

Regional Differences in Media and Public Perception of the Katahdin Woods and Waters National Monument

Introduction:

The Katahdin Woods and Waters National Monument (Katahdin Woods), located in Northern Maine near Baxter State Park, was designated a national monument by President Obama in August of 2016. The monument is located on land previously owned by Roxanne Quimby, most famously known as the founder of Burt's Bees. Prior to the National Monument designation, Quimby had in the past advocated for the creation of a national park on her donated land, but found the local population surrounding the area as well as the state government averse to a national park. Without the support of the state government, Quimby moved towards a national monument designation, and with the federal government's support, President Obama officially created the monument on August 24th, 2016, just a day shy of the National Park Service's 100th anniversary.

National monuments differ from national parks in that national monuments can be designated using executive action through the Antiquities Act of 1906, while national parks require congressional approval.¹ There are 157 national monuments that have been designated over the course of Antiquities Act; these have been created by 16 different presidents to preserve land already belonging to the federal government. National parks, on the other hand, are created solely through acts of Congress and therefore need wider approval. This crucial difference between national monuments and national parks has led to controversy in a number of regions

¹ "Monuments Protected Under the Antiquities Act." *National Parks Conservation Association*. National Parks Conservation Association, 13 Jan. 2017. Web. 10 May 2017. <<https://www.npca.org/resources/2658-monuments-protected-under-the-antiquities-act#sm.00001h5qm46v9yfojs7ay9q1delfz>>.

where local sentiment towards the creation of a monument may not agree with federal sentiment, and the Katahdin Woods and Waters National Monument is no exception.

In studying Katahdin Woods and its creation, a number of questions arise relating to its controversial nature. We have chosen to limit our study on the Katahdin Woods controversy to a few key ideas. We chose our research questions to be as follows:

1. Are there geographical differences in attitude toward the monument between Northern Maine, Southern Maine, and on a National scale?
2. How does the media portray the Katahdin Woods and Waters National Monument designation?
3. How are people responding to the media about the Katahdin Woods and Waters National Monument?

Using these three questions to guide our research, we will use qualitative and quantitative analyses to delve into the media's portrayal of Katahdin Woods and people's responses to the monument on a number of social media platforms.

Literature Review:

Monument Controversy:

In researching the controversy surrounding Katahdin Woods, we primarily referenced two papers relating to monument controversies. In Daniel Dustin's article, "The Science of Politics/The Politics of Science: Examining the Snowmobile Controversy in Yellowstone National Park," published in *Environmental Management* in 2005, Dustin discusses the relationships between scientists, park management, and politicians in balancing management of

Yellowstone National Park.² The many stakeholders and opinions present complicated decision-making on recreational access to the park.

Another article, “Local Mass Media Communication and Environmental Disputes: An Analysis of Press Communication on the Designation of the Tuscan Archipelago National Park in Italy,” written by Carrus et. al., similarly discusses conflicts between local residents of a region in Italy and the governmental body planning on designating a national park in the area.³ The authors used qualitative content analysis to compare opinions of the national park before and after the official designation of the park through analysis of media sources.

Qualitative Analyses:

In reading background literature, a number of articles discussed qualitative methods that influenced our use of methods in our research. Kaefer et. al. discuss the use of NVivo to analyze the content of newspaper articles to look at international opinions of how New Zealand performs environmentally in terms of climate change.⁴ The authors work through various methods of approaching qualitative analysis, such as top-down and bottom-up approaches, and discuss various forms of visualizations created in NVivo.⁵

Rachul and Caulfield look at newspaper articles and user comments on stem cell research in their article “Gordie Howe’s Stem Cell ‘Miracle’: A Qualitative Analysis of News Coverage

² Dustin, Daniel L., and Ingrid E. Schneider. "The Science of Politics/The Politics of Science: Examining the Snowmobile Controversy in Yellowstone National Park." *Environmental Management* 34.6 (2004): 761-67. Web. 761.

³ Carrus, Giuseppe, Francesca Cini, Marino Bonaiuto, and Alessandra Mauro. "Local Mass Media Communication and Environmental Disputes: An Analysis of Press Communication on the Designation of the Tuscan Archipelago National Park in Italy." *Society & Natural Resources* 22.7 (2009): 607-24. Web. 607.

⁴ Kaefer, Florian, Juliet Roper, and Paresha Sinha. "A Software-Assisted Qualitative Content Analysis of News Articles: Example and Reflections." *Forum: Qualitative Social* 16.2 (2015): 1-17. Web. 1.

⁵ Ibid., 10-11.

and Readers' Comments in Newspapers and Sports Websites."⁶ They compare how stem cell treatment in Mexico is portrayed in newspapers and on sports websites to look at how presenting data with no criticism gives patients an expectation of efficacy of treatment.⁷ They found that when news articles presented both praise and critiques for stem cell treatment, readers and commenters had more thoughtful and critical discussion of stem cell treatment.⁸

Quantitative Analyses:

We also consulted a number of articles discussing quantitative analysis methods. In "Applying content analysis for investigating the reporting of water issues," authors Altaweel and Bone discuss the use of quantitative text analysis on newspaper articles in Nebraska to study public sentiment about water quality in the state.⁹ The authors discuss analyses such as finding key words linked to topics of interest and analysis of the number of articles posted over a period of time involving water quality issues.¹⁰

Authors Caragea et. al. discuss how to use sentiment analysis with natural disasters in "Mapping Moods: Geo-Mapped Sentiment Analysis During Hurricane Sandy."¹¹ By looking at spatial mapping of geotagged tweets collected just after Hurricane Sandy and using software to quantify the sentiment of the tweets, they were able to geographically map sentiment of tweets.¹²

⁶ Rachul, Christen, and Timothy Caulfield. "Gordie Howe's Stem Cell 'Miracle': A Qualitative Analysis of News Coverage and Readers' Comments in Newspapers and Sports Websites." *Stem Cell Reviews and Reports* 11 (2015): 667-75. Web. 667.

⁷ Ibid., 667.

⁸ Ibid., 672-673.

⁹ Altaweel, Mark, and Christopher Bone. "Applying Content Analysis for Investigating the Reporting of Water Issues." *Computers, Environment and Urban Systems* 36.6 (2012): 599-613. Web. 599.

¹⁰ Ibid., 608.

¹¹ Caragea, Cornelia, Anna Squicciarini, Sam Stehle, Kishore Neppalli, and Andrea Tapia. "Mapping Moods: Geo-Mapped Sentiment Analysis During Hurricane Sandy." Proc. of Proceedings of the 11th International ISCRAM Conference, University Park, Pennsylvania. N.p.: n.p., n.d. N. pag. Print. 1.

¹² Ibid., 5.

The authors found strong geographic clustering of tweets with similar sentiment surrounding the landfall area of Hurricane Sandy.

Finally, Song and Xia in their article titled “Spatial and Temporal Sentiment Analysis of Twitter data” research how Twitter users on the Curtin University campus in Bentley, Australia felt about different academic subjects through their emotional expression on Twitter.¹³ The authors mapped the sentiment results and found that certain parts of campus had more positive tweets, such as the lecture theater, compared to other parts of campus, such as the school of engineering, which had much more negatively-toned tweets.¹⁴

Overall, past articles written on sentiment analysis, qualitative content analysis and coding, and monument controversy have been instrumental in guiding our analysis. Our methodology has been influenced by these articles as well as by methods practiced in the Nature of Data this semester, discussed further in the Discussion section of this paper.

Methods:

We will divide up our methodology into two sections, a description of our acquisition and cleaning of data and our analytical methodology. Overall, we chose to scrape a variety of types of data for our analysis, including newspaper articles, Facebook comments, and tweets. We used spatial mapping to visualize our data sources, qualitative and quantitative content analysis to analyze the content of our sources, and then additional graphing analysis on our results to look at the responses to Katahdin Woods in the media and in people’s responses to the media.

Data Acquisition and Cleaning:

¹³ Song, Zhiwen, and Jianhong (Cecilia) Xia. “Spatial and Temporal Sentiment Analysis of Twitter Data.” *European Handbook of Crowdsourced Geographic Information* (2016): 205-21. Web. 10 Apr. 2017. 205.

¹⁴ *Ibid.*, 214.

We acquired our data in a number of ways. The first set of data we used was a corpus of newspaper articles that included the phrase “Katahdin Woods and Waters National Monument.” We chose to limit our data to the top 10 national newspapers by subscription (am New York, Chicago Tribune, Daily News, Los Angeles Times, New York Post, Newsday, New York Times, Wall Street Journal, Washington Post, USA Today). We also looked at daily Maine newspapers mentioning Katahdin Woods and divided up Maine into two regions of interest, Northern Maine and Southern Maine (divided by Congressional district). Table 1 (below) shows the newspapers of interest that had articles about Katahdin Woods. Using ProQuest, LexisNexis, and newspaper websites, we downloaded newspaper articles published between August 1st, 2016 and April 1st, 2017. We converted all articles into both text and PDF formats using Adobe Reader.

National	Northern Maine	Southern Maine
Chicago Tribune	Bangor Daily News	Kennebec Journal
Los Angeles Times	Morning Sentinel	Portland Press Herald
New York Times	Sun Journal	
Wall Street Journal		
Washington Post		

Table 1: Newspapers scraped that had articles written about Katahdin Woods (not all newspapers had articles published on the topic). Newspapers are grouped by region. Daily newspapers were used in Northern and Southern Maine; top 10 subscribed newspapers were used for national newspapers.

We also scraped Facebook comments on the pages of newspapers mentioned above. Using R and the Facebook Developer API, we searched for article posts using the key words “Katahdin Woods and Waters” to find official newspaper page posts with articles previously found and then scraped all comments on these posts. We compiled the comments into text files organized by the article they pertained to for further analysis.

Additionally, we scraped tweets from Twitter using three keyword searches in the Twitter Advanced Search function. We searched for the following phrases,

“#KatahdinWoodsandWaters”, “Katahdin Woods and Waters”, “Katahdin Woods and Waters National Monument” and copied all tweets including these phrases into a word document. We then converted these into a CSV document using R and cleaned the data using R to keep the relevant information for the purpose of this project, namely the body of each tweet.

Analytical Methodology:

We began our analysis with spatial mapping of our newspaper sources. Using ArcMap 10.4, we chose to look at the distribution of newspapers to visualize where discussion was happening about Katahdin Woods. We geocoded the cities and states of the newspapers with articles on Katahdin Woods and created a shapefile of these locations and the number of articles posted about Katahdin Woods that we overlaid above a base map of the United States.

Next, we performed quantitative text analysis in order to look at overall themes in the articles, comments, and tweets. We ran text files of the three types of sources in R notebooks using R Studio and Jupyter notebooks in order to look at what was being discussed in each of the three sources types. We performed topic modeling on all three source types broken down by region (Northern Maine, Southern Maine, national) to look at what themes were common in different regions. We then brought our text files for different regions into Voyant in order to visualize aspects of our quantitative analysis. We created visualizations including word clouds of text in different regions and of different source types, relative frequency graphs for certain words present in text between regions, and correspondence analysis scatterplots to look thematically at similarities between words used in different regions in Facebook comments.

We performed qualitative content analysis on our three source types using NVivo software to code sources and portions of sources into a variety of nodes. Our codebook is shown below in Figure 1.

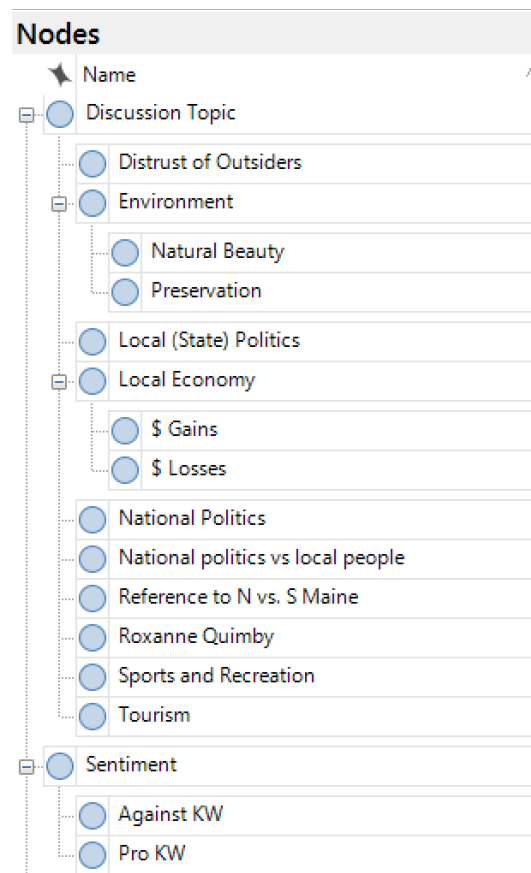


Figure 1: Codebook used in NVivo to code articles, Facebook comments, and tweets. All articles, comments, and tweets were first coded by category of source, region, and then portions of text were coded into pro or against Katahdin Woods categories and other categories included above. Codebook created between the three student co-researchers in NVivo 11.

We imported all text into NVivo and began by coding sources into overarching categories to identify the type of source and the region from which the source originated. We then went through sources line by line to identify portions of the text that were in support or opposition to Katahdin Woods and coded sections as such. We used an additional list of codes (shown in Figure 1) to categorize text more deeply. After completing this qualitative text analysis, we downloaded count data for various intersection categories by region to look at trends between regions of which nodes were most commonly tagged. We also looked at word frequency coverage regionally in Facebook comments in order to examine differences in the types of vocabulary used (and therefore sentiment expressed).

Overall, we determined that it was important to use a number of qualitative analyses as well as quantitative analyses in our analysis. This was a thought expressed in course readings such as Connolly et. al.'s "Mixed methods analysis of urban environmental stewardship networks" in which the authors describe the value of using a variety of methods to triangulate analysis to compile various types of informative data.¹⁵ Using multiple types of analysis has allowed us to be thorough in our analysis and confident in our methodology.

Results:

Our first phase of analysis began with spatial mapping of the newspaper articles mentioning Katahdin Woods. As shown in Figure 2, we mapped the number of newspapers written on the topic of Katahdin Woods in each newspaper used. We found that the vast majority of articles were posted in Maine (somewhat unsurprisingly so) and that while there was less conversation happening about the monument in other locations, there were still articles being posted nationwide about the designation.

¹⁵ Connolly, James J.T., Erika S. Svendsen, Dana R. Fisher, and Lindsay K. Campbell. "Mixed Methods Analysis of Urban Environmental Stewardship Networks." *Handbook of Research Methods and Applications in Environmental Studies* (2015): 102-21. Web. 106.

Number of Articles Written in Top 10 National Newspapers by Subscription and Maine Newspapers about Katahdin Woods and Waters National Monument



Figure 2: Number of articles written in national newspapers (top 10 by subscription) and Maine newspapers about KW between August 1st, 2016 and April 1st, 2017. Map made in ArcMap 10.4. Data gathered and created in Excel, imported into ArcMap. Data mapped with Natural Breaks (Jenks) classification.

After performing qualitative content analysis on all articles, comments, and tweets, we brought our resulting NVivo node/tag data into Excel for further analysis. We graphed the breakdown of tags across regions for both newspaper articles to look at differences between Northern Maine, Southern Maine, and national articles, as shown below in Figure 3.

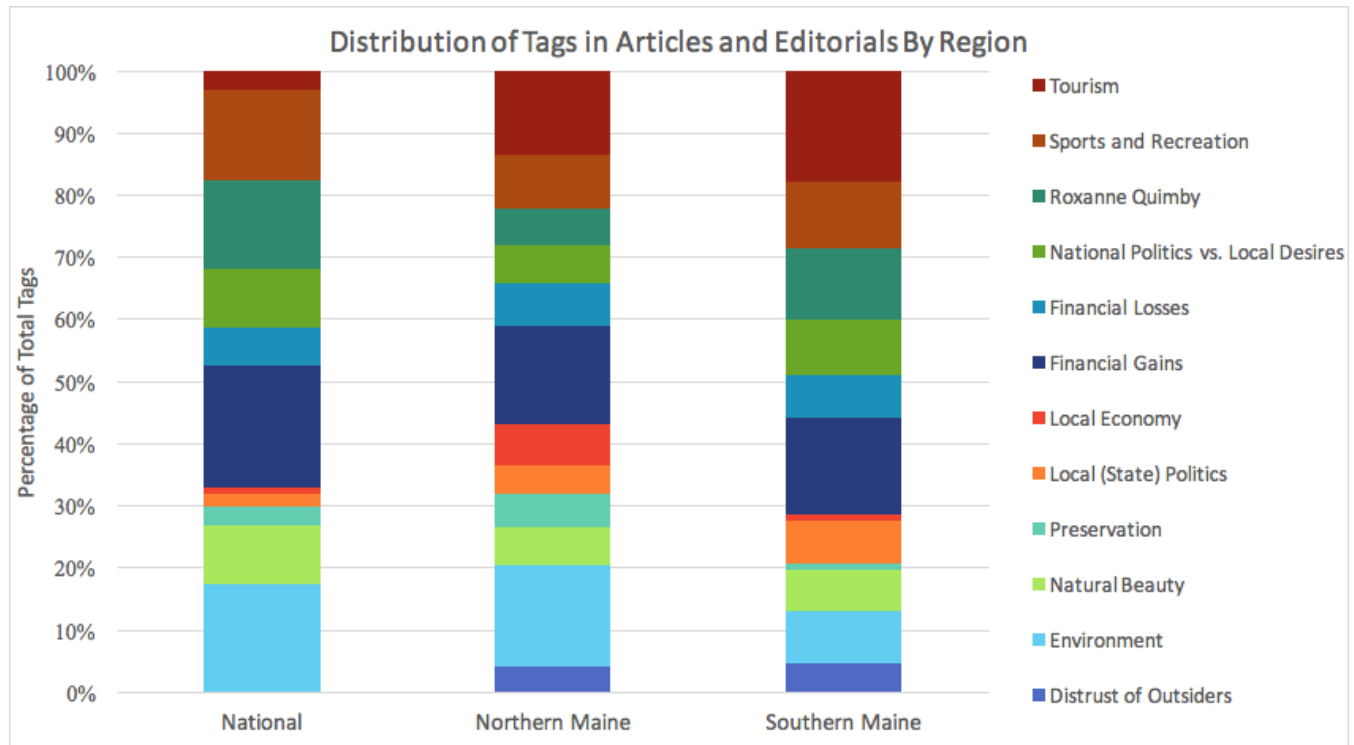


Figure 3: Distribution of tags in articles and editorials by region (National, Northern Maine, Southern Maine). Articles coded in NVivo, data imported into Microsoft Excel, visual created in Excel. Each region divided up into percentage blocks for the distribution of tags.

As we can see, there are differences in the distribution of tags between the regions, but many of the tags seem somewhat similar. As an example, the tag for Financial Gains takes up about 10% of the codes in national articles and around 8% of the tags in Northern and Southern Maine. It is important to note that in coding our articles, we realized that many of the articles in newspapers were reprints of news articles from newspapers in other regions. For example, a number of the articles we coded in the Bangor Daily News were originally published in the Portland Press Herald and vice versa. Given this information, it makes sense that many of the categories are similar and do not show a large difference between regions. There are a few categories in which we do see differences, such as the local economy tag (about 1% for national articles and Southern Maine articles, about 5% for Northern Maine articles) and distrust of outsiders (0% for national articles, 3-4% for Northern and Southern Maine articles). We will

highlight the latter category as a category of interest and include a number of quotes from articles coded as examples of the differences seen in this category.

Overall, there was a sentiment found in Maine articles (primarily editorials) discussing a distrust of outsiders coming into Maine to take control of Katahdin Woods. For example, in Southern Maine, an article from the Portland Press Herald mentions that Katahdin area residents “found [Quimby] abrasive... locals labeled her a self-serving outsider who hailed from Massachusetts.”¹⁶ Similarly, an editorial in the Bangor Daily News writes that “when Roxanne Quimby does what she wants with her private land, it is out-of-state elitists trying to tell us how to live.”¹⁷ This distrust of outsiders from local residents was something that we hypothesized would be apparent in articles and comments from our initial understanding of the Katahdin controversy.

We completed a similar analysis of NVivo tags using Facebook comments regionally (with region determined by the corresponding article linked in newspaper Facebook posts). As shown in Figure 4, we can see the distribution of tags across Facebook comments by region for all of the categories listed in our distribution for articles and editorials.

¹⁶ Fleming, Deirdre. "Son of National Monument Visionary Exploring next Steps for Katahdin-area Site." *Portland Press Herald*. N.p., 22 Dec. 2016. Web. 5 May 2017. <<http://www.pressherald.com/2016/12/22/son-of-national-monument-visionary-exploring-next-steps-for-katahdin-area-site/>>.

¹⁷ Ashland, Julie. "Landowners Double Standard." *Bangor Daily News*. N.p., 2 Sept. 2016. Web. 20 Apr. 2016. <<https://bangordailynews.com/2016/09/01/opinion/letters/friday-sept-2-2016-time-for-lepage-to-grow-up-donald-trump-unfit-to-be-president/?ref=storyPrevNextLinks>>.

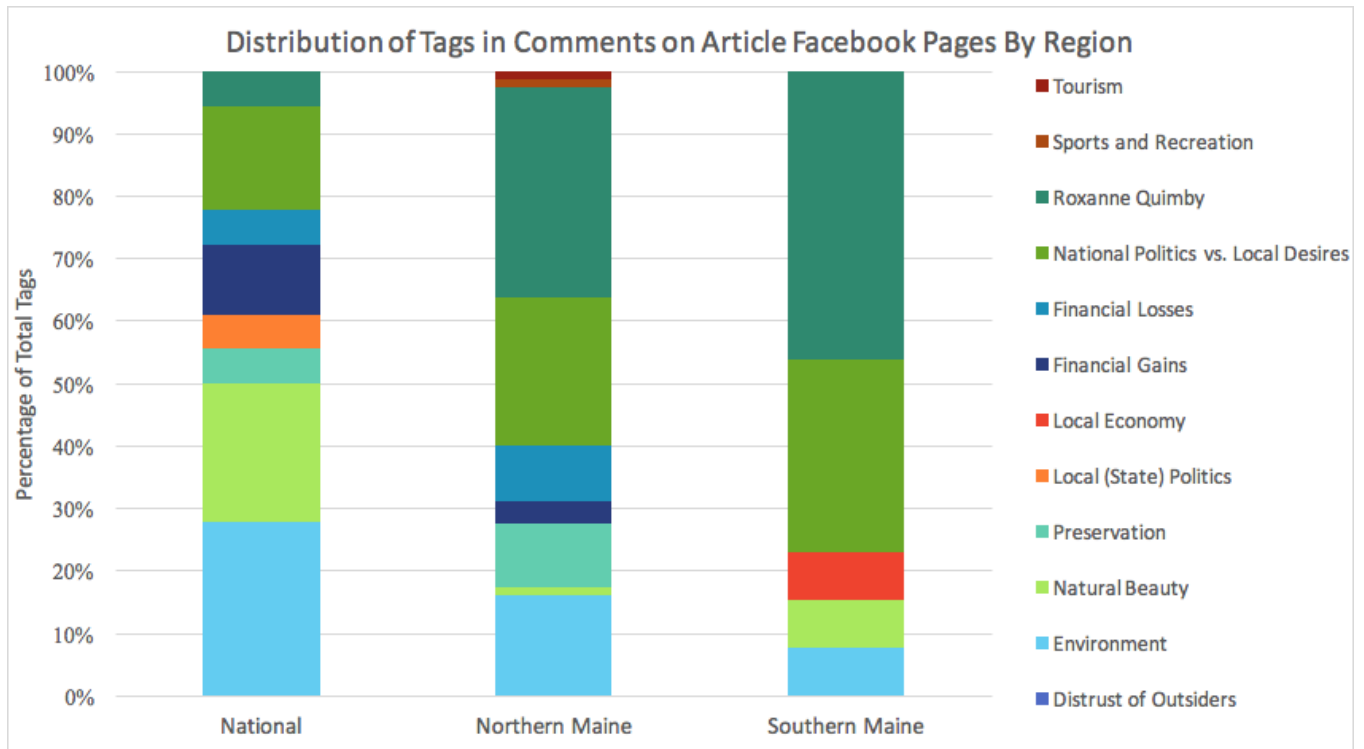


Figure 4: Distribution of tags in *comments on article Facebook pages by region* (National, Northern Maine, Southern Maine). Comments coded in NVivo, data imported into Excel, visual created in Excel. Each region divided up into percentage blocks for the distribution of tags (nodes). Comments gathered between August 2016 and April 2017. Note: some of these categories have very few tags.

In Figure 4, we can see a much larger difference between different tags across regions. While these percentages are accurate, it is important to note that we had a smaller sample size of quotes tagged in certain regions (for example Southern Maine). From this, we will look more deeply at the dark green tag for Roxanne Quimby. We see large difference in mentions of Roxanne Quimby between Northern Maine, Southern Maine, and national comments. Because there is only one comment on a national article mentioning Roxanne Quimby, it is not representative of a whole collection of comments. However, in Southern Maine and Northern Maine, we see a large difference in opinion towards Roxanne Quimby. As an example, in Southern Maine, one commenter wrote, “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.”¹⁸ In Northern Maine, on the other hand, one commenter wrote, “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.”¹⁹ Overall, Southern Maine comments showed more gratitude towards Quimby. Most of the comments from Northern Maine were negative towards Quimby; 75% of all comments had negative opinions of her, and the majority of those were attacks on Quimby herself, having nothing to do with Katahdin Woods at all. Additionally, many of the comments towards Quimby were quite sexually graphic in nature.

We found similar results in our quantitative analyses, justifying our choices in methodology between qualitative and quantitative analyses. Using topic modeling, we found that among national articles, the most common topic included in articles was an objective discussion of the monument's creation. A number of terms came up frequently in this topic, such as “Obama” (as he designated the monument) and “Trump” (as he has threatened to revoke the monument status). Topic modeling of comments on national article Facebook posts found some similarity between terms in the top topic, but were more supportive of the monument. In another quantitative analysis, we used Voyant to create a correspondence analysis between national, Northern Maine, and Southern Maine comments, as shown below in Figure 5.

¹⁸ Portland Press Herald. Facebook. 25 Aug. 2016. Web. 15 Apr. 2017.

¹⁹ Bangor Daily News. Facebook. 5 Oct. 2016. Web. 15 Apr. 2017.

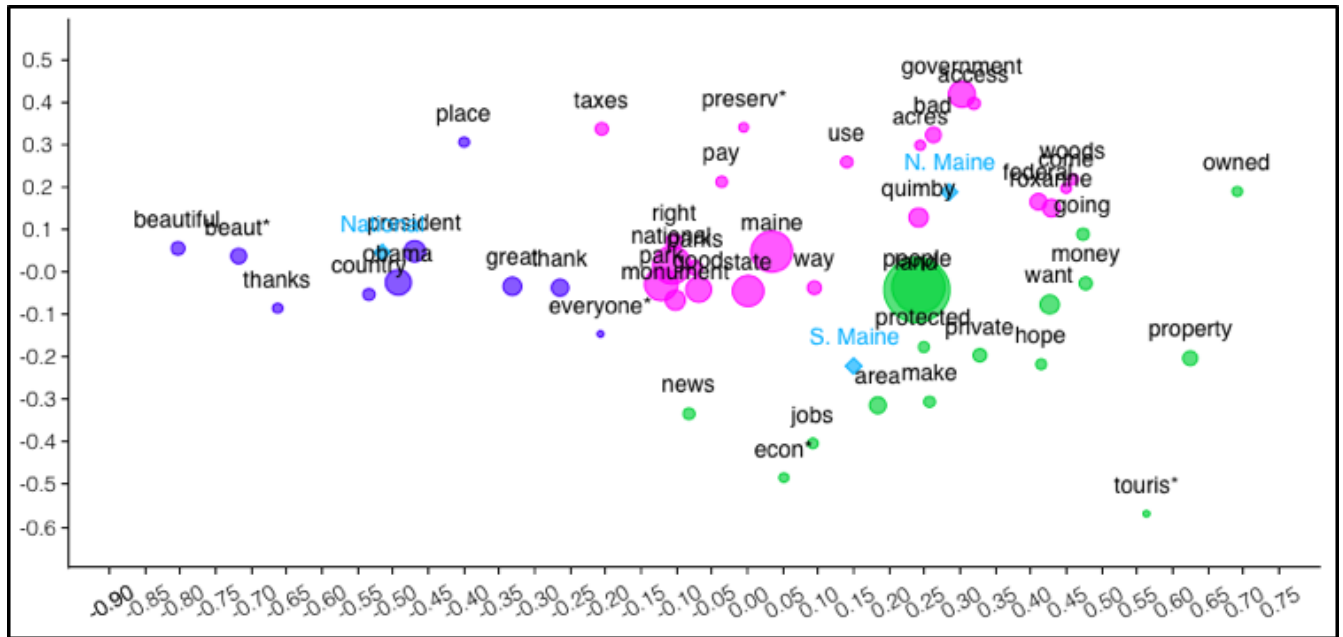


Figure 5: Correspondence analysis of Facebook comments on Northern Maine, Southern Maine, and national articles. Data points are grouped by region (light blue marks) and colored by clusters of associated words. Points are sized by relative word frequency. Words closer to each other in distance are more strongly associated with each other. Facebook comments were scraped using the Facebook Developer API and RStudio between August 2016 and April 2017. Graph was created in Voyant.

In Figure 5, we can see that our three regions have varying focuses (regions categorized by color). In our national section, we see words such as “thanks, beautiful, everyone, Obama” show up, in Southern Maine, we see words such as “hope, people, jobs, property, want” and in Northern Maine we see words such as “government, bad, access, pay, taxes.” From these alone we can see a large difference regionally in comments, with national comments showing gratitude about the monument, Southern Maine showing hope for the monument and its economic prospects, and Northern Maine being skeptical about the monument and its federal oversight.

We can compare this diagram to another strictly quantitative chart illustrating the regional differences in word choice in comments. As shown in Figure 6, we can graph the top 15 words found in comments to look at the frequency coverage of those words regionally. As we can see, many of the words overlap (as there are fewer than 45 words listed), but we see a number of clear differences regionally.

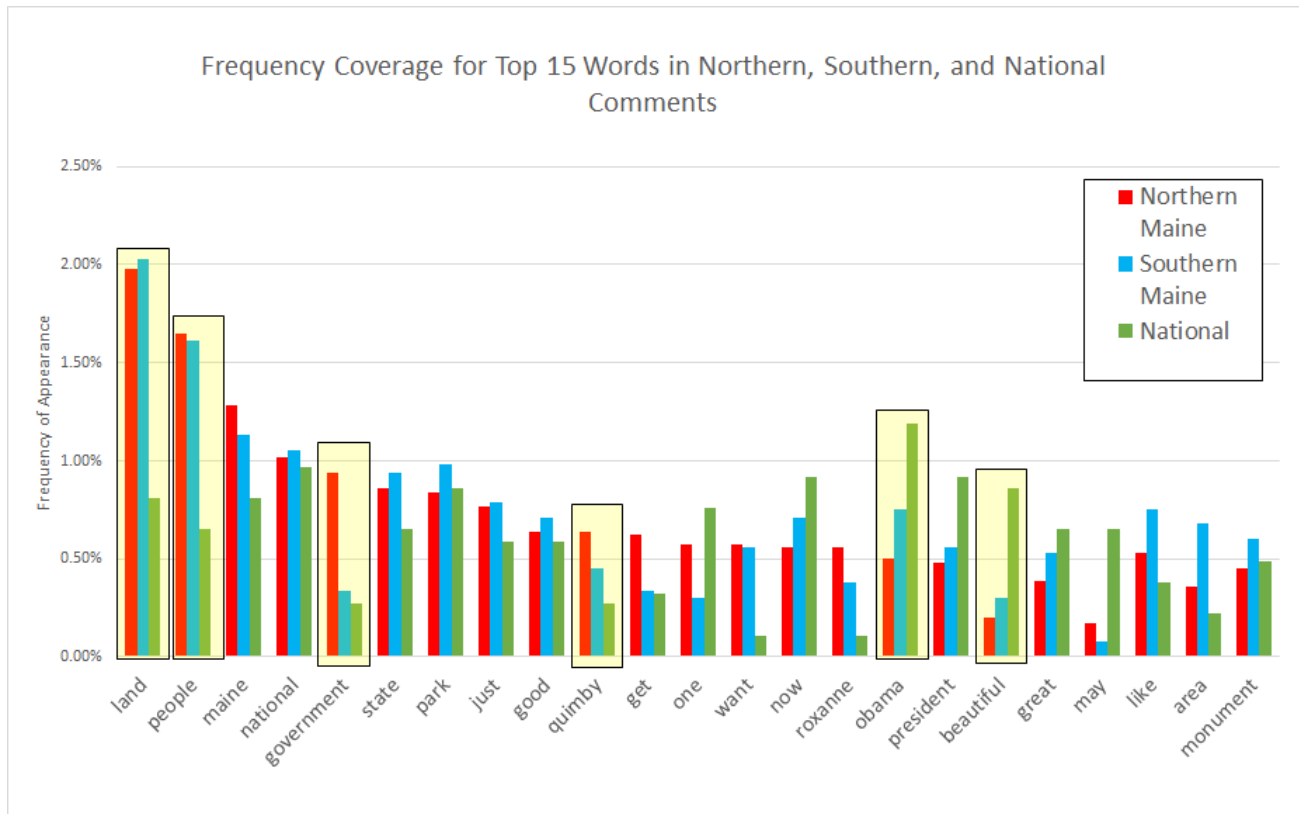


Figure 6: Percent frequency coverage for top 15 words in **comments** (National, Northern Maine, Southern Maine) with overlap of words. Words shorter than 3 letters and NVivo stop words excluded. Frequency analysis performed in NVivo, data imported into Excel, visual created in Excel. Comments gathered between August 2016 and April 2017. Highlighted words are words of interest for regional differences.

A number of key differences are highlighted in Figure 6. First, we can see that the words “land” and “people” show up much more frequently in Northern Maine and Southern Maine comments than in national comments. We also see a much larger focus on “government” in Northern Maine than in either Southern Maine or national comments. The words “Quimby” and “Obama” have a regionally inverse relationship; “Quimby” was mentioned more often in Northern Maine comments and fewer times nationally and in Southern Maine comments while “Obama” was mentioned more often in national comments than in Northern Maine or Southern Maine comments. Additionally, “beautiful” is used more often in national comments than in Northern or Southern Maine comments. These findings are consistent with other quantitative and qualitative analyses we completed.

In addition to our analysis of articles and comments, we did look at tweets to look at general responses to Katahdin Woods. However, we found that the limited length of tweets combined with the prevalence of tweets mentioning Katahdin Woods with just a photo attached made for difficulties in content analysis. We completed topic modeling of the body of the tweets, but without geographical information, it was difficult to come to any specific conclusions about the regional sentiment of tweets.

Discussion:

Overall, we found our project to be instrumental in showing some of the regional differences in attitude towards Katahdin Woods. We found that overall, regional differences in newspaper articles were not that apparent due to the number of reprints of articles between newspapers. We were unable to look at regional differences between tweets, as not only did we not have a large enough sample of geotagged tweets, but we also were unable to code for strong sentiment in the majority of tweets. Finally, we found large differences in comments regionally. Comments on national newspaper Facebook posts were positive towards the monument, showed gratitude towards President Obama, and focused on the beauty of the monument itself. Southern Maine comments had mixed reactions to the monument, but were hopeful for positive economic impacts of the monument and focused on tourism. Northern Maine comments were mostly negative towards the monument, arguing that Katahdin Woods was an act of federal overreach, and were quite critical of Roxanne Quimby.

Our results speak to the body of research consulted in this project and connect strongly to a number of articles and themes discussed in class. This research focuses on the opinions of stakeholders in the designation of Katahdin Woods from different regions; previous literature has discussed stakeholder opinions in monument designation as well as in environmental decision-

making. For example, one article we worked through in class, “Agreement on water and a watered-down agreement: The political ecology of contested coastal development in Down East, North Carolina” written by Campbell et. al., discusses stakeholder involvement in decision-making surrounding environmental concerns.²⁰ Our project similarly focused on different kinds of stakeholders in the process of monument designation and their feelings about the designation; for example, are there better ways to reach a variety of stakeholders for opinions? Are Facebook comments a thorough way of determining regional differences in opinion?

Though many of our newspaper articles were reprints, leading us to somewhat inconclusive results about newspaper articles, we found a number of articles that seemed quite representative of more local voices and wanted to delve more deeply into the role of local voices in decision making. This idea was represented in the previously mentioned article written by Carrus et. al. in which the authors looked at local perceptions of a national park designation in Italy. The authors found that analyzing local media showed a strong anti-government sentiment in the creation of a park. As Carrus et. al. state, regional media can show “confrontation between the local and national political levels involved in the park designation process.”²¹ Our findings were consistent with theirs; as we found strong regional differences in political opinion of the Katahdin Woods designation, especially in Facebook comments and editorials.

Our methodology could be implemented in a number of different types of projects. Not only is it directly applicable in monument designation, but it is also easily adapted to any environmental decision-making process involving public opinion. However, a number of changes in our methodology would make the methodology more robust and thorough in analysis.

²⁰ Campbell, Lisa M., and Zoë A. Meletis. "Agreement on Water and a Watered-down Agreement: The Political Ecology of Contested Coastal Development in Down East, North Carolina." *Journal of Rural Studies* 27.3 (2011): 308-21. Web. 308.

²¹ Carrus et. al., 621.

For example, we would like to be able to scrape comments directly off of newspaper articles rather than just Facebook pages. This would potentially allow us to reach a different audience of online consumers of media, as Facebook may have a different usage demographic than newspaper websites. Additionally, larger sample sizes of tweets, ideally geotagged, (impossible for this project due to an overall lack of tweets on Katahdin Woods) would allow another dimension of analysis. Monitoring a project over a larger period of time could allow for analysis of sentiment over time; this is something that due to the nature of the Katahdin Woods controversy and President Trump's focus on revocation of Katahdin Woods and other national monuments would bring insight to public opinion on the matter. Additionally, in future work, we would like to scrape more than just Facebook comments on newspaper articles. Scraping a wider variety of public Facebook posts, whether statuses or posts within groups, would add another dimension to the discourse happening, even if it is not possible to locate geographic trends in Facebook posts themselves.

Conclusion:

Overall, in this project, we looked at how newspapers discuss the Katahdin Woods monument regionally in Northern Maine, Southern Maine, and on a national scale. Additionally, we looked at social media responses to these articles through qualitative and quantitative analyses of Facebook comments. We found that there were subtle differences in regional media representations and that national articles were more focused on the gift of the monument than the details of the monument, but overall, the number of reprints of articles made it difficult to discern a strong opinion in articles regionally. In comments, we found that there were large differences regionally; Northern Maine comments were mostly against the monument, Southern Maine comments had mixed feelings about the monument but were hopeful, and national comments

were supportive of the monument and showed gratitude towards Roxanne Quimby and President Obama for the designation. Additionally, we found that Northern Maine comments were critical of Roxanne Quimby's character in a vulgar nature. In the future, we would like to focus expanding this work to include a time element, i.e. monitoring sentiment over time, along with adding media sources nationally, comments on newspaper articles, and Facebook posts of all kinds that include mentions of Katahdin Woods. This project has allowed us as researchers to delve deeply into using quantitative and qualitative methods, comparing methods to look at consistency between them, and reflection on how our methodology choices affect our results and future work.