included newspaper articles, Facebook

comments, and tweets. We used GIS mapping to describe our sources, qualitative content

analysis to explore the sentiments and themes expressed in each region, and quantitative content

analysis to identify notable patterns across the regions.

Data Acquisition

Region	Newspapers Eligible
Northern Maine	Bangor Daily News, Morning Sentinel, Sun Journal
Southern Maine	Journal Tribune, Kennebec Journal, Portland Press Herald, Times Record
National	am New York, Chicago Tribune, Daily News, Los Angeles Times, New York Post, Newsday, New York Times, Wall Street Journal, Washington Post, USA Today

Table 1. Newspaper sources included in study by region. Maine daily newspapers were divided into Northern Maine and Southern Maine regions based on the congressional district line. National newspapers included the top 10 national newspapers by subscription.

We downloaded newspaper articles for our analysis using the databases ProQuest and

LexisNexis. In this search, we first defined eligible newspapers to include in our study, as

outlined by Table 1. We chose to include all daily newspapers published in Northern and Southern Maine. "Northern Maine" newspapers were defined as newspapers published in Maine's 2nd Congressional District. "Southern Maine" newspapers were defined as newspapers published in Maine's 1st Congressional District. National newspapers eligible for our study were limited to the top 10 national newspapers by subscription.

Within each of these included newspaper sources, we searched ProQuest and LexisNexis for the keywords "Katahdin Woods and Waters National Monument" and the date range of August 1st, 2016 to April 1st, 2017. All resulting articles were downloaded in text and PDF format for future analyses. We visited the websites of eligible newspaper sources that were not available on ProQuest and LexisNexis and searched for articles manually using the same criteria. Articles that were not originally available on ProQuest or LexisNexis in text format were converted from PDF files using Adobe Reader.

We then scraped Facebook comments on articles from the newspaper sources mentioned above. To do this, we visited the Facebook pages of each eligible newspaper source and searched article posts using the keywords "Katahdin Woods and Waters National Monument" within the date range of August 1st, 2016 to April 1st, 2017. We then scraped the user comments on the resulting article posts using the Facebook Developer API. RStudio (R) converted the scraped comments into text files for further analysis.

We also gathered data from twitter as an additional national social media source. We searched for tweets including the keywords "#KatahdinWoodsandWaters", "Katahdin Woods and Waters", or "Katahdin Woods and Waters National Monument" within the date range of August 1st, 2016 to April 1st, 2017. We copied the resulting tweets into a word document and

converted this document into a comma separated values (CSV) document using R. We then cleaned this document using R to preserve only the body of each tweet for analysis.

Analytical Methods

We first geographically mapped our newspaper sources in order to examine the spread of articles about Katahdin Woods. Drawing from Caragea et al.'s geographical map of tweets, we aimed to examine how our sources were distributed across the country. The cities and states of newspapers with articles on Katahdin Woods were geocoded and assembled in Microsoft Excel. We then created a shapefile of these locations and the number of articles posted by each newspaper source that we overlaid over a base map of the United States in ArcMap 10.4.

Articles, Facebook comments, and tweets were then analyzed qualitatively using NVivo 11 software. Drawing from Kaefer et al. and Rachul and Caulfield, we incorporated qualitative methodologies into our analysis in order to examine underlying themes and sentiments in each region. We first imported all data sources (articles, Facebook comments, and tweets) into NVivo as PDF or text files. We initially reviewed the data sources to explore relevant themes and patterns of interest. We then worked collaboratively to develop a detailed codebook, which is shown below in Figure 1. Our codebook categorized text by source type, region, sentiment, and discussion topic. Discussion topic codes addressed various common themes within the sources, such as the environment, distrust of outsiders, and the local economy.
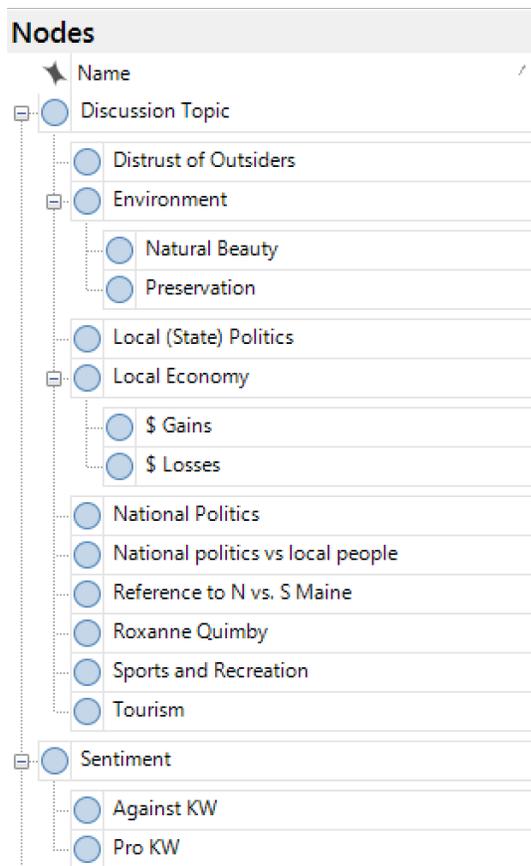
Nodes

Name	/
⊖ ◯ Discussion Topic	
⋯ ◯ Distrust of Outsiders	
⊖ ◯ Environment	
⋯ ◯ Natural Beauty	
⋯ ◯ Preservation	
⋯ ◯ Local (State) Politics	
⊖ ◯ Local Economy	
⋯ ◯ $ Gains	
⋯ ◯ $ Losses	
⋯ ◯ National Politics	
⋯ ◯ National politics vs local people	
⋯ ◯ Reference to N vs. S Maine	
⋯ ◯ Roxanne Quimby	
⋯ ◯ Sports and Recreation	
⋯ ◯ Tourism	
⊖ ◯ Sentiment	
⋯ ◯ Against KW	
⋯ ◯ Pro KW	

Figure 1. Codebook used in qualitative NVivo coding of articles, Facebook comments, and tweets. Sources were first coded by region and source type and were then coded by sentiment and discussion topic where appropriate. Codebook developed by the authors in NVivo 11.

After creating the codebook, we then systematically coded each source. We first coded the entirety of each source by source type (article, Facebook comment, or tweet) and region (Northern Maine, Southern Maine, or national). We then coded phrases within each source by sentiment (for or against Katahdin Woods) and discussion topic where applicable. When we finished coding, we created queries to examine the qualitative results within each discussion topic and within various intersecting codes of interest. We also examined NVivo word clouds of word frequencies within discussion topic codes of interest. Additionally, we downloaded count data for several intersecting code categories in Excel for quantitative analysis. Using this data, we then created graphs and charts in Excel that visualized regional trends.

Next, we performed topic modeling in R and Jupyter Notebooks to examine the dominant themes present in each of our sources. We first performed topic modeling by region to examine overall regional differences in language use. We then broke each region down by source type (comment, article, or tweet) and performed individual topic models for each region and source type. This allowed us to examine specific differences between regions within each source type.

We then quantitatively analyzed our acquired Facebook comments and newspaper articles using Voyant Tools (Voyant). We first used R and Jupyter notebooks to compile one text file for each region of Facebook comments and each region of newspaper articles. We created one Voyant corpus for Northern Maine, Southern Maine, and national Facebook comments and one corpus for newspaper articles by region. We then used Voyant to visualize quantitative patterns evident in the text, as exemplified by Altaweel and Bone's informative quantitative content analysis. Our visualizations included word clouds of most frequent words, relative frequency graphs comparing the relative frequency of keywords, and correspondence analysis scatterplots that demonstrated the relative correspondence of keywords used across all regions.

RESULTS

Geographic Results

Overall, we found Katahdin Woods articles in three Northern Maine newspapers, two Southern Maine newspapers, and five national newspapers. We also analyzed Facebook user comments on Katahdin Woods article posts on these newspaper Facebook pages. The map shown in Figure 2 below shows the geographical distribution of the number of newspaper articles discussing Katahdin Woods. As expected, the vast majority of newspaper articles referencing Katahdin Woods were concentrated in Maine. There were fewer discussions about

the monument on a national scale. As Figure 2 demonstrates, newspaper conversations about

Katahdin Woods largely occurred in Northern and Southern Maine.

Figure 2. Geographical distribution of articles written in national newspapers (top 10 by subscription) and Maine newspapers about Katahdin Woods between August 1st, 2016 and April 1st, 2017 Data markers are sized based on the number of articles written about Katahdin Woods in each newspaper source. Data marker sizing determined by Natural Breaks (Jenks) classification. Data gathered and created in Microsoft Excel, imported into ArcMap. Map created in ArcMap 10.4.

Qualitative Results

Our qualitative analyses in NVivo revealed notable differences between these Northern

Maine, Southern Maine, and national newspaper articles. Unfortunately, many of the articles

were reprints from articles originally published in newspapers from other regions, which limited

our ability to fully discern differences between the articles by region. This will be discussed

further in our limitations section. Despite this, there remained differences in article themes by

region. These differences are summarized in Figure 3, which highlights the distribution of coded
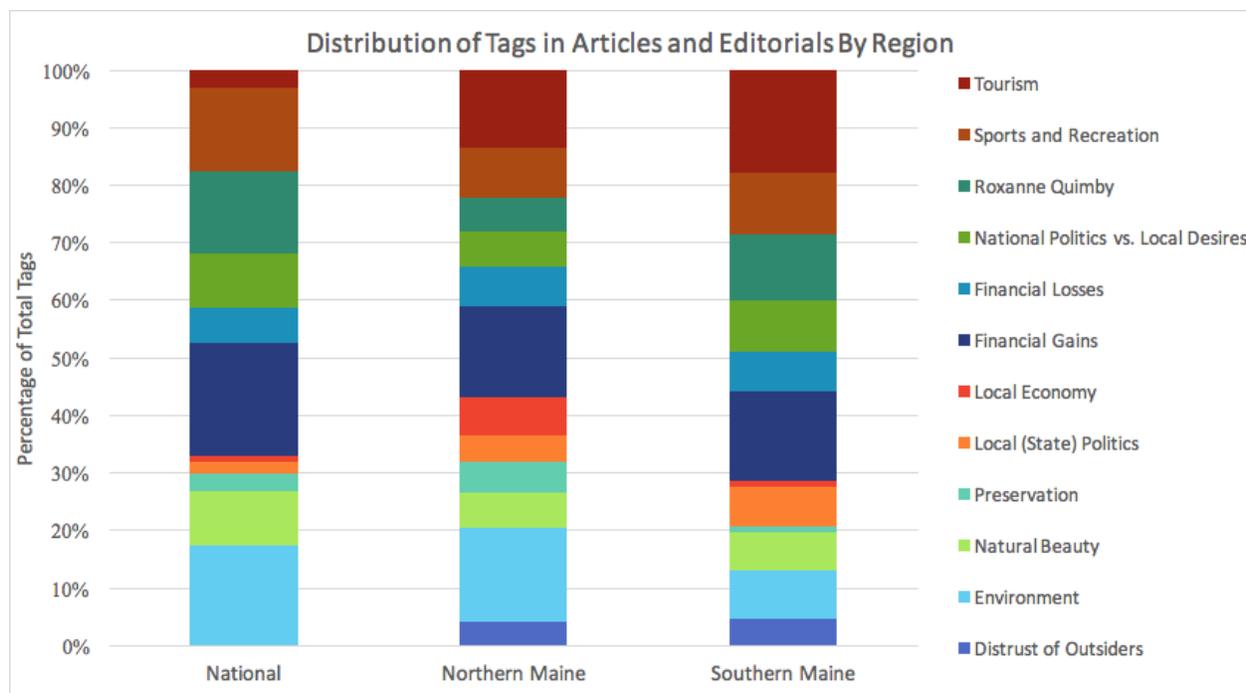
tags from our codebook by article region.

Figure 3. Percent distribution of themes represented in Katahdin Woods newspaper articles and editorials by region (National, Northern Maine, Southern Maine). Articles published between August 2016 and April 2017. Bars are colored based on percent distribution of NVivo tags (nodes) out of the total distribution of tags in the region. Articles coded in NVivo 11, data imported into Microsoft Excel, visual created in Excel.

Perhaps indicative of this prevalence of reprints, some of the tags shown in Figure 3 were distributed nearly equally in each of the regions. These themes included financial losses, financial gains, and national vs. local politics. However, we can also see some striking differences in article discussions of the monument by region. For instance, while about 8% of Northern Maine articles referenced the local economy, only about 1% of both Southern Maine and national articles reference this theme. Additionally, national newspapers more frequently discussed the natural beauty of the monument. Furthermore, while Northern and Southern Maine articles both referenced distrust of outsiders in the monument controversy, this theme was not discussed in the national articles. Examples of phrases tagged with distrust of outsiders included:

Northern Maine: "When Roxanne Quimby does what she wants with her private land, it is out-of-state elitists trying to tell us how to live" (Editorial, Bangor Daily News, August 13, 2016).

Southern Maine: "[Katahdin area residents] found [Quimby] abrasive… locals labeled her a self-serving outsider who hailed from Massachusetts" (Article, Portland Press Herald, December 22, 2016).

In examining these specific comments more closely, we can see that even though the "distrust of outsiders" theme was distributed similarly in Northern and Southern Maine comments, the tone of phrases addressing this theme differed by region. National articles did not discuss distrust of outsiders at all, perhaps indicative of their distance from the concerns of Maine people themselves. The Southern Maine phrase above also suggests a distancing from the local people. The comment specifically highlights that it was Katahdin area residents, rather than all Mainers, who distrusted outsiders during the monument debate. On the other hand, the Northern Maine comment demonstrates a more personal, intensely felt distrust of elitist outsiders. Our combination of quantitative and qualitative analyses of this theme highlighted that Northern Maine articles reflected greater personal distrust of outsiders than articles from other regions.

Our analysis of Facebook user comments helped ameliorate some of the reposting issues with article posts, as Facebook comments are original postings by readers of the article source. We assumed for the purposes of our analysis that readers of local newspapers tend to be residents of the area and readers of national newspapers are representative of the national public. It is also important to note that our sample size of national newspaper Facebook comments was very small, which will be discussed further in the limitations section. We conducted a similar analysis

of the distribution of NVivo tags by region, as is shown below in Figure 4. Overall, we found

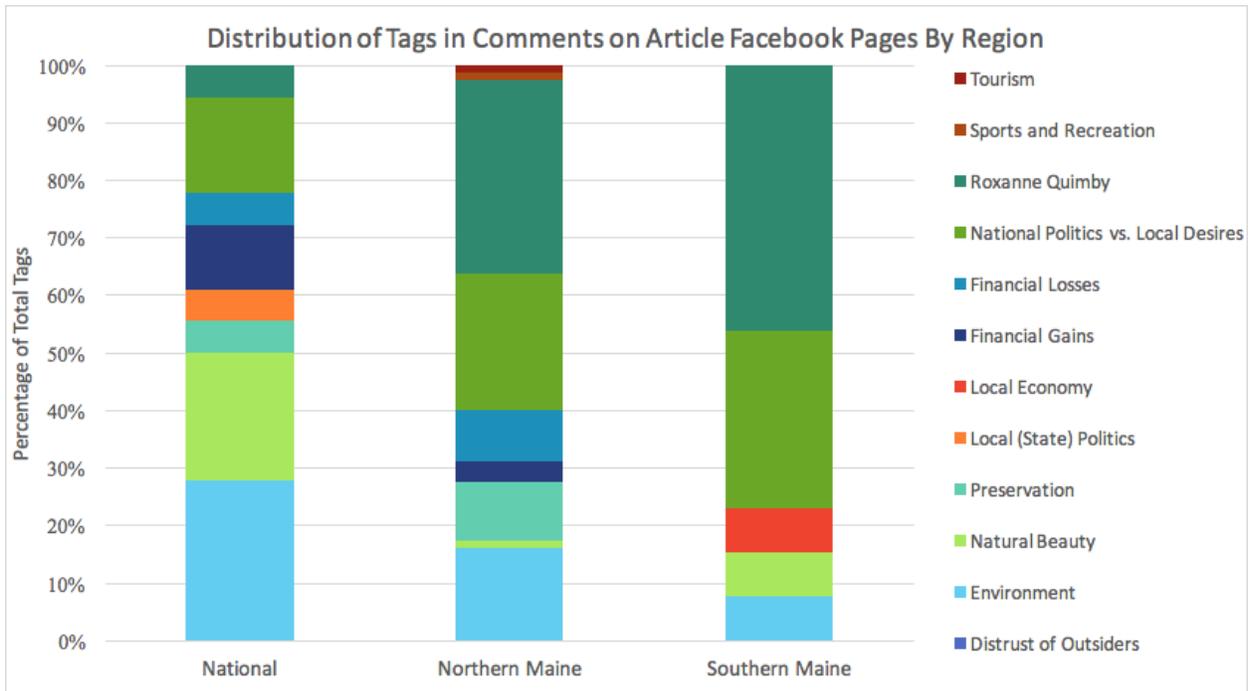notable differences between the regional Facebook comments.

Figure 4. Percent distribution of themes represented in Facebook comments on Katahdin Woods newspaper article posts by region (National, Northern Maine, Southern Maine). All comments were posted between August 2016 and April 2017. Bars are colored based on percent distribution of NVivo tags (nodes) out of the total distribution of tags in the region. Articles coded in NVivo 11, data imported into Microsoft Excel, visual created in Excel.

As Figure 4 demonstrates, we noted significant differences in the themes invoked in

Facebook comments by region. For instance, a greater distribution of national comments

referenced the environment (about 28%) than Northern Maine (17%) and Southern Maine (8%)

comments. This may suggest that the Maine public was less concerned about environmental

issues relative to other more pressing local concerns. Only Northern Maine and national

comments addressed financial losses of the monument, while Southern Maine commenters did

not mention this issue. Strikingly, the distribution of comments referencing Roxanne Quimby

differed significantly by region. About 4% of national comments, 35% of Northern Maine

comments, and 47% of Southern Maine comments discussed Quimby. Examples of the Maine comments are shown below:

> *Northern Maine:* "If not for Burt Shavitz old Roxanne Quimby wouldn't have a pot to piss in or a window to throw it out of. He should have left old Roxanne alongside the road" (Comment, Bangor Daily News, October 5, 2016).
>
> *Southern Maine:* "You're right. The appropriate response to the Roxanne Quimby family is a huge 'thank you' and one as well to our president who has the foresight to preserve it" (Comment, Portland Press Herald, August 25, 2016).

Again, by examining these comments qualitatively, we can clearly see that perceptions of Roxanne Quimby differed by region. While both Northern and Southern Maine commenters had mixed feelings about Quimby, we noticed clear regional patterns in perceptions towards the donor. As the Northern Maine comment above exemplifies, Northern Maine commentators largely expressed negative views towards Quimby. Often, such comments were demeaning attacks on Quimby's personal character, and many were sexual in nature. Southern Maine comments, by contrast, largely praised Quimby for the "gift" of the monument. They tended to express gratitude towards Quimby for her generous donation.

Quantitative Results

Our quantitative results confirmed and expanded upon the regional differences we observed in our qualitative analyses. Using topic modeling, we found that articles across all regions most frequently drew from a similar category of neutral words such as "monument", "park", "national", and "Obama" when discussing the monument. However, with closer analysis of the secondary topics, we noted that Northern Maine articles and comments tended to draw from more negative pools of words than Southern Maine and national sources.

Our correspondence analysis of Facebook comments, shown in Figure 5 below, also suggested clear differences between the regions. Comparably to our topic models, our correspondence analysis scatterplot identified key clusters of terms that frequently appeared together in the documents. Terms were plotted based on co-occurrence and relative association, and regions were plotted according to correspondence with particular groupings of words.
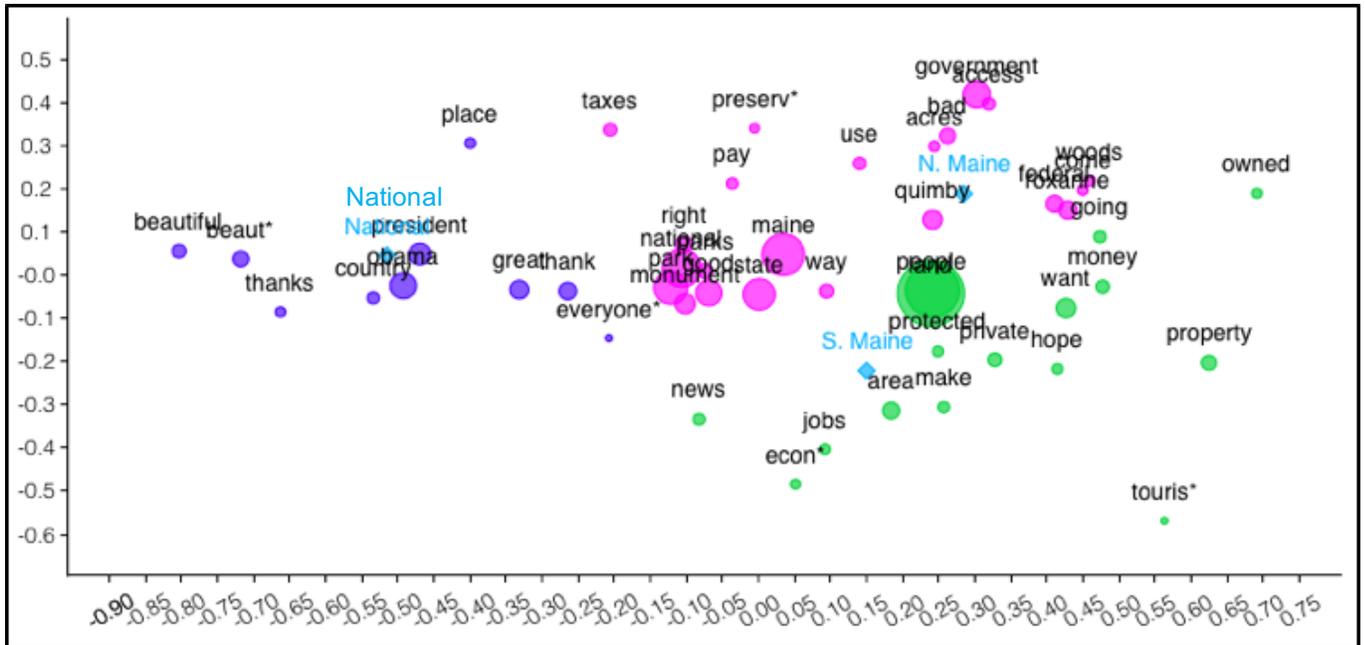

Figure 5. Correspondence Analysis scatterplot showing the association of relative word frequencies used in Facebook user comments on national, Southern Maine, and Northern Maine articles. Facebook comments posted between August 2016 and April 2017. Term data points are sized according to relative word frequency. Words closer in proximity to each other are more closely associated. Color represents cluster of associated words. Location of regional comment corpus according to word frequency distribution is indicated in blue. Voyant stop words were excluded from the analysis. Comments were gathered using Facebook Graph API Explorer and RStudio. Scatterplot created using Voyant Tools.

In support of our qualitative findings, Figure 5 shows that themes invoked in Facebook comments differed significantly by region. As expected, Facebook comments from all regions employed the neutral words in the center of the plot such as "national", "Maine", "park", and "monument". Other words were more characteristic of certain regions, however. For instance, National commenters tended to draw from words colored in purple. These commenters were generally appreciative of the monument, utilizing positive terms such as "beautiful", "thanks",

and "great". Southern Maine commenters also largely responded favorably to the monument, as indicated by the words in green such as "protected", "jobs", and "hope". Northern Maine comments, on the other hand, were generally more negative with regards to the monument. Reflecting skepticism about the potential impact of federal oversight of the monument, they used terms such as "bad", "access", and "pay".

We see similar patterns when directly comparing the relative frequencies of words used in Facebook comments in each region. Figure 6 below shows the relative frequency of the most frequent words in national, Southern Maine, and Northern Maine Facebook comments. This figure includes the top 15 words for each region. Given that some of these most frequent words overlap in multiple regions, fewer than 45 words are displayed in the figure.
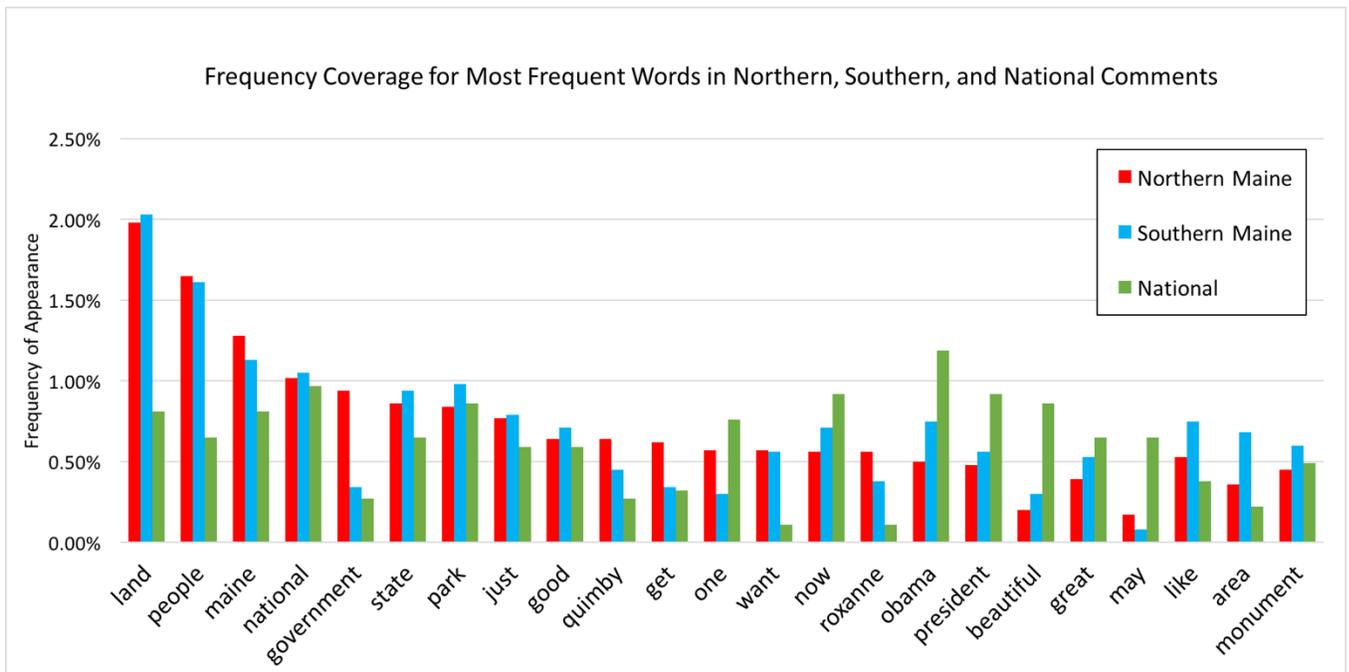

Figure 6. Percent frequency coverage for most frequent words in Facebook comments on national, Southern Maine, and Northern Maine article posts. Comments posted between August 2016 and April 2017. Most frequent words are defined as the top 15 most frequently occurring words in comments from each region. Due to overlap in each region's top 15 words, fewer than 45 words are depicted. Words shorter than 3 letters and NVivo stop words excluded. Frequency analysis performed in NVivo 11, data imported into Microsoft Excel, visual created in Excel.

Figure 6 demonstrates significant differences in the occurrence of words in Facebook comments by region. For instance, "land" and "people" occurred far more frequently in Maine Facebook comments than in national comments, perhaps suggesting that the direct impacts of the monument on the land and people of Maine are more pertinent to the local residents themselves. Northern Maine commenters more frequently mentioned the government, which may be indicative of the greater distrust of outsiders that we noted in our qualitative analyses. As we highlighted previously, Northern Maine commenters also more frequently address Roxanne Quimby. Additionally, as we noted in our other analyses, national comments more frequently invoked positive terms such as "beautiful" and "great".

We also examined tweets in our qualitative and quantitative analyses. We analyzed the tweets using NVivo qualitative coding, topic modeling, and frequency analyses. However, due to a relatively small sample size and the lack of geographical tags linked to tweets about Katahdin Woods, these tweets did not contribute significant information towards our focus on regional differences in perceptions towards the monument.

DISCUSSION

Overall, we found striking differences in regional perceptions towards Katahdin Woods. Our qualitative and quantitative analyses of both print media and social media provided us with a comprehensive understanding of how the monument was represented differently in distinct regions. While we were limited in our ability to see striking contrasts between newspaper articles published by region due to the prevalence of reprinted articles, we did see some notable differences. For instance, we found the Maine articles expressed a greater distrust of outsiders than National articles, which may pertain to the proximity of Maine sources to locals who voiced these sentiments.

We also observed notable distinctions in Facebook comments by region. These differences were corroborated in both our qualitative and quantitative analyses. National comments tended to praise the monument as a generous gift that would preserve the natural beauty of the land for years to come. Southern Maine comments, while more mixed in sentiment, also generally portrayed the monument positively. These commenters largely expressed hope for the monument and its potential impact on local jobs. Northern Maine commenters tended to react more negatively to the monument. They largely vilified Roxane Quimby and expressed concerns about government ownership of the land.

More broadly, our results highlight that key regional stakeholders may approach monument controversies in distinct ways. This supports our class discussion of the importance of incorporating a wide variety of stakeholder views when resolving environmental disputes. As Campbell and Meletis underscore in their analysis of different players involved in a coastal development dispute in North Carolina, distinct stakeholders may bring very different perspectives to environmental debates. As they maintain, we must consider stakeholders' "varied economic and cultural stakes" in environmental problems (316). In support of this assertion, our findings point to the distinct stakes national, Southern Maine, and National Maine populations held in the controversy. For instance, the varied Facebook comments in each of these regions shows that stakeholders had different relationships with the monument. National stakeholders were far removed from the monument and largely interact with the monument as tourists. As Figure 5 underlines, national commenters largely emphasized the monument's beauty and preservation for all. They clearly held different stakes in the monument than more local residents in Northern and Southern Maine, who felt the economic and political impacts of the monument on a daily basis.

Our analysis also supports prior work demonstrating that media sources portray public controversies in distinct ways. For instance, Rachul and Caulfield examined how a single high-profile stem cell case was represented in the media. They concluded that the same case was portrayed quite differently in newspapers and sports websites and the comments on these sources. Similarly, we found that national, Southern Maine, and Northern Maine articles and Facebook comments portrayed the Katahdin Woods controversy in distinct ways. For example, while national comments frequently referred to environmental aspects of the monument, Maine comments more frequently talked specifically about Maine people and Roxanne Quimby (Figure 6). Such media distinctions point to the varied ways the monument was portrayed and viewed in each of the regions.

In addition, our research points to broader local sentiments in Maine that may influence future environmental controversies in the region. In their qualitative media assessment of a national park dispute in Italy, Carrus et al. concluded that media articles demonstrate the "confrontation between the local and national political levels involved in the park designation process" (621). In accordance with this conclusion, we noted significant differences in local and national media representations of the Katahdin Woods monument controversy. For instance, Northern Maine articles were more likely to express skepticism about future federal control of their land and community. As Miller highlights, this is a "robust and often debate that has divided the Katahdin region [for many years]." That is, this unease about federal control has long shaped the area and will continue to persist in future environmental controversies. This reflects a national pattern of small, rural communities fearing federal oversight in national monument proposals (Carrus et al.; Dustin). This enduring sentiment in Northern Maine may influence future controversies and policies in the region that involve national government interventions.

Overall, our use of qualitative and quantitative methodologies to analyze media portrayals of Katahdin Woods enabled us to thoroughly examine regional differences in monument perceptions. However, there were a variety of limitations to our study. Our newspaper analysis was limited because many of the articles were reprinted from other sources. This limited our ability to discern clear regional differences in media portrayals of the monument. We were also unable to scrape comments directly from newspaper websites themselves. While we were able to overcome this challenge by instead scraping comments from article posts on newspaper Facebook pages, we recognize that Facebook commenters may not be representative of all commenters on the newspaper articles. While these Facebook article posts were publically available, they were only visible to Facebook users who followed the particular newspaper Facebook page. This may have reduced the extent to which our commenters were representative of news readers in general. Many newspaper sites did not post all of their Katahdin Woods articles on their Facebook pages, so our sample size of Facebook comments was relatively small. Furthermore, we were unable to include the Twitter data collected for this study due to a limited sample size and a lack of geotagged Katahdin Woods tweets. Despite these challenges, our study represents an important initial assessment of regional differences in media portrayals of the monument.

CONCLUSION

In this research, we demonstrated that there were significant regional differences in media representations of the Katahdin Woods and Waters National Monument. Through our qualitative and quantitative analyses, we concluded that national, Southern Maine, and Northern Maine articles and Facebook comments portrayed the controversy in distinct ways. National and Southern Maine news sources were generally positive and auspicious about the

monument, while Northern Maine sources frequently expressed concern about the potential implications of federal monument oversight. As others have argued, these differences point to the diverse and often clashing stakeholders involved in national monument controversies.

Our research examines an ongoing debate about federal overreach in a small local community. As we have shown, this coincides with broader debates about the federal government's right to institute national monuments within local communities. This debate is still ongoing today. President Donald Trump recently called for a review of any monuments "where the Secretary [of the Interior] determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders" (Miller). As this declaration highlights, there remains significant concern about federal government overreach without adequate consent of local communities. This debate remains ongoing in Maine and in the nation as a whole.

In order to work towards a resolution to this debate, future researchers must continue to gather local stakeholder perceptions of the Katahdin Woods monument. As our research highlights, local media sources may provide key insights as to local views of the monument. Leaders of the monument should thus expand upon our research by continuing to review local editorials and articles over time. Continuous study of local media sources would enable monument leaders to gather a continuous public feedback loop that highlights changing perceptions of the monument over time. Furthermore, as our work demonstrates, social media responses to the monument can also shed light on community concerns. Social media data such as personal Facebook posts, Facebook user photos of the monument, and tweets may reveal how distinct stakeholders continue to engage with the monument. These social media voices may reflect community perspectives that otherwise go unheard. With this expanded data, Katahdin-

area residents could develop a management plan that would benefit a diverse array of both local and more distant stakeholders. Moving forward, we must continue to assess both local and national perspectives towards the Katahdin Woods monument. In doing so, we can work towards making the monument a place that benefits all.

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