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Learning from Late Night

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Essay Summary

Late Night with Seth Meyers is an American soft news and political satire NBC television program. To investigate whether *Late Night* possesses the qualities to influence political thinking among political novices, a content analysis was conducted based on data collected from a coding sheet. The coding sheet was designed with questions regarding relevant political content to measure the various qualities of humor and political communication within *Late Night.* A survey that replicated the code sheet was created; this allowed two researchers[1] to take the survey and analyze their collected data from the first segments of 50 randomly chosen season 9 *Late Night* episodes that aired from September 20, 2021, to January 31, 2022. The coder's responses suggest that *Late Night with Seth Meyers* produces emotionally charged facts that can affect consumers' attitudes but do not establish the proper contexts and insights to influence the behaviors or cognitions of the average American citizen, who tends to fall into the category of a political novice. The findings of this study raise awareness about pseudo-satire news media and highlight that a lack of context and intersectionality can hinder the learning process of political novices. The findings suggest that *Late Night* is predominately consumed by middle to upper-class white males interested in politics, individuals who tend to be political sophisticates.

The news media is the filter for the public to receive political information; it demonstrates proper political behavior and societal values. Intentionally or unintentionally, the media affects consumers' attitudes on political topics, candidate preference, or party affiliation. The media may also affect consumers' behaviors, such as influencing voter turnout, financial

[1] I would like to formally thank Natalie Hale for her contribution to the content analysis as a secondary coder. Her code sheet response data is used for the intercoder reliability measurements.

campaign contributions, and public discussion of politics (Graber, D. A. et al., 2017). Political dialogue among citizens is the most common non-voting form of political participation in the United States (Geer, J.G. 2020). Still, affecting consumers' attitudes and behaviors does not benefit the public unless the media can influence political learning in the cognitions of its consumers'. Learning effects from news media only occur when a credible source presents information that is understandable, relevant, and at odds with the consumers' former beliefs; due to a lack of context, learning effects do not happen from *Late Night.* It is unlikely that a person who does not actively watch the news can understand most of the show's political content. *Late Night* exemplifies that political satire programs should present political information with context to effectively cultivate learning of relevant political knowledge within a political novice audience.[2]

Implications

Political learning for news is influenced by how information is presented and how it is processed (Graber, D. A. et al., 2017). A political novice is a person who is not experienced in politics; they know very little about government and have little political involvement, such as attending protests or voting in local elections. Contrarily, a political sophisticate is a person who is actively involved in politics; they vote, donate, endorse politicians, and keep up to date on current political happenings within the country. A person with high political sophistication has a wide range of knowledge about the government and its policies, such as the required steps to pass a bill into law or the process of impeaching a president. A person with low political sophistication is not interested in watching hard news programs such as FOX or MSNBC News

[2] This paper does not include research on what a political novice can learn from the information presented in *Late Night*. Instead, this paper focuses on whether a political novice can learn. This paper looks at if *Late Night* meets the standards of the learning effects model by providing receivable, understandable, and relevant content that comes from a credible source and is at odds with former beliefs. Various political scientists endorse the learning effects model, determining that the media can only have learning effects on its consumers if the content meets the standards set by the learning effects model (Graber, D.A. et al., 2017).

and would not be able to name the current representatives of their state; they only vote in national elections, whereas sophisticates exercise their right to vote as often as possible. After watching the news, a political sophisticate is able to correctly answer questions about the contexts, procedures, insights, and facts from the program (Graber, D. A. et al., 2017).

In 1987 political scientist Robert Luskin proposed that political sophistication is measured by an individual's exposure to political information alongside their motivation and ability to understand and comprehend it. Luskin later defined political sophistication as the differentiation and integration of a person's political cognitions, meaning that a person's political sophistication is the extent to which they can recall and organize political information and opinions (Luskin, R. C. 1990). A person's political belief system (PBS) is determined by their political cognitions and constraints.[3] Three dimensions of the political belief system are looked at when measuring political sophistication:

1) the *amount* of political knowledge one already has; what do they know about politics? 2) the *range* of their information; what political categories does their knowledge reside in? 3) the *constraint* of their knowledge; how organized and accessible is that information? (Luskin, R.C. 1987).

Political socialization is an individual's ability to understand and organize political information. In *Mass Media and American Politics*, Doris Graber[4] asserts that political socialization is affected by an individual's exposure to political information, meaning that exposure to political communication, via the mass media or in daily life, affects an individual's interest and engagement in politics (Graber, D. A. et al., 2017). Graber further asserts that

[3] A constraint is an organized belief or attitude one associates with a political topic.
[4] Doris Graber (1923-2018) was an American Political Scientist that helped to establish and shape the field of media and politics through her book, *Mass Media and American Politics (10th Edition*). The Political Communication Section of the American Political Science Association has awarded the 'Doris Graber Book Award' since 2000 in her honor.

individuals with low levels of political sophistication make up approximately 75% of American citizens. In contrast, the remaining 25% of Americans are highly politically sophisticated and selectively expose themselves to political content.

The two groups are separated by what political scientists call the knowledge gap, which compares people with high political knowledge to those with low levels. The average American is aware of an extensive array of political topics due to informative messages within the media, such as entertainment programs and video games, but consumers often do not know the details about those topics (Graber, D. A. et al., 2017). Political novices are prone to accepting news media's views regarding political topics since they do not have experience or proper political socialization to guide them. Contrarily, political sophisticates use news media for information and as a jumping-off point for reaching conclusions regarding a topic; they often reject or ignore attitudes and evaluations presented by the news media (Graber, D. A. et al., 2017).

Political novices and sophisticates use the media differently. Political scientist Zizi Papacharissi examined factors of different groups' media choices to determine the motivations behind consumers' media use (Stacks, D. et al., 2009). The difference in political media consumption between novices and sophisticates can be explained by the uses and gratifications theory, which holds that consumers use media to satisfy specific needs or desires (Lule, J. 2012). A political sophisticate would use the media to stay up to date on current supreme court judicial rulings. In contrast, a political novice would use the media to ask questions such as "how old do you have to be to run for president?"

Additionally, Graber proposes that factors such as race, ethnicity, gender, age, income, education, region, and city size can also affect an individual's media consumption and exposure. Political sophisticates are typically upper-class members of society; the higher an individual's

income, the more likely they are to vote (Geer, J.G. 2020). Due to technological advancements in media consumption, political sophisticates have become more knowledgeable about politics and expanded the knowledge gap; the wealthy have more access to media outlets and can acquire information faster than those with lower socioeconomic statuses. The increase in entertainment has caused political novices to become less knowledgeable because of the endless entertainment options available. Since novices do not actively seek political information, they are not as exposed as sophisticates, and factual political learning happens for political novices through soft rather than hard news. Soft news can gain novices' attention by presenting accessible information; attention is a prerequisite for learning (Graber, D. A. et al., 2017).

For political media to influence the learning of its audience, individuals must integrate the presented content with prior knowledge to develop new knowledge (Mayer, R. E. 2002). Two information processing models measure the extent to which a person can integrate political information into their working memory; the working memory is where learners actively select and organize the information (Persuh M. et al., 2018). The working memory is also where a person's political belief system resides (Wilker, H.R. 1970). The first model, the memory model of information processing, explains the information processing of political sophisticates (Zaller. 1992). Political sophisticates are more stimulated by new information and thus more likely to remember it; they typically have a large array of schemas that allow them to retain more news stories that go beyond the cognitions of political novices (Graber, D. A. et al., 2017). The memory model explains that political sophisticates can maintain content considerations that are accessible, and their opinions carry more weight in response due to a recollection of detail. Conversely, the online information processing model demonstrates that sensory or "short-term" memory is the first place received information is processed (Mayer, R. E. 2002). When political

information is presented to political novices, opinions are formed immediately and often reinforce prior beliefs (Lodge et al., 1989). The online model explains that a positive or negative emotional response in sensory memory is where political novices form an opinion. Working and sensory memory have similar functions, but the sensory memory processes information temporarily; it is not until the information is assessed and understood that it reaches long-term memory (Lule, J. 2012).

The learning effects[5] theory is the current model used to measure political communication within the media; it requires that the audience receive news content that is understandable, relevant, at odds with former beliefs[6], and credible to influence consumers' political learning. Reaching all of the steps of the learning effects model does not guarantee an individual will learn. Still, all the steps are required for political communication to have learning effects on an individual. Receivable content refers to how accessible the information is; whether it is private, public, print, or electronic media, can the average person easily access it? *Late Night* is available on several streaming services, thereby making it accessible to most Americans. The availability of the NBC television program prompted the coders to deem *Late Night* and Seth Meyers as credible news information sources. The content in *Late Night* presented the same key topics and provided similar information throughout each of the 50 segments. If someone is consuming media that repetitively presents the same information, they are not learning anything new. Still, the sample size is not large enough, nor is there enough data collected that would lead to any valid and sound conclusions on if the information is at odds with the former beliefs of a political

[5]All parts of the learning effects model are necessary to change consumers' attitudes, behaviors, and cognitions, yet making it through all steps of the learning effects model does not guarantee that information has been learned. Before the 1980s, political scientists believed that the media could only affect consumers' attitudes (how they feel about political topics) and behaviors (their involvement in political activities such as voting or protesting). However, once it was discovered that the media could also affect the cognitions of its audience, political scientists determined the bare essentials needed for an audience to experience learning effects from the media.

[6] For example, if a person believes that Joe Biden is behind the rise in gas prices but then consumes' media blaming gas prices on the war in Ukraine, that media is presenting information at odds with their former belief.

novice. Nonetheless, survey responses suggest that *Late Night* does not provide easily understood or relevant information. Instead, the impact of the content produced by *Late Night* has a hypodermic needle effect on the political sophisticates of its audience. The hypodermic needle theory assumes that the audience is like a sponge that absorbs and retains the information shared via news media; it holds that the media may influence consumers' political attitudes and behaviors (Graber, D. A. et al., 2017). By looking at how political novices and sophisticates receive and process political information, the memory and online information processing model explains why the hypodermic needle effect is not an accurate measure of knowledge gain (Lodge et al., 1989).

The facts discussed in *Late Night* forgo the inclusion of context and instead provide surface-level information in a pseudo-satirical manner that a political novice audience is unlikely to understand. Genuine satire produces information and insight into topics discussed humorously. In contrast, pseudo-satire presents trivial information in a cynical fashion, most commonly used as an attack on the competence of political leaders (Peterson, R. L. 2008). After analyzing *Late Night,* the findings point to specific people or persons such as Donald Trump and Joe Biden as the focal point of *Late Night's* political information, constituting it a pseudo-satirical program; political topics such as the Capitol Attack and Bidens Build Back Better Act were a sub-focal point. Pseudo satirical political content decreases media credibility, eliminating a necessary factor in the learning effects model. A common component of pseudo-satirical content is a heavy focus on characters which can harm democracy as seen by the *Daily Show* effect, which suggests that humor-based content corresponds with an increase in political efficacy but a decrease in public perceptions of trustworthiness in political candidates (Baumgartner, J., & Morris, J. S. 2006).

If the audience perceives a source is credible, they are more likely to trust the information presented. However, Pew Research Center found that only 22% of US adults have high trust in the government. A decline in candidates' trust leads to a reduction in citizen involvement in political activity. Personal trust in the government varies depending on age, race, ethnicity, education, and income; trust is linked to how one views the government (Rainie, L. 2020). Although men and women vote at similar rates, men usually have higher political sophistication than women because women are generally less frequently involved in non voting political activities, such as attending speeches and having political discussions (Kittilson, M.C. 2016).

In 1992, the European Summit on Women in Decision-Making found that the under-representation of women in decision making is a loss for society; subsequently, in 1995, AP News reported findings from a survey that suggested television endorsements made by women are more credible than their male counterparts (Goldman, K. 1995). However, the Georgia Human Rights and Education Center still finds that women are underrepresented in politics, stating that a low ratio of women in politics is a phenomenon for democracies (Cunanan, P. 2020). Of the 157 countries that elect their leaders, only 11 have female Heads of State. Furthermore, Pew Research Center found that women make up only 27% of the US Congress (Blazina, C. & DeSilver, D. 2021). Mack D. Mariani, Political Science Department Chair at Xavier University, conducted a study to examine whether individual-level gender-related differences affect the likelihood of female state legislators seeking and winning congressional office. Mariani found that marital status, age, children, and educational and occupational history play a role in the lack of women in public office (Mariani, M. 2008).

After studying the difference in how the media covers men and women in politics, journalist Linda Trimble found that the media normalizes sexism through gendered metaphors,

stereotypes, and assumptions that undermine the political legitimacy of women (Trimble, L. 2018). British journalist Bim Adewunmi points to the media's trivial scrutinization of female politicians' as a factor of female underrepresentation in politics. Rather than focusing on the women themselves, the media often showcases women's fashion choices, sexual pasts, and childcare arrangements rather than their political beliefs or policies (Adewumni, B. 2014). Additionally, Shauna Shames, a graduate of Rutgers University-Camden, studied barriers to women's political participation and found that institutional structures and policies, social and cultural issues, and psychological and motivational factors hinder women's involvement in politics. Shames suggests that the media should be given information sessions and trained on covering women in politics to increase women's political participation (Shames, S. 2013).

Political learning from news platforms is conditioned by the way information is presented. Despite the many news media outlets available, political scientist Neil Postman says that the media can decrease the efficacy of political learning by trivializing the world's problems (Graber, D. A. et al., 2017). Accordingly, *Late Night* may damage public perception of politics by presenting political content with a conflict frame; this frame is prominent when the speaker focuses on the processes rather than the substance of specific topics (Atkinson, M. L. 2017).

Political scientists Scott Keeter and Cliff Zukin have claimed that most citizens are too uninformed to make intelligent political choices. When citizens are uninformed, they often ignore civic duties, such as voting in state elections, which hinders the democratic process and exemplifies why political satire and soft news media programs should aim to increase the learning of a political novice audience and provide their audience with information that is understood, relevant, at odds with former beliefs and from a credible source. The images produced by the media convey perceptions in audience members that meld the media stimuli

with an individual's perceptual state when information is received. Media outlets should focus on expanding novices' knowledge rather than sophisticates. The media is least likely to influence the learning of political sophisticates because they have direct or vicarious political experiences and already have formed opinions grounded in their values (Graber, D. A. et al., 2017).

Nonetheless, despite the plethora of facts within *Late Night*, the findings suggest that the show does not have learning effects on political sophisticates or novices; instead, *Late Night* aims to update political sophisticates on current government drama using a conflict frame. Specifically, the findings suggest that to influence the cognitions of Americans, the content within *Late Night* and other political satire programs should provide context surrounding interactions, concepts, and situations, speak to the relevancy, and include diverse areas of interest in the types of political information conveyed.

Evidence

Context is required for political novices to understand the political content discussed. *Late Night* did not provide context for the topics discussed 43.1% of the time, and only 33.3% of the segments contained "brief context.[7]" The lack of context reinforces the notion that *Late Night* is produced to update political sophisticates on political happenings within the country and uses a conflict frame that furthers the knowledge gap between political sophisticates and political novices.

Late Night incorporates many facts relating to politically relevant information but provides no insights. 100% of the segments contained politically relevant information conveyed humorously and 98% focused on news intended for a national audience. Facts corresponding to

[7] When segments were coded for "brief context," the speaker did not paint a clear picture of the discussed topic. A person who is considered a political novice does not actively seek out political news. As such, coders were to determine whether or not the segment would be confusing to a political novice who was not predisposed to the information beforehand.

national democratic processes were present in 72.5% of the segments. In 86.3% of those segments, the information corresponded more closely to the left side of the political ideology spectrum. The most prominent facts mentioned were those pertaining to government 'characters' and renowned political figures; 80.4% of the segments focused on specific people. The persons of focus throughout *Late Night* were predominantly white men, such as Joe Biden, who was mentioned in 84.3% of segments, and Donald Trump, who was mentioned in 56.9%. Topics were coded as the focus of the segment 78.4% of the time; 88.2% of the topics within this category were considered to be legislative-related. The most common legislative topic discussed was President Biden's Build Back Better Act, which was discussed 50% of the time.

Minority groups such as women, people of color, and the LGBTQ+ community were underrepresented in *Late Night*. Apart from Joe Biden and Donald Trump, the most frequently mentioned man was Senator of West Virginia, Joe Manchin, in 38% of the segments. Conversely, the two most mentioned women were Vice President Kamala Harris, a black woman, in only 10% of the segments, and Nancy Pelosi, a white woman, in 14%. Despite Nancy Pelosi being Speaker of the House, of the 14% of segments she was mentioned in, only 9% regarded legislative matters. *Late Night* mentioned women's rights in 1.1% of the segments and abortion only once, while Texas Governor Greg Abbott was mentioned in 4% of segments; Abbott signed the Heartbeat Bill into law on May 19, 2021, which aims to decrease abortion rates by penalizing physicians for performing abortions after a heartbeat is detected (Walter, J. 2021). However, the statement about abortion was quoted from White House Press Secretary Jen Psaki and was unrelated to the Texas legislation; rather than discussing abortion, Meyers joked that Pope Francis and Joe Biden were not going to speak about it. *Late Night* did not give the audience any context regarding the conversation between the Pope and Biden.

Topics related entirely to women and other minority groups, such as the LGBTQ+ and black communities, were not prominent in any segment. Although *Late Night* spoke of President Biden's communication with Russian President Vladimir Putin in 16% of the segments, *Late Night* did not mention that Biden communicated with him on December 30, 2021 that the United States will support LGBTQ+ rights abroad (Lavers, M. K. 2021). Further, since the murders of Breonna Taylor and George Floyd in May 2020, the Black Lives Matter movement has gained publicity, and in September 2021, 55% of U.S. adults had expressed support for the movement (Horowitz, J.M. 2022). NBC mentioned the George Floyd trial as recently as April 12, 2022, showing that George Floyd and the movements following his murder are still politically relevant news topics (NBC News. 2022). *Late Night,* on the other hand, did not discuss topics regarding the Black Lives Matter[8] movement in any of the segments outside of mentions of police misconduct-related content[9] present in 1.1% of episodes and mentions of protests in 2%.

The first segment in each episode was the opening monologue presented by Seth Meyers, which covers current political stories and news; however, the monologue primarily covers topics centered around white men in power and often lacks intersectionality. Kimberlé Crenshaw defined intersectionality in 1989 as an analytical framework highlighting the different modes of discrimination and privilege derived from a person's social and political identities (Gharib, S. E. 2022). The lack of intersectionality within *Late Night* is in line with findings from a graduate of the Autonomous University of Barcelona, Elisa Perez. Perez analyzed Primetime and Late Night

[8] Topics that would have been coded as regarding the Black Lives Matter movement are any conversation or statement regarding systematic racism, mention of people of color who have experienced police brutality, or mention of the Black Lives Matter protests, such as why they occurred, when they occurred, or what happened as a result of the protests.

[9] Police misconduct-related content does not necessarily mean police brutality. The police misconduct-related content was about the Kyle Rittenhouse trial in November 2021. Coders had prior knowledge regarding the trial, but *Late Night* did not present the audience with the context that Rittenhouse was on trial for the shooting of three men at a police brutality protest in Kenosha, Wisconsin. *Late Night* only stated that Rittenhouse would be going on trial.

shows in Europe and the United States and found that men tend to speak of political topics that pertain to them (Perez, E. P. 2020). *Late Night* does not provide relevant information about these minorities which caters the show to a white male audience and reinforces the patriarchal power dynamic within the American political system (Forthun, E. 2020).

The tone used to present information was comedic 65.7% of the time, 75.5% of the content was described as political satire, and 25.5% was considered politically informative. The January 6, 2021 insurrection was mentioned in 34% of the segments; it is a common conspiracy that voter fraud caused Joe Biden to win the 2020 election, which inspired the attack. Still, despite 4% of the coded segments mentioning voter fraud and 12% of the segments discussing the 2020 election, *Late Night* did not discuss the implications of the possible voter fraud that occurred during the 2020 election (Rojas-Castillo, E. 2020). Instead, the mentions of voter fraud regarded the Dominion Voting Systems' lawsuit against My Pillow CEO, Mike Lindell. The facts *Late Night* provided surrounding the insurrection referred to subpoenas issued to former President Donald Trump and members of his then-presidential cabinet and about the judicial proceedings of persons who took part in the insurrection. Similarly, in the discussion of Biden's Build Back Better Act, *Late Night* only provided facts regarding when the Senate planned to vote on the act and Joe Manchin's opposition. *Late Night* never discussed the substance of the Build Back Better Act, nor why Joe Manchin opposed the act. A less frequently discussed topic was the withdrawal of U.S. troops from Afghanistan in August 2021, mentioned in only 8% of episodes. Despite the tragedy that ended the 20-year war between the U.S. and Taliban, *Late Night* only provided facts surrounding General Mark Milley's first appearance before the House since the removal (Senate RPC, 2021). The only information regarding the tragedy was that Biden withdrew American troops from Afghanistan. *Late Night* does not provide context beyond

that required for a political sophisticate to be able to understand. An individual who qualifies as a political sophisticate would already be interested in the news regarding the trials following Afghanistan and would not need as much context as a political novice since sophisticates have the motivation to use other media sources to remain informed.

The content of *Late Night* is meant for political sophisticates, who follow the uses and gratifications approach in media consumption. The uses and gratifications theory assumes that consumers are actively seeking out news media and typically choose to ignore news stories that are personally irrelevant and present messages that are unappealing to the individual consumer (Stacks, D. 2009). People who dislike the media they consume are less likely to vote. Despite the United States census finding that the 2020 election had the highest voter turnout of the 21st century, one-third of eligible voters did not vote in the 2020 presidential election (Chamie, J. 2021). Non-voters, like political novices, do not feel obligated to stay politically informed (Woodard, C. 2020). Since race, gender, and socioeconomic status factor into political sophistication, sophisticates often have different interests and attitudes than novices about politics. When novices do not vote, they become politically underrepresented, and the 25% minority of political sophisticates becomes the majority. In 1957 Anthony Downs published *An Economic Theory of Democracy,* which proposed the median voter theory. The theory holds that if voters select candidates based on ideology and everyone participates equally, the party closer to the middle will win (Black, J. et al., 2009). For a democratic society to thrive, the media must endorse political participation by providing relevant and understandable information to a political novice audience.

Methods

The analysis of *Late Night with Seth Meyers'* ability to influence and affect the learning and knowledge of political novices was centered around four primary questions;

(1) Does *Late Night with Seth Meyers* contain politically relevant content? (2) What type of political content is presented? (3) Is that information presented to inform the average American citizen? (4) How is that information conveyed to the audience?

After deriving an additional 30 questions from the four research questions and designing a 34-question codebook[10] a survey was created via SurveyMonkey and applied to the opening monologues in each episode. The analysis was done on Season 9 since it is the most recent season; a random number generator selected the 50 episodes the coders watched. The survey includes eight questions to collect personal information from the coders, as well as information related to the show that identified each episode. Three of the questions were designed to determine if the content was politically relevant and humorous and included check-box questions consisting of 36 possible variables that were intended to be broad identifiers of relevant political information such as foreign affairs, Donald Trump, judicial topics, and state police powers. Four of the questions corresponded to the types of processes[11] discussed, regarding whether they focused on international, national, or state government processes, and three questions related to any facts, contexts, or insights[12] presented. The survey also asked three questions about outside media sources and whether they were portrayed positively or negatively by Seth Meyers[13].

Questions were posed to determine the political bias, the central topic of the content covered, and identify any inclusion of celebrity news related to politics; these questions allowed

[10] The codebook is available upon request from the author; it contains the terms and definitions provided to the coder to take the survey. It presents instructions for coding and examples of political communication identifiers that could appear in *Late Night with Seth Meyers*.

[11] The processes coders were looking for were interactions between government levels to complete specific actions. When coding, 'international processes' coders were to look for interactions between US Government officials and foreign countries or leaders. 'National processes' were executive, legislative, or judicial topics and topics that affect a large majority of US citizens, such as national elections or the passing and overturning of laws. Democratic processes such as state governor elections were coded as 'state processes.'

[12] *Late Night* presented facts but did not make projections. When coding for insights, we looked for commentary, such as discussion of how specific government actions can affect aspects of the future (e.g., the government's power to tax can lead to corruption).

[13] This question was included to determine if Seth Meyers was a credible source; responses provided no conclusive data.

us to determine *Late Night's* intended audience. The remaining questions recognized the tone, focus level of the information (whether it was aimed at a state, national, or international level), the amount of context provided, and the overall type of political content portrayed in the segments. The intercoder reliability (ICR)[14] for determining if each unit of analysis (UoA) contains politically relevant information was 100%.

Similarly, the findings relating to abortion, police misconduct, protests, voter fraud, LGBTQ+, and Black Lives Matter movements also had 100% ICR. Unfortunately, the rest of the findings did not have as high intercoder reliability. Coders had 32% ICR regarding the information being focused on a national news level, 35% when selecting "national processes' " as the type of processes mentioned in the segment, and 22% on the political affiliation of *Late Nights*' content. The lowest ICR was -3.8% for people being the main focus of the segment, but 33.6% for topics being the main focus. The ICR was 41.6% for Joe Biden, 52% for Donald Trump, 18.9% for Joe Manchin, 31% for Kamala Harris, and 56.63% for Nancy Pelosi. The coders had an ICR of 9.7% for mention of legislative topics and 32% for Biden's Build Back Better Act, 69% for well-known scandals, 38% for Afghanistan, and 12% regarding the 2020 election. Regarding the comedic tone of the UoA, politically informative content within the UoA, and context provided, the ICR was 3%, 0%, and 49%, respectively.

Partial responsibility for the low intercoder reliability was due to the categories being too narrow. The Survey questions provided would better measure political topics rather than individual people; these factors caused coder disagreement and confusion in categorizing political topics. *Late Night* often mentioned political figures' names concerning non-politically

[14] Intercoder reliability is the extent to which individual coders evaluate a characteristic or message and reach the same conclusion (Bracken, C. 2005). Intercoder reliability is important for measuring a content analysis's reliability, validity, accuracy, and precision since most questions are subjective.

relevant topics, such as Joe Biden getting the COVID-19 booster shot, making coding more difficult. Nonetheless, due to short-response options on questions, the survey adequately accounted for the political content and communication within *Late Night with Seth Meyers.*

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State Government Responses to Cross-State Air Pollution: The Effect of Problem Severity

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Abstract

This study examines how the amount of cross-state air pollution a state receives and contributes influences the amount of effort that state puts into limiting cross-state air pollution and its effects. Hardly any of the existing literature that seeks to explain variations in environmental effort examines the problem of cross-state air pollution. Past research into the effects of problem severity on environmental effort has not been updated or applied to the interstate transport of pollution. To test this relationship, this study conducts case studies on Delaware and West Virginia to identify modifications in government behavior in response to varying levels of cross-state air pollution. The study considers the amount of air pollution traveling into and out of each state and then analyzes changes in their regulation and enforcement, the nature of their regulatory competition, and their litigation activity, all measures of state environmental effort. The analysis found that Delaware, a downwind state, has engaged in a high level of environmental effort as its government has filed a uniquely high number of Section 126 Petitions, has adopted strict air quality regulation and monitoring practices, and appears to be racing to the top. West Virginia, an upwind state, has engaged in less environmental effort as it was involved in litigation to limit federal efforts to decrease cross-state air pollution and does not allow its state environmental regulations to exceed the stringency of federal requirements. Looking into this type of state activity could also clarify how states try to influence other states' behavior in the U.S. system of federalism when addressing issues, such as pollution, that cross borders.

Key Acronyms

EPA: United States Environmental Protection Agency

CAA: Clean Air Act

CAIR: Clean Air Interstate Rule

CSAPR: Cross-State Air Pollution Rule

DNREC: Delaware Natural Resources and Environmental Control

DEP: Department of Environmental Protection (West Virginia)

FIP: Federal Implementation Plan

NAAQS: National Ambient Air Quality Standards

SIP: State Implementation Plan

Introduction

Air quality in the United States has greatly improved since President Richard Nixon signed the Clean Air Act (CAA) of 1970 (Ringquist 1993; EPA 2021h). Under the leadership of the Environmental Protection Agency (EPA), states implemented regulations to decrease air pollution and protect human health. Since 1970, emissions of the air pollutants that the CAA regulates have dropped by 78 percent (EPA 2021h). A 2011 study from the EPA predicted that the CAA would prevent 230,000 early deaths in 2020 (EPA 2021b). More recently, the EPA has attempted to address air pollution that travels from one state to another using the CSAPR, which, with its subsequent updates, is estimated to produce $2.8 billion in climate and public health benefits over the next 20 years (EPA 2021i). Despite such progress in air quality regulation,

cross-state air pollution continues to challenge some states.

Cross-state air pollution presents a complex problem for state and federal regulators. Air pollution can travel long distances and cross state lines, meaning it can affect constituencies outside where it was emitted (EPA 2021f; Glasgow & Zhao 2017). A recent study found that between 41 and 53 percent of premature deaths from a state's air pollution occur outside of that state. It also found that states in the Northeast are the net importers of pollution originally emitted in states upwind from them (Dedoussi et al. 2020). Downwind states have expressed their frustrations about air pollution from other states, as it has caused many of them to fall below federal air quality standards (Rabe 2021). Despite downwind states implementing more stringent regulations, they have little direct control over the pollution that other states emit (Eichmann 2019). Delaware's government contends that over 90 percent of the ground-level ozone in its state has resulted from emissions in other states (Delaware News 2018). That is an especially pressing issue for Delaware as the EPA has designated two out of three of Delaware's counties as nonattainment zones for ground-level ozone (EPA 2021e). Upwind states that contribute cross-state air pollution often do not have the same air quality problems as downwind states. West Virginia, a state that exports a significant amount of air pollution because of its high number of polluting facilities, currently does not exceed any federally established pollution concentration limits including those set for ground-level ozone (EPA 2022c).

The difference between these states' experiences suggests the following question: How does the amount of cross-state air pollution a state receives and contributes influence the amount of effort that state puts into limiting cross-state air pollution and its effects? To test this relationship, this study conducts case studies of Delaware and West Virginia to identify modifications in government behavior in response to more severe cross-state air pollution

problems. The analysis shows that Delaware has engaged in substantial environmental effort to address cross-state air pollution. Delaware's government has, between the years of 2011 to 2021, filed a uniquely high number of Section 126 Petitions under the CAA, adopted strict air quality regulation and monitoring practices, and appears to be exceeding national standards to compete with other states, a behavior called racing to the top. West Virginia engaged in less environmental effort, instead seeking to limit federal enforcement of cross-state air pollution regulations through litigation. West Virginia has engaged in a large number of enforcement practices, although has limited its regulatory stringency by preventing state requirements from being more strict than federal rules.

Theoretical Perspectives On Cross-State Air Pollution And Environmental Effort

Background on Clean Air Act and Cross-State Air Pollution Rule

Through the CAA and the CSAPR, the federal government has tried to address problems of pollution spillover. The CAA substantially expanded on previous clean air legislation (Portney 1990). It created the National Ambient Air Quality Standards (NAAQS), putting limits on six common "criteria pollutants" that threaten human health. These criteria pollutants are particulate matter, which includes suspended liquid and solid particles, as well as ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. The CAA also initiated the use of State Implementation Plans (SIPs), which require states to present their plans to meet air quality standards for approval by the EPA (EPA 2021j). The CAA gives authority to the EPA to regulate cross-state air pollution through the "good neighbor" provision (EPA 2021f, Glasgow & Zhao 2017; "EPA's Revised CSAPR Update is issued and a single petition for review is filed in the DC Circuit" 2021). The good neighbor provision requires states and the EPA to reduce air pollution

that will "contribute significantly to nonattainment in" other states (Clean Air Act of 1970, § 7410). Nonattainment refers to when levels of any of the criteria pollutants exceed those prescribed in the NAAQS. Downwind states can file a CAA Section 126 Petition to ask the EPA to limit pollution from a source in another state that impairs air quality across borders (Environmental and Energy Law Program 2020). Since 2015, the EPA has used the CSAPR and its subsequent updates to regulate cross-state air pollution and avoid nonattainment in downwind states.

In 1970, the CAA initiated a command-and-control system to address air pollution. Command-and-control policies are prescriptive and dictate behaviors such as the amount of pollution a firm can emit, or the type of control technology firms must install (EPA 2010b). While deemed effective, command-and-control regulatory systems impose significant costs on businesses (Glasgow & Zhao 2017). The Clean Air Act Amendments of 1990 introduced pollution trading, a market-based solution, to address acid rain problems with more cost incentives for polluters. The Acid Rain Program was a huge success as polluters had the flexibility to trade their pollution allowances and make the most cost-efficient pollution reductions (EPA 2021a; Schmalensee & Stavins 2013). The CSAPR and its predecessor, the Clean Air Interstate Rule (CAIR), have utilized similar trading mechanisms to control the emissions of sulfur dioxide and nitrogen oxides that contribute to the formation of fine particulate matter and ground-level ozone in downwind states (EPA 2010a; EPA 2021c; Potts 2011).

Both the states and the federal government play a key role in promoting cleaner air throughout the country. Scholars consider states and the federal government to operate through a cooperative relationship on environmental policy (Scheberle 2004; Vig, Kraft, & Rabe 2021).

The different levels of government engage in mutual reliance as states depend on the federal government for financial and technical support while the federal government entrusts most implementation duties to the states (Scheberle 2013). This relationship exists because experts and policymakers expect that without federal oversight, states would lack the capacity and willingness to properly address environmental issues (Konisky 2015).

As previously mentioned, the CAA requires states to submit SIPs for EPA approval. These SIPs describe how state regulations will ensure the state can achieve federal air quality standards. If the EPA does not approve a state's SIP or finds that a state is not following through on its plans, the federal government can take full responsibility for implementation in that state with a Federal Implementation Plan (FIP). This action is called preemption. The threat of preemption by the EPA is designed to motivate states to actually implement better environmental quality (Scheberle 2004; Potoski 2001). However, most presidential administrations rarely use FIPs, and the EPA likely lacks the capacity to fully take over implementation for a state (Scheberle 2013; Scheberle 2005). During the presidential administrations of Bill Clinton and George W. Bush, the EPA only implemented one FIP. Under the Obama administration, the EPA significantly increased its usage of FIPs, filing over 50 while Obama was in office (EPA 2018). The Trump administration then worked to convert around 20 of these FIPs into SIPs (EPA 2019). Instead of implementing an FIP, the EPA may just allow a state to submit a new SIP and trust the state to work towards meeting federal standards (Konisky & Woods 2016). This may occur because the federal government does not have the capacity to implement FIPs or because the administration prefers to give more autonomy to state governments.

Regulatory Competition Between States

Regulatory competition might help explain the variance in states' environmental behavior. States may alter their environmental regulation or enforcement based on other states' behavior to make some type of gains, often economic (Konisky 2007; Rabe 2011; Rabe 2021). One theory of regulatory competition is race to the bottom, which predicts that states decrease the stringency of their environmental regulations to attract capital investment and boost their economies (Konisky 2007). This theory expects that stricter environmental standards put a state at a competitive disadvantage (Vogel 1997). In clean air policy, a race to the bottom occurs when states are only regulating to meet national standards. In 2015, 19 states had policies that prohibited regulatory agencies from adopingt air regulations that went beyond the threshold set by the federal government (Breggin 2015). Some states may also decrease enforcement of their regulatory standards to attract industry without visibly changing their regulations (Cao & Prakash 2012).

Some states seem to be racing to the bottom, but many exceed national regulatory standards, lending support to an alternative theory of regulatory competition which predicts that some states race to the top (Scheberle 2005; Potoski 2001; Vogel 1997). When a state like California implements tougher environmental regulations, that may encourage other states or companies that do business with California to increase their standards so that they can comply with the strictest standards. In this situation, increasing regulation or enforcement can be a source of competitive advantage, rather than a disadvantage (Vogel 1997). States may race to the top because they think it will bring economic advantages, but also because it might decrease the incentive for polluting industries to enter the state, bring electoral advantages, and even influence national policy (Konisky 2007; Rabe 2011). Some scholars argue that there is a lack of

evidence to support states racing to the bottom and states regulating beyond national standards is proof of a race to the top (Vogel 1997; List & Gerking 2000; Potoski 2001). States in the Northeast have lobbied and sued for higher national air quality standards, which is the opposite of race to the bottom (Scheberle 2005).

There is mixed evidence for these different forms of regulatory competition but overall, there seems to be a mix of states that regulate at the national standards, states that innovate and go beyond those standards, and states in the middle of the pack (Rabe 2021). States respond to other states' behavior, but in ways that produce vastly different environmental policy outcomes (Konisky 2007; Grumbach 2018). That leaves the question of why states act differently in the face of competitive pressures.

What makes regulatory competition more complex in the realm of clean air policy is the free-rider problem. The race to the bottom theory assumes that political jurisdictions are willing to endure the costs of worse environmental quality to attract investment and economic benefits (Konisky 2007). As previously outlined, air pollution is mobile and many of the costs of pollution in upwind states are felt by citizens in downwind states. Perhaps upwind states will be more likely to decrease their regulation and enforcement if they are free-riding and not enduring the full costs of low regulation and high pollution. However, sufficient evidence does not exist to prove that states intentionally pollute more near state borders, or that they enforce environmental regulation less near state borders (Glasgow & Zhao 2017; Konisky & Woods 2010). If upwind states were acting strategically to make economic gains while exporting the pollution to other states, there should be a pattern of lower enforcement, higher emissions, or both, near state borders.

Internal State Factors

Environmental effort is a term used to describe how committed a state is to addressing environmental issues as displayed through its regulations and enforcement, as well as other activities that promote environmental health and protection. Many scholars have attempted to identify the factors that cause states to engage in different levels of environmental effort. These factors can be summed up in four categories: state political ideology, state economic conditions, interest group power, and problem severity. It is important to acknowledge that different parts of state environmental programs may have different determinants (Potoski & Woods 2002). Also, Konisky and Woods (2012) have argued that evidence of these factors' influence is altered based on how environmental effort is measured. For example, a factor such as income may have a different measured effect on environmental effort based on whether a study uses environmental policy indices, state environmental spending, pollution abatement costs, or counts of regulatory enforcement actions.

State political ideology does not clearly account for the variation in state environmental effort. Generally, elected officials from the Democratic Party are considered to be more favorable towards environmental policies compared to Republicans; liberal voters are more supportive of government action to address environmental issues (Clayton 2017; Konisky et al. 2008; Vig et al. 2021). However, voter preferences do not always translate to environmental action by Democratic elected officials. While some studies find that higher levels of liberalism within a state's government lead to more pollution reductions (Glasgow & Zhao 2017), others find that electing Democrats only has a small impact on the implementation of liberal policies along these lines (Caughey at al. 2017). In fact, studies on state environmental effort and enforcement behavior have failed to find consistent statistical

impacts from government ideology (Konisky 2007; Bacot & Dawes 1997).

Economic conditions in a state could influence how a state chooses to regulate or enforce air quality standards. One theory about the influence of economic conditions is that as a state increases in economic well-being through measures such as Gross State Product (GSP) or income, there will be more public demand for strict environmental regulations, resulting in better environmental quality (List & Gerking 2000; Glasgow & Zhao 2017). This result aligns with the expected relationship of the environmental Kuznets curve where at some point in development, further increases in income result in better air quality (Stern 2018).[1] Other scholars have found that higher shares of economic activity made up by manufacturing will lead to higher amounts of pollution (Ringquist 1993; Konisky 2007). These findings could mean that fiscal health may not always directly correlate with the stringency of a state's air quality regulations.

Voter behavior is another important factor when considering the effect of economic health. Voters might respond to economic downturns and high unemployment by voting incumbents, such as the governor, out of office (Atkeson 1995). To avoid lower approval ratings and electoral losses, governors who have little control over unemployment may choose to coax industry into the state by lowering environmental regulations or enforcement (Hansen 1999). This behavior could relate to the race to the bottom theory, although these state officials may not be responding to other states' behavior but instead just trying to win approval in their own state. Economic voting will occur when voters connect the behavior of elected officials to economic conditions. Different factors may influence when voters make this connection, and

[1] The environmental Kuznets curve (EKC) is a predicted relationship between income and environmental quality. The EKC would expect that at lower levels of development, income increases correspond with increases in environmental degradation, meaning, for example, higher emissions. But the EKC forms an inverted U-shape, meaning eventually, further increases in income lead to lower levels of environmental degradation. See Stern (2018).

Ebeid and Rodden (2006) identify natural resource dominance in a state's economy as one possible factor. They find that there are fewer signs of economic voting in states whose economy depends on farming or natural resources, compared to states with more diversified economies where state officials play a larger role in attracting investment.

Interest group strength is often analyzed as part of either industry strength in the economy, or as part of the balance of environmental politics in the state (Konisky 2007; Potoski & Woods 2002). When analyzed individually, there is evidence that environmental interest group strength has a positive relationship with state environmental effort (Bacot & Dawes 1997). Environmental interest groups may help to translate higher income into tougher environmental regulations, and their strength could determine where a state sets its own ambient air quality standards (Potoski & Woods 2002; List & Gerking 2000). When industry interests are strong in a state, they seem to have a negative influence on environmental effort as businesses can lobby or threaten to leave the state if the government tries to tighten its environmental standards (Konisky 2007).

Most scholars agree that when there is higher problem severity, meaning more serious pollution problems, there will be more state environmental effort (Lowry 1992; Bacot & Dawes 1997; Potoski & Woods 2002). However, many studies that examine problem severity are not particularly recent (see Lowry 1992; Bacot & Dawes 1997; Potoski & Woods 2002), and a recent study from Konisky & Woods (2012) did not find problem severity to have a consistent impact on different parts of state environmental policy. It does seem likely that a state would increase environmental stringency if it had bad air quality, especially if there were clear negative health effects. For cross-state air pollution, having higher problem severity could mean experiencing a higher level of air pollution resulting from other states' emissions. One state may

experience a high level of pollution, which is primarily emitted within the state, and another state could have better overall air quality but a high fraction of its pollution comes from outside its borders. While both states could be said to have high problem severity, this study will focus on the severity of cross-state air pollution problems.

Theoretical and Empirical Implications of Previous Work

Scholars agree that different states act with different levels of effort to prevent environmental degradation. This effort can be measured in different ways, including measurements of regulation, enforcement, or abatement costs. States seem to act strategically in how they regulate or enforce environmental policies, sometimes by moving beyond the regulatory efforts of other states and sometimes by reducing their own efforts. A state's economic well-being often predicts levels of environmental effort, and different mechanisms such as economic voting may produce this result. While findings on problem severity have not been confirmed in recent years, a number of studies have found that states with higher problem severity will put in more effort to prevent degradation.

However, there remain disagreements and uncertainties. Scholars disagree on whether states race to the bottom or race to the top. Konisky (2007) suggests that different states race in different directions but it is unclear why states choose to act differently. The academic community also lacks an understanding of the relevance of state party control in determining state environmental effort. Throughout all of the factors that could influence why a state acts with more or less effort to improve air quality, disagreement exists over the most important factor or why some factors are more critical in certain situations than others.

Which factors cause a state to choose to race to the bottom or race to the top? As mentioned, different states seem to pursue different strategic paths. How does the institutional structure of federal clean air policy allow for states to escape or enforce more stringent standards on cross-state air pollution? The CAA leaves states with enough discretion to vary widely in their regulation and enforcement of clean air policies. Both of these questions could help us better understand why states behave as they do and determine which policy solutions could best address cross-state air pollution.

Methods

This project addresses the following research question: How does the amount of cross-state air pollution a state receives and contributes influence the amount of effort that state puts into limiting cross-state air pollution and its effects? This question could also be worded as: How does problem severity affect environmental effort? These questions allow the study to focus on problem severity which could be a useful variable to compare and contrast the difference in behavior from upwind and downwind states. Higher problem severity seems to result in higher state environmental effort, but these findings have not been recently updated and have not been applied to the issue of interstate pollution transport. This study measures problem severity as how much cross-state air pollution a state receives or contributes.

Table 1 presents a typology illustrating the different types of states according to the amount of cross-state air pollution a state contributes and receives. The four types represented in the table are separated states, upwind states, downwind states, and mid-wind states. Identifying these typologies is helpful in developing and working through the causal relationships that might characterize different types of states. This process also enables us to home in on the typologies of interest for this study: upwind and downwind states.

Table 1: State Pollution Typologies

		Pollution Contributed to Other States	
		Low	High
Pollution Received from Outside the State	Low	I. Separated States Ex. Maine, Arizona	II. Upwind States Ex. West Virginia, Wyoming
	High	III. Downwind States Ex. Delaware, Connecticut	IV. Mid-wind States Ex. Ohio, Pennsylvania

I. Separated States: These states do not contribute much pollution to other states and they do not receive much pollution from other states. A separated state would not be expected to demonstrate much effort to reduce cross-state air pollution because it is not affected by emissions from outside its borders and is not a large contributor to pollution downwind.

II. Upwind States: These states are net exporters of cross-state air pollution and their emissions contribute significantly to air pollution problems in other states. An upwind state would be expected to show low levels of environmental effort to decrease cross-state air pollution because it can profit off of the industries creating pollution. These states would prefer to continue polluting as usual, without any federal requirements to decrease their downwind contributions.

III. Downwind States: These states are net importers of cross-state air pollution as they receive air pollution from upwind states and do not contribute much air pollution to other states. Even if downwind states have stringent environmental standards, they are not able to achieve better air quality due to the emissions of other states. A downwind state could be expected to

demonstrate more environmental effort to decrease or offset cross-state air pollution because pollution from other states significantly affects its air quality.

IV. Mid-wind States: These both contribute pollution to states downwind from them and receive pollution from states upwind from them due to weather patterns and their geographic locations. It is unclear how a mid-wind state would act in response to cross-state air pollution. These states may have the motivation to increase their environmental effort to limit the pollution coming in from outside of their state, or they may oppose more federal enforcement as these states could also bear the costs of decreasing their emissions.

These state types differ based on how much cross-state air pollution they recieve and contribute. This study anticipates that different levels of cross-state air pollution, as is experienced by each state type, lead states to engage in different amounts of environmental effort.

This study predicts that if a state experiences higher levels of air pollution coming in from outside its borders, it is more likely to exhibit higher amounts of environmental effort to decrease or offset the effects of that pollution. Environmental effort will be measured by analyzing three interrelated behaviors. More cross-state air pollution in a state is expected to lead to that state joining litigation efforts to increase enforcement of federal rules about cross-state air pollution. A downwind state is likely more motivated to initiate these legal challenges that could cause the EPA to require more emission reductions from states responsible for creating air pollution that crosses state borders.[2] A state with higher levels of cross-state air pollution is more likely to increase the stringency of its regulatory and

[2] While the CAA also allows groups and individuals to sue polluters, this research will focus on examples where a state or group of states sues the EPA over emissions from another state.

enforcement behaviors and decrease its emissions to offset the pollution coming from outside its borders. Finally, states with higher levels of cross-state air pollution are more likely to interact strategically with other states by racing to the top rather than racing to the bottom. States may be motivated to regulate beyond what is required by the federal government (a form of racing to the top) to discourage polluters from moving into the state. If states race to the top, they can be expected to increase the rigor of their regulation and enforcement.

States that contribute high amounts of cross-state air pollution are more likely to demonstrate less environmental effort. States that are high contributors are less likely to engage in litigation to increase federal enforcement against upwind polluters as they themselves are upwind polluters. These states will have little incentive to increase the stringency of their regulation and enforcement because they benefit from the business of the polluting industries within their borders while knowing that the emissions from these companies are exported to other constituencies. Consequently, these states are more likely to race to the bottom than to the top. These states are unlikely to change their regulations unless new federal regulation requires it.

Hypotheses

The first set of hypotheses focuses on how receiving different levels of cross-state air pollution may cause a state to exert different levels of environmental effort. States that endure more pollution coming from other states will likely pursue behaviors that offset or reduce cross-state air pollution.

- Hypothesis 1: States that experience higher levels of cross-state air pollution are more likely to sue the EPA to increase federal enforcement on polluters in upwind states.

- Hypothesis 2: States that receive more cross-state air pollution are more likely to increase the stringency of their air pollution control measures: both regulation and enforcement.

The next two hypotheses consider state action conditional on whether states are engaging in regulatory competition. Two predictions follow.

- Hypothesis 3: If they are engaging in regulatory competition, states that receive higher levels of cross-state air pollution are more likely to compete with other states by racing to the top and regulating beyond federal requirements.
- Hypothesis 4: If they are engaging in regulatory competition, states that experience lower levels of cross-state air pollution are more likely to compete with other states by racing to the bottom and lowering the stringency of their regulation and enforcement as low as possible.

The next four hypotheses relate different levels of pollution contributions to the same measures of environmental effort. They predict that states with higher contributions to other states' air pollution problems are likely to demonstrate less environmental effort.

- Hypothesis 5: States that contribute more cross-state air pollution are less likely to sue the EPA to increase federal and state enforcement on polluters in upwind states.
- Hypothesis 6: States that contribute more cross-state air pollution are more likely to decrease the stringency of their air pollution control measures.
- Hypothesis 7: If they are engaging in regulatory competition, states that contribute higher amounts of cross-state air pollution are more likely to compete with other states by racing to the bottom and lowering the stringency of their regulation and enforcement as

low as possible.

- Hypothesis 8: If they are engaging in regulatory competition, states that contribute higher levels of cross-state air pollution are less likely to race to the top and regulate beyond federal requirements

Case Selection

This study aims to investigate the pollution levels and the environmental effort of Delaware and West Virginia. Conducting case studies of these two states will allow this study to test and further understand the theories behind downwind and upwind states' motivations and behaviors.

Delaware is a model example of a downwind state as it is a net receiver of cross-state air pollution. Delaware well represents other downwind states that lack political influence but must respond to severe cross-state air pollution problems. Located on the East Coast, Delaware receives significant amounts of air pollution produced by states to the west. Delaware does not have significant political power as it has a population of just over one million people and has the ninth smallest state economy in the United States (U.S. Census Bureau 2021a; Kaiser Family Foundation 2019). The levels of industrial toxins within the state are among the highest in the country, despite Delaware not having a large number of polluting industries within its borders. In 2021, there were 127 polluting facilities operating in Delaware, including several large DuPont chemical plants. But Delaware still has fewer polluting facilities than most states, and has far below the average number of polluting facilities per state which was over 800 in 2021 (EPA 2022a). In recent years, Delaware's government has blamed Delaware's air pollution on polluting industries in other states, highlighting the issue of cross-state air pollution (Delaware News 2018; Eichmann 2019).

A case study on Delaware will reveal some of the motivations held by state governments that encounter high levels of cross-state air pollution. Despite being a small state, Delaware has attempted to use its institutional powers to force upwind polluters to change their actions and the federal government to toughen their policies on upwind polluters. As such, Delaware can be expected to engage in high amounts of environmental effort to combat the issue of cross-state air pollution, consistent with Hypotheses 1 through 4. The state would be expected to engage in litigation to change the amount of air pollution it receives from other states. Delaware would also be expected to race to the top and increase the stringency of its own regulation and enforcement to offset the impact of cross-state air pollution.

West Virginia is a typical upwind state as it is a net contributor of cross-state air pollution. Due to its geographic location and its economic dependence on profits from energy production, West Virginia contributes high levels of cross-state air pollution to other states. West Virginia is among the country's largest producers of coal and natural gas (IEA 2021). It is also home to more than double the number of polluting facilities as Delaware (EPA 2022a). The EPA has linked West Virginia to downwind air quality problems and has lowered West Virginia's emissions budget with different versions of the CSAPR (EPA 2021i). Similar to Delaware, West Virginia is a state with a small population and a small economy (U.S. Census Bureau 2021b; Kaiser Family Foundation 2019). West Virginia currently holds significant federal political influence because of Senator Joe Manchin's power in the Senate. All of these factors may be important to keep in mind as this study analyzes the methods that West Virginia has used to achieve its economic and environmental policy preferences.

West Virginia can be expected to engage in low levels of environmental effort, at or near what is required by federal regulations. West Virginia gains economic benefits from its polluting

facilities and bears fewer of the costs because some of its pollution travels outside its borders. As outlined in Hypotheses 5 through 8, West Virginia is less likely to sue the EPA to increase enforcement on upwind states, to increase the strictness of its own regulation and enforcement, or to race to the top. Instead, West Virginia is expected to oppose the EPA's efforts to increase enforcement through litigation of its own. While West Virginia has been required by the EPA to add new air pollution control measures, the hypotheses predict that it will only adopt regulations that are legally required. If West Virginia is engaging in regulatory competition, it can be expected to race to the bottom.

Sources of Data

To measure the severity of cross-state air pollution in Delaware and West Virginia and their responses, this study uses data from a range of sources from 2011 to 2021 with a focus on ground-level ozone as it is the primary criteria pollutant affected by cross-state air pollution. This time period is compelling because the CSAPR was finalized in 2011, representing the start of an era with more government attention on cross-state pollution and more available data, as well as because of the lowering of the federal ground-level ozone concentrations standard from 0.075 ppm to 0.070 ppm that occurred in 2015, which makes it more difficult for downwind states to escape nonattainment.

A portion of the data used for this analysis was retrieved from the EPA's databases, including the Enforcement and Compliance History Online (ECHO) website and the Green Book, which reports states' attainment status. The EPA's modeling data from 2017 and 2021, was used to estimate how much pollution each source or state contributes to other states' ozone concentrations. Moghani et al. (2018) provided similar contribution data for Delaware from 2011.

To understand the stringency of the states' regulations, each states' air quality regulations and SIPs were examined to find what new regulations they each implemented in the past 10 years. For enforcement, this study calculated the amount of enforcement and monitoring actions that each state took according to its number of polluting facilities to be compared to national averages.

Some information for this study was obtained from representatives from each states' government: a Program Administrator from Delaware's Division of Air Quality and a Technical Analyst from West Virginia's Division of Air Quality. The Program Administrator described how Delaware's government sees the issue of cross-state air pollution and how state officials have attempted to respond to the problem. The official spoke of how Delaware's counties continue to be classified as nonattainment areas even though Delaware has already made all feasible emission reductions. The Technical Analyst from West Virginia made it clear that West Virginia's government updates its regulations along with federal requirements but that it cannot adopt anything more stringent than what federal regulations require. The official also emphasized that West Virginia is one of only 16 states to stay in attainment with all of the NAAQS. These perspectives will be discussed further in the analysis section.

Variables

The key independent variable for this study is the severity of cross-state air pollution, measured by how much cross-state air pollution a state contributes and receives. The amount of pollution each state receives is measured by calculating the proportion of each state's ground-level ozone concentrations created by pollution from sources outside their boundaries. This study focuses on ground-level ozone because it is the most concerning criteria pollutant for downwind states. EPA rules on cross-state air pollution primarily seek to limit nitrogen oxide

emissions because they chemically react with other pollutants to create ground-level ozone, the pollutant with the highest concentrations in downwind states. Additionally, Delaware's counties are only in nonattainment for ground-level for ozone (EPA 2021e). For each year, ozone contributions were totaled, approximating the ozone concentrations both Delaware and West Virginia will measure in that year. Then the modeled contributions of other states to Delaware and West Virginia's ozone concentrations were summed. The contributions to both state's ozone concentrations which come from non-state sources such as international pollution or fires were also totaled. Those calculations were used to find the proportion that each source category has contributed to Delaware and West Virginia's ozone concentrations. It should be noted that the modeled contribution data collected for 2011, 2017, and 2021 vary in a few ways.[3] While these data are not able to provide a fully comparable account of contributions, they are still useful in understanding the general severity of the problem throughout the period studied. Delaware and West Virginia pollution contributions to other states was calculated by summing each state's contributions to other states for 2017 and 2021 and dividing this by their total ozone contributions to find the proportion of emissions that go towards ozone formation outside of their borders.

The dependent variables are measures of the states' environmental effort. This study measures environmental effort by considering Delaware and West Virginia's litigation efforts to impact federal enforcement of cross-state air pollution rules, the stringency of their regulation and enforcement, and the nature of their regulatory competition.

Delaware's litigation activity to alter the federal government's enforcement of cross-state air pollution is measured by its filing of Section 126 petitions. A Section 126 Petition involves a

[3] For example, different years provided data from different monitoring locations and Moghani et al. did not include contribution information for non-state sources. Also, the data from 2011 only focused on Delaware's ozone concentrations.

state requesting that the EPA require pollution reductions from a polluting source that has significantly contributed to nonattainment in the petitioning state (EPA 2021g). While there is not an equivalent of Section 126 petitions for upwind states, this study analyzes records of when West Virginia joined or filed amicus curiae briefs for legal cases to challenge federal rules on cross-state air pollution.

To understand the stringency of both states' environmental policies, this study analyzes their regulation and enforcement actions. Recall Hypotheses 2 and 6 where higher amounts of pollution received are expected to result in more strict regulation and enforcement while higher amounts contributed are likely to result in less.

Regulatory competition is the most difficult variable to measure when taking an isolated look at individual states, but there are clues as to whether Delaware and West Virginia are engaging in regulatory competition within their environmental regulations. For example, if Delaware has matched other more environmentally minded states by adopting stricter regulations, that may be an indication that Delaware is engaging in regulatory competition and racing to the top. If West Virginia never exceeds the stringency required by federal standards, then that could indicate that West Virginia is racing to the bottom.

Results

Using the EPA's modeling data for 2017 and 2021, the analysis found that West Virginia contributes a much higher amount of air pollution to other states than Delaware does. Delaware contributed to around 50 ppb of ozone both years, while West Virginia contributed almost 700 ppb in 2017 and almost 400 ppb in 2021. It is not clear what caused West Virginia's contributions to other states to drop so severely from 2017 to 2021, but it could be the effect of

tightened federal regulations or the result of the COVID-19 pandemic decreasing overall economic activity.

The available data show that the vast majority of Delaware's ozone concentrations is the result of emissions from outside of Delaware. Each year, Delaware's emissions contributed a small percentage to its ozone concentrations compared to other states' emissions; In 2011, 2017, and 2021, Delaware's emissions made up 5.2, 5.5, and 8.6 percent respectively of the total contributions from state sources. Unlike Delaware, West Virginia's emissions made up about a third of all state contributions to its own ozone levels. In 2017 and 2021 West Virginia's emissions made up 32.5 and 36.3 percent respectively of the total state contributions.

The following results include non-state sources, which allows them to provide a fuller picture of the emission sources that led to ozone creation in Delaware and West Virginia. In 2017, Delaware emissions contributed 1.77 ppb of ozone, or 2.7 percent of all ozone in Delaware that year. In 2021, Delaware's emissions had an impact of 2.87 ppb, or 4.5 percent of total contributions. Other states were the largest contributors to Delaware's ozone as they contributed 64.7 percent in 2017 and 54.8 percent in 2021. This drop in other states' contributions could be the result of the federal implementation of the CSAPR Update, which began in May 2017, or the pandemic's effect on overall economic activity. In 2017, West Virginia contributed 12.45 ppb to its own ozone concentrations, or 20 percent of total contributions. Similarly in 2021, West Virginia contributed 12.96 ppb to its ozone concentrations, with a small increase to 21.7 percent of total contributions. Other states and non-state sources contributed similar amounts to West Virginia's ozone concentrations: other states contributed 41 percent in 2017 and 37.7 percent in 2021, while non-state sources contributed 39 percent in 2017 and 40.4 percent in 2021.

All modeling data of contributions to Delaware's ozone show that other states are the main contributors, that Delaware often contributes below five percent to its own ozone concentrations, and that it contributes very little cross-state air pollution to other states. According to Hypotheses 1 through 4, since Delaware receives high amounts of pollution, it should engage in higher levels of environmental effort. West Virginia contributes high amounts of cross-state air pollution to other states and receives much less cross-state air pollution compared to Delaware; Hypotheses 5 through 8 predict that West Virginia engages in lower levels of environmental effort.

Nevertheless, as the relationship between cross-state air pollution and state behaviors is not well understood, the analysis discussed above cannot demonstrate a causal relationship but will rather show if an association between the variables exists.

Between 2016 and 2021, Delaware filed four separate Section 126 Petitions regarding different polluting facilities outside of Delaware, more than all other states combined (Environmental and Energy Law Program 2020). Delaware continued to pursue the legal challenges that it started by suing the EPA twice over its delay to respond to its petitions and appealing the EPA's decision to deny its petitions. Delaware's Section 126 Petitions are not the only time that Delaware has challenged the federal government to reduce cross-state air pollution. In 2013, Delaware joined seven other states to petition the EPA to require upwind states to reduce their emissions (Min 2013). These results are consistent with Hypothesis 1 as states with more severe cross-state air pollution problems have engaged in litigation efforts to increase federal enforcement on upwind polluters.

West Virginia has not filed any Section 126 Petitions, likely because it does not receive much cross-state air pollution and is an upwind polluter itself. There does not seem to be a counterpart of Section 126 Petitions that requests that the federal government ease enforcement on upwind polluters. However, upwind states including West Virginia have attempted to affect the stringency of federal regulations by getting involved in suits against the EPA. This occurred in 2013 when several upwind states and localities, along with energy generation companies, argued before the Supreme Court in *Environmental Protection Agency v. EME Homer City Generation*. Upwind states argued that the EPA violated the system of cooperative federalism by announcing new requirements for upwind states and immediately telling upwind states how they must implement the new regulations. West Virginia did not join the case officially, but instead filed an amicus curiae, or "friend of the court," brief with other states in favor of the respondents' argument (SCOTUS Blog, n.d.).

Delaware appears to have responded to the effects of cross-state air pollution by ensuring its emitting sources are held to strict regulations to decrease ozone concentrations, and has made two changes to its air quality regulations in the past 10 years that affect ozone creation. In 2013, Delaware established a Low Emission Vehicle (LEV) program, which implemented California's standards for motor vehicles as allowed in Section 177 of the CAA. California's standards are tougher than federal regulations for motor vehicles and only 16 states have adopted them (EPA 2020a; California Air Resources Board 2021). Delaware implemented another new regulation in 2017 that updated the control of nitrogen oxide emissions from industrial boilers and process heaters. The text of this regulation includes a specific reference to Delaware being in nonattainment for ozone, stating that "NO_x emission reductions from the affected boilers and heaters shall contribute to (1) attainment and maintenance of the 8-hour

ozone standard, and (2) improvement of the ambient air quality, in both Delaware and the entire NAA" (Title 7 Natural Resources & Environmental Control Delaware Administrative Code, 1142 Specific Emission Control Requirements § 2.0 2017).[4] Delaware's introduction of both regulations aligns with Hypothesis 2, which predicted that states that receive more cross-state air pollution are more likely to increase the stringency of their air pollution control measures.

The hypotheses predicted that West Virginia, as a state that contributes high amounts of cross-state air pollution, would move in the other direction and roll back its air quality measures because it can freeride on downwind states. West Virginia has not relaxed its regulations but rather has kept them only as strict as required by the federal government. The Technical Analyst from West Virginia's DEP explained that "the State Code prohibits state rules from being more stringent than federal regulations." This means any changes to West Virginia air quality regulations must already be required by the federal government. In 2015 and 2018, West Virginia made changes to its permitting system for polluting facilities. While it is not clear whether all of these changes made the permitting system more strict, the change in 2015 was specifically geared towards permitting for polluting facilities "which cause or contribute to nonattainment" (EPA 2020b). In 2018, West Virginia also updated its regulations controlling "Ozone Season Nitrogen Oxides Emissions" and referenced the requirements of the Cross-State Air Pollution and its NO_X Ozone trading system (Title 45 Legislative Rule, Series 40 2019).

West Virginia has had more than double the number of polluting facilities in operation compared to Delaware each year since 2014. West Virginia had an average of 329 polluting

[4] NAA refers to the PA-DE-MD-NJ non-attainment area.

facilities from 2013 to 2021 compared to Delaware's 139 facilities. An analysis of states' monitoring and enforcement actions found that Delaware engaged in an average of 520.89 compliance monitoring activities each year, or an average of 3.76 monitoring actions for each of Delaware's polluting facilities. West Virginia only engaged in an average of 2.22 monitoring actions per polluting facility, which is close to the national average of 2.2 monitoring actions per facility. However, Delaware had far fewer enforcement actions on average, with only .024 enforcement actions per facility, when compared to the average for all states at .039 actions per facility. West Virginia conducted more enforcement actions than Delaware and the national average, with an average of .059 enforcement actions per polluting facility. But the number of West Virginia's enforcement actions seem much more variable from year to year, as they range from .011 to .148 actions per facility. This variability suggests that West Virginia's government does not have a consistent commitment to ensuring that polluting facilities are complying with environmental regulations. Overall, Delaware engages in more monitoring activities than the national average, but conducts fewer enforcement actions. While these results could indicate that Delaware is easy on polluters, this paper contends that the threat of monitoring motivates polluters to follow regulations leaving Delaware's government with less need to penalize them through enforcement actions. West Virginia engages in fewer monitoring actions than the national average, but more enforcement actions. These findings do not fully match the hypotheses that expect a downwind state like Delaware to engage in more enforcement practices than an upwind state like West Virginia.

Just as the Program Administrator described, records of Delaware's regulatory and enforcement activities show that Delaware's polluting units are well controlled with stringent regulations to keep ozone concentrations low, matching expectations from Hypothesis 2. But

due to cross-state air pollution, Delaware continues to fail the ozone NAAQS and the EPA requires Delaware's government to revise its SIP and implement programs to reach attainment. The official expressed that there is not much more Delaware can do. One of the few options remaining to decrease ozone concentrations which are mostly due to out-of-state emissions is to adopt another one of California's programs, called the Zero-Emission Vehicle (ZEV) regulations.

Given the high standards that Delaware sets for polluting industries, it appears that Delaware could be racing to the top. Delaware's government has kept tight restrictions on polluters and has even adopted California's stricter motor vehicle regulations just like Delaware's geographic neighbors. Konisky (2007) has suggested that certain state-level factors may cause states to either race to the top or race to the bottom. The data on Delaware and other downwind states' behaviors suggests that a high amount of cross-state air pollution could determine the nature of a state's regulatory competition as predicted in Hypotheses 3 and 4, but a more rigorous analysis is required to prove this relationship.

West Virginia has a so-called stringency law that requires state regulations not to go beyond the strictness of federal standards. For this reason, it is likely that West Virginia is engaging in regulatory competition and racing to the bottom by keeping their standards as loose as possible.

Conclusion

By focusing on Delaware and West Virginia's litigation history, their regulation and enforcement practices, and through consideration of regulatory competition, this study found that between 2011 and 2021 Delaware, a downwind state, exhibited more environmental effort

to decrease cross-state air pollution than West Virginia, an upwind state. Delaware's government attempted to decrease cross-state air pollution by making Section 126 Petitions to the federal government and adopted strict regulations that reduced Delaware's ozone concentrations as much as possible. However, despite Delaware's effort, the problem of cross-state air pollution remains severe. Rather than petition the government to increase federal enforcement on upwind polluters, West Virginia joined legal efforts to prevent federal enforcement. While West Virginia engaged in more enforcement practices compared to Delaware, it has less stringent regulations and engaged in fewer monitoring actions. It also appears that West Virginia is racing to the bottom by limiting state regulations from being more stringent than federal requirements.

These findings have several implications. For Delaware's government, this analysis may demonstrate that the state's actions are inadequate to significantly reduce cross-state air pollution. Government officials may choose to pursue other types of solutions that could have a greater effect on Delaware's ozone levels. Similarly, these results may inform the federal government that it needs to take a larger role in addressing interstate pollution as states like Delaware do not have enough influence to make a difference. Several upwind states including West Virginia are only able to increase the stringency of their regulations if the federal government first introduces more severe requirements. The federal government may also choose to alter whether it considers downwind states like Delaware to be responsible for their own air quality problems. Currently, the EPA requires states in nonattainment to submit a new SIP with more strict requirements. But downwind states have little influence over their own air quality as they often contribute less than 10 percent of their own ozone concentrations. Meanwhile, the upwind states that contribute air pollution to Delaware can enjoy better air

quality and may even be able to avoid nonattainment.

For a preliminary study such as this, there are benefits of looking closely at two cases to attempt to understand what type of casual relationships may be operating. However, this study's focus on only Delaware and West Virginia has its limitations. While this study briefly mentioned the behavior of other downwind and upwind states, it is possible that their responses to cross-state air pollution are different from Delaware's and West Virginia's. This study also did not consider any states that receive *and* contribute high amounts of pollution or states that receive and contribute low levels of pollution, the other cells in the typology appearing in Table 1. Additionally, much of the analysis lacks robust statistical analysis which could provide evidence for potential causal relationships.

The next step in this research is to conduct case studies on states that receive and emit varying levels of cross-state air pollution to understand their behaviors. After theoretically developing the causal mechanisms for different state typologies, one could empirically test the relationships between cross-state air pollution and state behaviors. This literature could then be applied to understand governments' responses to other types of pollution that cross borders.

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The Proxy Goes Both Ways: Digital Propaganda of Yemen's Houthi Movement

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Abstract

In this paper, I examine and analyze the Houthi movement's online propaganda platform. The Houthis, officially known as Ansar Allah, have participated in a devastating civil war in Yemen that has led to one of the worst humanitarian crises in recent history. In the process of this rebellion, the Houthis have relied on digital communication and social media to rally millions of Yemenis in rebellion against the central government, undermining regional stability and igniting a proxy conflict involving regional powers such as Saudi Arabia and Iran. This paper first examines the context and positionality of the Houthi movement in present day Yemen, as well as the literature surrounding propaganda, online extremism, and imagery used by political actors to disseminate propaganda, recruit militants, and attract international attention. This is followed by an analysis of digital propaganda disseminated by the Houthi propaganda wing, considering both local and regional influences on the content produced by the movement. Lastly, this article examines the implications of international support and attention for the Yemeni civil war in the context of their continuing propaganda efforts.

Introduction

The civil war in Yemen has resulted in an ongoing economic and humanitarian crisis, where nearly 80% of the population is in need of international assistance (Sharp, 2021, p. 14). At the center of this conflict lies the Houthis, a movement which emerged out of northwestern Yemen during the 2015 civil war and has since taken over large swaths of the country. Initially a Zaydist family in Yemen's Sa'da governorate, the Houthis have expanded to control the nation's capital of Sa'na and most of western Yemen. They are also currently known by the Arabic term

Ansar Allah ("Champions of God"), extending membership to the movement beyond familial boundaries. The Houthis have relied on digital media to consolidate political and social control of their territory throughout their rise in Yemen. Their media presence ranges from conventional television programs to social media campaigns, allowing them to control the national narrative surrounding the ongoing conflict (Salmoni et. al, 2010, p. 16). Mirroring other armed groups in the region, the Houthi movement's digital communications infrastructure has become increasingly sophisticated, using a wide variety of platforms and content to reach broad audiences within the country. In this paper, I will deconstruct the Houthi movement's digital propaganda infrastructure. I will use elements of propaganda studies and studies of visual culture to analyze Houthi media, examining how they mechanize varied content and rhetorical strategies in achieving their political objectives. I argue that the content of Houthi propaganda is characterized by their identity of statelessness in regards to Yemen as a whole, integrating external actors into their media in order to capitalize on a set of "shared truths" among the Yemeni people. Through this effort, the Houthis illustrate the fractured nature of Yemeni identity, while using shrewd messaging to characterize their rebellion as a part of a broader religious and political struggle.

Propaganda, Extremism, and the Power of the Image

In order to contextualize Ansar Allah's use of digital media as propaganda, the terminology surrounding their content must be outlined and understood. The term "propaganda," used expansively and often liberally in regards to media, can be understood in a number of ways. Since the end of the first world war, when "propaganda" entered the common vernacular of English-speaking society, the term has drawn significant debate surrounding its connotation and utility in academic discourse (Cunnigham, 2002, p. 3). Defining what constitutes

propaganda– deviating from entertainment or otherwise unbiased forms of social informing–can be an almost impossible task. Cunningham (2002) describes this difficulty in *The Idea of Propaganda* as a postmodern conundrum, where an academic aversion to the notion of absolute truth leads to a focus on "idioms of power and social control" instead of the degree of truth within a piece of media (p. 13). At its core, propaganda can be understood in a vast number of ways, and its demonstrated ambiguity can lead theorists to focus on the context of propaganda production rather than its denotative nature.

The way in which propaganda is understood in academic literature is largely derived from the foundational works of American propagandist Edward Bernays, who outlined the theory and practice of manipulating public opinion in works such as *Crystallizing Public Opinion* (1923) and *Propaganda* (1928) (Olasky, 1984, p. 3). Bernays understood propaganda as a reorganization of the economy of choice, capitalizing on existing attitudes and feelings in order to alter conceptions of truth when one decides, cast a vote, or go to war (Olasky, 1984, p. 3). These attitudes and feelings are thereby "associated and regimented for common action," where the prescribed action can lead to political or economic choices among a diverse set of options (Bernays, 1928, p. 13). Bernays does not acknowledge the moral implication of propaganda as a malign practice, however, alleging that propaganda is necessary in order to prioritize an infinite field of potential choices in public life. This sentiment is echoed in Noam Chomsky and Edward Herman's *Manufacturing Consent: The Political Economy of the Mass Media*, where the authors argue that propaganda is necessary as a means of codifying values and integrating individuals into society on a broad scale. However, the degree to which states and media bodies are able to effectively administer propaganda is dependent on the circumstances in which it is produced. Chomsky and Herman assert in *Manufacturing Consent: The Political Economy of the Mass*

Media that monopolistic control of mass media streamlines the marginalization of dissident viewpoints, removing the filters of advertising, competition, and the presence of "expertise" outside the propagandists' governing dogma (Chomsky and Herman, 2008, p. 62). This makes the propagandists' conception of truth unassailable in the space of mass media, although the advent of social media offers an alternative space for political discourse and consensus production (Dodds, 2018, p. 650). In democratic media spaces, the idea of propaganda becomes blurred by conceptions of truth and perspective expressed by multiple sources. A broad spectrum of available viewpoints can thereby eliminate the clear distinction between propaganda and honest informing, making way for disagreement regarding the nature of any item of media. As a result, when the concept or pursuit of truth cannot be reasonably agreed upon, the propagandist's intention of establishing political or social control becomes the primary lens through which propaganda is understood.

Cull et. al. (2003) complicates this issue by noting the negative connotation surrounding propaganda, despite its potential for constructive persuasion in the pursuit of better governance (p. xvii). Nonetheless, in their expansive encyclopedia of propaganda's use and misuse throughout history, Cull et. al. agree that the most important distinguishing feature of propaganda is the intention of its creator, in that propaganda constitutes "conscious, deliberate attempts to employ the techniques of persuasion to attain specific goals" (p. xix). This definition omits the idea of disinformation in its outline, arguing that state uses of political messaging can be productive regardless of the content's subjectivity. The United States Department of Defense characterizes propaganda in similar terms, describing propaganda as "any form of adversary communication, especially of biased or misleading nature, designed to influence the opinions, emotions, attitudes, or behavior of any group in order to benefit the sponsor, either directly or

indirectly" (Winkler and Dauber, 2014, p. 7). This removes the state itself from the definition of propaganda, limiting it to "adversary communication." Despite this, the DOD uses a similar notion of intent and desired political effect in their categorization. This leaves room for government officials to interpret what constitutes disinformation and direct intent in adversarial media, underscoring both the subjectivity of propaganda as a concept and the tendency for foreign communication to be labeled as propaganda without significant forethought. While varying in their respective conceptions of the role of truth within propaganda, the aforementioned definitions help to build an understanding of propaganda as it relates to political coordination and public opinion. Propaganda is characterized by deliberate actions taken by groups in order to achieve political or social goals, using varied forms of communication in doing so. Aside from the intentions of the creator, political messaging can be also understood through its intended receivers, where the attributes of an audience determine their "susceptibility to persuasion" (Jamieson and Kenski, 2017, p. 60). In this case, the identity and attitudes of an audience determine a piece of propaganda's intrinsic value. For the purpose of this study, the nature of the Houthis' audience plays a significant role in determining the value systems in which the Houthis aim to exploit in their media outreach. In doing so, they draw on strategies developed by other non-state actors and existing images within the Yemeni cultural psyche.

While the Houthi movement's use of media is scarcely studied in academic literature, the use of digital media by militant groups in the Middle East is well documented (Awan, 2017, p. 3). Since the internet became a popular mechanism for exchanging ideas, separatist groups and other actors have adopted online communication platforms as a decentralized hub for communication. In the case of the Islamic State, the most studied non-state actor in terms of their digital media output, social media served as a powerful tool in supporting their recruiting and

consolidation efforts in the Levant (Karagiannopoulos, 2012, p. 170). In contrast to the Islamic State, however, the Houthi movement has made no indication in their content that recruitment from other states is a primary goal. Cull et. al (2003) finds that many Islamist groups are just as outwardly focused as they are towards local leadership, finding use in imagery beyond the borders of a particular state (p. 343). Cultural and political symbols common throughout the Islamic world can draw upon an idea of unity that preexists contemporary boundaries. Political media expert Doris Graber cites the power of imagery in political messaging, a dimension of propaganda that has been substantially less studied than the use of rhetoric and verbiage (Graber, 1989, p. 145). As content becomes more complex in both production value and ease of transmission, propaganda creators have built upon existing strategies in the power of imagery and emotion in their work. Anthropologist Clifford Geertz writes that images are central to the construction of reality, creating a set of quasi-religious values that garner "what they perhaps most need to be coercive: the appearance of objectivity" (Geertz, 1957, p. 627). Religion is defined in more abstract terms here, relating to an adherence to practices and values that supersede conscious deliberation.

This sentiment is echoed in the work of Gruber and Haugbolle (2013), who dissect the role of images in the modern Middle East. They note that visual imagery "projects a kind of reality through visual signs," where the meaning of the message is determined by both the creator and audience (p. xiii). This reflects the same framework as the work of Cunningham (2002) and Cull et. al. (2003), determining the meaning of imagery and its effect on attitudes and beliefs based on the message itself and the existing identity of the audience. In the digital era, where the creation and dissemination of imagery has never been easier, the development of narratives surrounding war and conflict allows ample room for manipulation. However, Apel

(2012) notes that "controlling the visual field" can fail as a result of an excess of available information (p. 153). The task of the propagandist, in this case, becomes the selection of visual material that has the greatest chance for resonance.

Humble Beginnings

Yemen has experienced internal conflict since it was established as a sovereign nation in 1990. In addition to their participation in a brief civil war in 1994, the Houthis' original region of Northwestern Yemen's Sa'da governorate has been in near continuous conflict with the central government, where the central government has exercised "an extremely attenuated level of control" (Salmoni et. al., 2010, p. 3). The government of Yemen has engaged with separatist movements in Northwestern Yemen in brief conflicts known as the "Sa'da Wars," broken up by momentary ceasefires that illustrate the tenuous relationship between people of Northwestern Yemen and any form of central government. In response to president Saleh's dispatch of troops into Northwestern Yemen in 2004, the Houthi family became a larger phenomenon than a competing tribe in Sa'da. More and more people in Yemen began to call themselves Houthis in solidarity against the central government, looking to the Houthi clan for political and religious guidance (Salmoni et. al., 2010, p. 8). This marks the beginning of "Houthi" being referred to as a broader political movement instead of a tribal network, where the term lends itself to a set of ideological similarities rather than tribal ones. However, as of 2010, the Houthis still had not demonstrated a strong degree of organizational or ideological cohesion across their growing ranks (Salmoni et. al., 2010, p. 9). Their emerging political influence in the country was not solidified or particularly different from other tribal alliances at the time and faced a "scorched earth" strategy employed by the central government to stomp out the Houthi movement (Filiu, 2015, p. 143). Nonetheless, during the events of the 2011 Arab spring, which emboldened Yemenis to rise up against their government, the Houthis played a role in the ousting of President

Ali Abdullah Saleh and rallying the people of Sa'da (Hill, 2017, p. 179). Emerging from this deepening vacuum was Al-Qaeda in the Arabian Peninsula (AQAP), the Southern Transitional Council (STC), and other tribal networks vying for regional supremacy. The STC and AQAP still exercise political control over portions of the country in Yemen's Southwest and East, respectively.

During the events of the 2015 civil war, the Houthis emerged as a contender for national supremacy. Not only had they become broader than their initial status as a tribal group in the Sa'da governorate, they unified large swaths of previously competing tribal networks in order to depose the centralized government. In its current form, the Houthis' 'nation' can be described as a proto-state. While not being internationally recognized as legitimate, they exercise near-total autonomy in the territories they hold, as evidenced by a monopolistic hold on their territory's education, economic, and media infrastructures (Salmani et. al., 2010, p. 217). Proto-states are described by Eleftheriadou (2021) as territorial clusters within a larger state that "contest the right of central authorities to govern, raising competing claims to authority and popular representation" (p. 2). These competing claims became a measure of the Houthis against other regional factions rather than against local players in Northern Yemen. Within the Houthi proto-state, however, lies a dizzying array of local kinship and tribal networks that predate the existence of Yemen as a country, which have competed for territory and influence in the region since the area was first settled. These networks have defied the centralized governance emerging after Yemen became a sovereign state, preferring local traditions of justice and political mediation over the bureaucracy in Sana'a. As such, holding these contending groups together necessitates the use of propaganda in order to build national identity in a place devoid of such patriotism.

Poetry in Motion: Evaluating Houthi Content

Ansar Allah's media apparatus has grown in conjunction with their territory, becoming increasingly complex as social media allows information and media to be transmitted with increasing ease. Building upon recordings and broadcasts of founder Hussein Al-Houthi's lectures and interviews, the Houthi media platform evolved to include chants, online sites, and videos beginning in 2007 (Salmani et. al., 2010, p. 217). The Houthis' television channel, Al Masirah, was founded in 2012 and functions as an all-encompassing media hub for the Houthis (Porter, 2020). Al-Masirah is located physically in the Hezbollah stronghold of south Beirut, receiving logistical support from Hezbollah's Al-Manar TV, their own flagship television channel (Transfeld, 2017). While Al-Masirah's internet presence has been curbed across U.S domains, the Houthis maintain complete control over the information apparatus of their territory. By stationing their primary media apparatus outside of their country, the Houthis are able to avoid Saudi interference in their information network and receive logistical support from Hezbollah's media wing (Levitt, 2021, p. 18). As social media became increasingly popular in the Arab world, as did the circulation of Houthi content via platforms such as Facebook, YouTube, and Telegram, allowing digital content to be reproduced by Yemenis who act as propagandists in their own right.

As such, the scale of Houthi propaganda is incredibly vast. Beyond official sources of media, snippets and copies of Houthi content are reproduced on social media platforms such as Twitter, YouTube, WhatsApp, and Telegram, contributing to a complex web of content that crosses between technological and ideological boundaries. For the purpose of this study, the content and form of three specific propaganda pieces will be analyzed for common imagery, rhetorical strategy, and regional influence. Each piece of media was selected based on its similarities to overarching visual and rhetorical themes within Houthi propaganda.

Figure 1: *Houthi soldiers pray between clashes with Hadi forces.*

The first examined piece of propaganda comes directly from Ansar Allah's website, ansarollah.net, where they offer updates on battlefield action, publish essays from Houthi leadership, and disseminate digital content. Figure 1 shows a frame of the video "*Tawilu Al Harb Alayna*," meaning "long live our war," and illustrating Houthi soldiers praying between clashes with Hadi forces. The video begins in English, showing the U.S Capitol building and Flag with a heavy red tint overlaid on top of it. A snippet of an American press release proclaims, "we have been informed that the kingdom of Saudi Arabia launched military operations in Yemen," leading into a montage of Saudi Arabian fighter jets overlaid with the same red tint. The beginning of the video disregards subtlety in outlining oppositional forces in the United States and Saudi Arabia, contextualizing the imagery that follows it under the guise of American and Saudi aggression. The video then leads into a sequence of the perceived results of this aggression, showing children injured or killed in airstrikes as triumphant music fades into focus. The emotional appeal of strongly negative imagery is described in Graber (1990) as a strategy

pioneered by cable news outlets, creating a "video malaise" that generates lasting emotional effects (p. 153). The use of extreme imagery in propaganda allows the viewer to unconsciously build relations of opposites regarding political issues and figures, associating one side with absolute injustice and the other with its antithesis.

This transition illustrates a common theme within Houthi propaganda and Islamist iconography, where human suffering is represented as both a political catalyst and an object of aestheticization (Gruber and Haugbolle, 2013, p. 117). The image of an injured or dead child represents the purity of God being unjustly marred by violence, creating the need for vengeance against the "guilty others" who perpetrated it (Gruber and Haugbolle, 2013, p. 118). In this manner, violence against children is portrayed as both a political and religious call to action, urging all Muslims and Yemenis to enact justice against a godless foe. Immediately after this sequence, with the lyrics of the song beginning, the viewer is confronted with a mirror depiction of the war's violence. Imagery of Houthi soldiers, armored vehicles, and combat flashes across the screen as the music continues, demonstrating how Ansar Allah presents righteous violence and unjust suffering as disparate and yet similarly glorified motifs within their propaganda, where the death of innocents acts as cause for retaliatory warfare. Jaap van Ginneken (2003) describes the use of violent imagery in *Collective Behavior and Public Opinion: Rapid Shifts in Opinion and Communication* as a presentation of moral conflict. Van Ginneken notes that collective opinion can be readily manipulated by the knowledge of a perceived injustice, leading to a self-sustaining "spiral of violence" that justifies itself as it gains momentum (Van Ginneken, 2003, p. 202). Imagery of death is commonplace within Islamist media productions, serving as a method of social informing for prospective viewers. Martyrdom in the name of a broader

religious conflict is cast over the entirety of the Houthi cause, whether through an active role (via fighting) or a passive one (noncombatant deaths).

The use of Islam as a political and rhetorical tool is omnipresent in Houthi media. At [0:44], as seen in Figure 1, Houthi soldiers are depicted in prayer with rifles strapped to their backs. This imagery places piety and violence within the same cultural frame, denoting the religious underpinnings of the Houthis' fight for Yemen. Imagery of praying soldiers is repeated at [0:58] and [3:10], interwoven with lyrics such as "what we have undergone / for only God and none other" (*Long Live our War: Ansar Allah Group Performance*). Geertz (1957) notes that the efficacy of religion in underscoring social values lies in "the ability of its symbols to formulate a world in which those values, as well as the forces opposing their realization, are fundamental ingredients" (p. 627). In this manner, the Houthis' use of Islamic symbols in both their imagery and messaging allows them to construct a reality in which their cause is synonymous with that of Islam itself. Even though the direct enemies of the Houthis on the ground are Muslims themselves, religious rhetoric contributes to a body of symbols that seeks to redefine spirituality, citizenship, and duty through the Houthi cause.

Beyond the opening minute, the remainder of the video follows a similar pattern. Sequences of violence committed by and against the Houthis are followed by images of piety among soldiers, military technology, and Houthi leaders. Each sequence lasts between two and ten seconds, leaving little time for the viewer to digest the content before proceeding to the next sequence. The veracity of each sequence is therefore set aside, favoring the construction of sentiment over convincing the public of a specific political goal. Instead, the creators deftly crisscross between portrayals of enemies and martyrs. Chomsky and Herman (2008) cite the idea of worthy and unworthy victims, whose suffering or death is placed on a moral scale defined by

sectarian or religious affiliation rather than the context of the suffering itself (p. 97). By defining and repeating an idea of moral worth to the public, the consequences of political and military action are separated from the cause itself, removing humanity from the enemy and reinforcing the value of continued violence.

No mention is made of Hadi forces or other competing factions within the country, nor is the war mentioned as a fight for self-determination, civil rights, or economic opportunity. The de-specification of conflict messaging is pervasive in Houthi media, where specific details or actors in the war itself appear to have little presence in the content being produced. This dichotomy will be explored in further detail, outlining the unifying and dividing factors that contribute to Houthi generalization.

Figure 2: *Issa Al-Laith sings in front of Houthi martyrs in "Nation of Truth."*

Similar usage of religion, external enemies, and music is present in Issa Al-Laith's "Nation of Truth," a music video published on YouTube with over 900,000 views. Al-Laith is a popular Houthi musician and performer, whose official channel has more than 925,000 subscribers. Al-Laith's channel and other Houthi performers boast much larger subscriber counts

and view totals than official Ansar Allah media, whose YouTube channels number between 20,000 and 75,000 subscribers (YouTube). The production value of Al-Laith's content is also much higher than the video in Figure 1, using high-definition drone footage and actors in conjunction with the mountaintop scene pictured in Figure 2. The increased popularity and quality of a content producer less directly tied to the Houthis is worth noting, possibly due to stronger engagement on social media with those regarded as celebrities in popular culture.

As the music video begins, Al-Laith is seen brandishing a traditional Yemeni *Jambiya* dagger and an AK-47 rifle atop a mountain. Similar to the *ansarollah.net* video, the music of the video is modeled after traditional Yemeni *Zawamil*, or tribal poems, with the addition of modern background music to form a cohesive song. These poems have long been used as a means of tribal mediation, historical documentation, and cultural identification among the disparate networks of the country. The Houthis' return to *Zawamil* as a rhetorical tool allow them to "instigate sentiments of sovereignty, chivalry, and victory" among their audience, capitalizing on an existing cultural vernacular in order to equate embedded traditions with Ansar Allah's victory (Naji, 2022). When integrated with contemporary music, patriotism and pop culture work together in a blend of traditional and emerging cultural practices. Using music within propaganda "lends itself to patriotic appeals since the latter depends upon an emotional response, and music is well suited to the expression of emotions" (Cull et. al., 2003, p. 255). These videos strike the intersection of antiquity and innovation in the media space, building on long standing attitudes and beliefs while ensuring engagement with the young population.

The use of historical themes along with contemporary visual strategies is consistent throughout Al-Laith's video, along with the characterization of the Houthi cause as an expression of *Jihad*. At [0:51], a group of actors dressed in traditional Yemeni warrior garb cry out while

brandishing swords, spears, and shields, illustrating the connection between the present conflict and a longstanding warrior tradition in Yemen. Similar to *Long Live Our War*, Al-Laith's video is interspersed with sequences of heroic violence, using actors alongside raw combat footage. Just as *Long Live Our War* displays imagery of the American enemy in contrast to Houthi soldiers, Al-Laith's video shows an American Humvee being attacked and the soldiers within it killed at [0:41]. The lyrics coinciding with this imagery read "From our fathers' wealth, America, run," indicating direct opposition to the United States and a threat of future violence.

The rhetorical strategies employed in Al-Laith's video are more subtle than in *Long Live Our War*, making a series of choices that present the same imagery in a more palatable manner. Raw videos of Hadi soldiers being shot are replaced by montages of actors holding rifles, America and Saudi Arabia are referenced visually without a clear red overlay, and causal relationships between foreign aggression and domestic suffering are implied rather than directly stated. Nonetheless, both videos employ the same visual strategies and capitalize on the same cultural vernacular in order to engage the audience. Strength and masculinity are displayed in both productions through individual weaponry and military vehicles. In addition to the reinforcement of masculinity, weapons can demonstrate individual and collective autonomy for tribal Yemenis (Salmoni et. al., 2010, p. 36). Individuals holding weapons–even without a demonstrated need for them–are statements of sovereignty over the self and the community.

As is seen in Figure 2, the role of martyrdom within Houthi culture is displayed by the placards behind the performer. The men on the left and center of the frame are former Houthi leaders Hussein Al-Houthi and Saleh Al-Sammad, killed by GOY and Saudi military operations, respectively. Connecting slain Houthi officials to the construct of martyrdom strengthens the idea of Houthis as *mujahideen*, religious warriors fighting to preserve political Islam and protect the

country from disbelievers. This practice has been evident in Houthi media for more than a decade, posturing the conflict as a long-standing battle for an Islamic cause (Salmoni et. al., 2010, p. 225). These figures have direct administrative and ethnic ties to the Houthi movement, with Hussein Al-Houthi acting as the movement's founder and patriarch until his death in 2004. More perplexing, however, is the presence of Iranian Security officer Qasem Soleimani, pictured on the right side of Figure 2. Despite his 2020 assassination by U.S airstrike in Baghdad having little to do with the conflict in Yemen, his status as a martyr is widely publicized within Houthi publications and media. As his face is presented beside the foundational leaders of the Houthi movement, Al-Laith chants "the blood of Qasem Soleimani / dawn rises from every place," portraying the Iranian official's death as a pivotal loss for the cause. Through the blood spilled by the United States, the dawn of the rebellion emerges from every corner of the country.

Figure 3: الصرخة" - *The Scream"*

Examining the presence of external actors such as Suleimani can be better understood through the most ubiquitous image disseminated by the Houthis. The *Sarkha*, or scream, is composed of five simple lines of Arabic: *Allahu Akbar, Al-Mawt li-Amrika, Al-Mawt li-Israyil, Al-A'ana A'ala Al-Yehud, A-Nar lil-Islam*. Translated into English, the *Sarkha* reads "God is great, death to America, death to Israel, curse upon the Jews, victory for Islam." At first glance, the content of the Houthi slogan appears to be entirely externally oriented, leading one to assume that the Houthis' goals lie in the destruction of Israel, the Jews, and America in the name of Islam. Echoing the sentiment of the *Sarkha*, Houthi propaganda at large is devoid of visual or verbal references to Yemen or smaller localities within their content. The overarching enemy

within their frame of reference is portrayed to be Saudi Arabia, the United States, the United Arab Emirates, and Israel, making little reference to the Hadi government or STC forces in the south.

This repeated presence of externalized imagery within Houthi messaging illustrates the United States and Israel as direct adversaries to the Houthi cause. Even though the United States is only tangentially involved in the Civil War itself, the Houthis are able to capitalize on widespread anti-American sentiment that has developed after the events of 9/11 (Salmoni et. al., 2010, p. 7). Furthermore, Israel has no substantive connection to the conflict in Yemen. America's war on terror, which extended into Yemen to combat the rise of AQAP, has solidified the United States as "as a prominent enemy of Yemeni indigenous rights to self determination" (Mohamed and El-Desouky, 2021, p. 208). American support for the Hadi government and strategic interest in Yemen is inimical to the Ansar Allah's anti-imperial mission, regardless of their degree of influence in the conflict itself. As such, Yemeni attitudes towards the United States and Israel are among the few topics the fractured nation can agree upon. The externalized sentiment of the *Sarkha* "reduces complex geopolitics to simple religious identifications to win support from core Houthi supporters along with the broader Yemeni public," leading to a greater degree of unity among Houthi sympathizing populations (Mohamed and El-Desouky, 2021, p. 206). In a political campaign against the Hadi government, situated physically within Yemen, externalizing the "bogeyman" of Houthi rhetoric fosters togetherness among disparate groups and mobilizes the population against a symbolic enemy. Rhetoric against the United States "calls for action against America are revalorized as a call to action against the GOY itself," in a process of realigning the symbolic and religious meaning of the war (Salmoni et. al., 2010, p. 224).

In practice, however, the Houthis do not pose a significant threat to the United States. By their own admission, the Houthi movement's strong anti-American sentiment is "merely rhetorical as no imminent threats were ever directed against the US presence in the country" (Mohamed and El-Desouky, 2021, p. 215). In turn, the United States does not consider the Houthis to be a terrorist organization despite repeated calls for the death of America (Revocation of the Terrorist Designations of Ansarallah, 2021). This demonstrates the somewhat hollow nature of Houthi rhetoric, which is nonetheless effective at fostering unity. Sana'a still belongs to Ansar Allah, and the Hadi government is no closer to regaining control of the country.

The Yemeni people's common definition of external enemies can also be understood through their history of colonial domination. Many lived experiences in the country can be described both presently and historically as being controlled by states with little connection to the Yemeni people, much less the kinship networks that define their conception of governing authority. Even if the United States and Israel are only tangentially involved in the conflict, resisting the Hadi government can be understood as a resistance to the imperial domination that characterizes much of the Yemeni nation story. As such, loyalty to the Houthi national cause still fits within a broader framework of anti-imperialism and adherence to local customs, as that the movement maintains tribal custom in its ideology (Blumi, 2011, p. 24) (Pridham, 1984, p. 154).

Maintenance of tribal traditions in a practical sense while ignoring them in mass media is central to identity building between disparate and occasionally warring groups. As a proto state consisting of diverse polities with complex tribal and kinship networks, the people of Yemen identify themselves primarily with their religion and family rather than the Yemeni state. This feeling is amplified in the North, where the Yemeni central government has never been accepted, much less popular. As such, the use of localized conflicts that have persisted long before

Yemen's establishment, or even colonialism, is cause for fracturing within the polity the Houthis are attempting to construct. Before Yemen was established as a country, the idea of political unity was considered a possibility only at the cost of political values in respective regions of the state (Pridham, 1984, p. 263). Effective usage of propaganda is therefore vital in suppressing dissent and preventing fracturing among those who call themselves "Houthis," who are already characterized by a lack of unity (Carter and Carter, 2021, p. 920). Houthi propaganda therefore seeks to define "Yemen" as it pertains to unifying external forces, choosing to circumvent the internal schisms that complicate the process of unification.

International Considerations

It has become clear in recent years that Iran lends support to the Houthis in terms of weapons, logistics support, and training (Sharp, 2021, p. 10). However, it is generally agreed among scholars that Iran's participation in Houthi politics is relatively low, and significantly less than the support lent to Hadi forces by Saudi Arabia (Transfeld, 2017) (Eleftheriadou, 2021, p. 6). Little is known, however, of the degree to which Iran supports the Houthis in the creation and dissemination of political propaganda. Alternative to previous discussion of Houthi content, the externalized nature of Houthi messaging suggests that Iran exercises some control over the content of their propaganda. Additionally, Hezbollah's proximity and support of Houthi media production adds an additional dimension of support from Iran, whose rhetorical fingerprints are evident in Houthi publications. Hezbollah's construction of identity as a champion of political Islam is similar to that of the Houthis, indicating a level of understanding between each group's presentation of political and religious identity (Alagha, 2011, p. 123). The Houthi slogan itself was borrowed from Iran's revolutionary motto, becoming a statement of Yemeni sovereignty despite its outward-facing language.

For Iran, funding the Houthi movement is consistent with their operations with Hezbollah and other militant groups in the region, where creating antagonism between varying groups can "badger, distract, and waste the resources of its enemies" (Johnston et. al., 2020, p. 64). However, prevailing literature still suggests that Iran has little use for direct involvement in the propaganda construction of the Houthi movement. Consolidating Shi'a influence in Yemen is only productive for Iran insofar as they can control the conversation regarding Yemeni goals, whose stated political goals rely much more heavily on sovereignty than a commitment to warfare against Saudi Arabia. This means that the Houthis are a useful tool for Iran only if they are actively in direct conflict with Saudi Arabia, an outcome that would likely not persist if they were able to gain complete control of the country. The degree to which Iran– and to a lesser extent, Hezbollah–exercise control over Houthi media is ultimately up for interpretation. Further research could find additional links between individuals and practices that are shared between the three related entities, but such an insight into Iranian grand strategy in the Middle East is unlikely to be found through conventional sources.

Conclusion

Describing the ongoing conflict in Yemen as strictly a "proxy war" is not an accurate assessment of the war's minutiae. The presence and support of Iran in the Houthi movement cannot be characterized as a relationship of control, but rather a mutually beneficial partnership that allows both parties to engage in a proxy of their own. Iran can act as a disruptive force to their regional rival in Saudi Arabia by arming and advising a small portion of the Houthi cause, creating instability in the Gulf and undermining Saudi state building processes. In turn, the Houthis readily accept Iranian assistance in order to fight a symbolic war against the United States and Israel, which ultimately has little to do with their chosen enemies and everything to do

with creating unity among the Yemeni populace. By capitalizing on existing attitudes shared between the vast majority of the Yemeni population, the Houthi nation building enterprise is able to exceed the limits of tribalism and kinship within the political sphere, building a national identity through established methods of political persuasion. The beliefs behind Houthi propaganda are ultimately less important than their consequences, which have allowed the movement to maintain an uneasy hold on a massive portion of the warring country. While victory in a strict sense is still beyond the horizon for the Houthis, their ability to maintain control of an area so consistently in opposition to broader political structures is a testament to the success of their media and military infrastructure. Ansar Allah's digital communication network is both sophisticated and effective, relying on knowledge of existing cultural truths within the population to realign the Yemeni nation story towards their political ends. In the future, any competing faction within or outside the country will face a significant challenge in uprooting a movement that has managed to transcend its religious and tribal roots.

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Review of *The Consequences of Humiliation: Anger and Status in World Politics* by Joslyn Barnhart

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Joslyn Barnhart's *The Consequences of Humiliation: Anger and Status in World Politics,* published in 2020, is a thorough, well-written look at what causes humiliation on the international stage, how humiliated states respond, and the factors and conditions that lead to various responses. Barnhart defines humiliation as "the emotional response to the perceived undeserved decline of one's status in the eyes of others" (p. 83). She argues that there are two categories of national humiliation; either the state in question falls short of the performance it considers appropriate for its status, or other states fail to grant the level of recognition the state believes it deserves. Relevant factors that influence responses include the time elapsed since the humiliation occurred, the power differential between the humiliated state and its humiliator, and the "material and political losses" endured (p. 212). Barnhart raises several research questions, including how humiliation contributes to aggression, what factors influence who the aggression is directed towards, and whether individuals' views on national humiliation affect states' responses. Barnhart's hypotheses include, among others, that recently humiliated states are more likely than states not recently humiliated to be aggressive in the aftermath of the event, and that states that have lost resources due to a humiliating event and since recovered have a higher chance of performing "assertive status-seeking acts" than states who have not recovered and than states that have not endured such an event (pp. 211-217).

The quality of Barnhart's research and writing is high, but the book contains a nontrivial number of grammatical errors that significantly impact the persuasiveness and perceived credibility of the research. Barnhart covers significant ground in a relatively short piece of

writing, which renders the research somewhat hard to follow and the components of the topic somewhat difficult to track. The text is largely well structured; the introduction provides a general overview of the integral concepts that will be discussed, the early chapters float theories that will be covered in detail followed by chapters discussing Barnhart's hypotheses, and the study is wrapped up with a discussion of historical examples supporting the research. While this final section of chapters is certainly beneficial to the reader as it provides concrete examples (the colonization of Africa by France and Germany in the late 1800s and the Cold War between the United States and former Soviet Union), the format Barnhart chose for the latter half of the text is somewhat jarring; moving from research conclusions directly to historical context rather than providing examples along the way arguably impedes the flow of the text unnecessarily.

Nevertheless, Barnhart's discussion of the various factors influencing humiliation is thorough and clear. The evidence presented is convincing, and though there are some holes in her arguments, Barnhart calls attention to these by pointing them out explicitly rather than glossing them over. This research provides a new perspective for those studying international relations by raising important questions regarding aspects of conflict on the international stage that have been previously remarkably under-studied. Further research will undoubtedly bolster the conclusions Barnhart draws throughout her study. Future researchers may benefit from delving further into smaller areas within the scope of Barnhart's research, such as how individual humiliation affects national humiliation, rather than taking on such a broad subject in its entirety. Still, Barnhart's work represents significant steps forward in the study of conflict on the international stage and is a fantastic starting point on which future research can be based.