Comparison of Online Maneuvers by Authentic and Inauthentic Local News Organizations*

Christine Sowa Lepird $^{1[0000-0002-9350-5627]}$ and Dr. Kathleen M. $\text{Carlev}^{1[0000-0002-6356-0238]}$

Carnegie Mellon University, Pittsburgh PA 15213, USA csowa@andrew.cmu.com http://www.casos.cs.cmu.edu

Abstract. This paper utilizes the BEND framework to analyze the maneuvers of Facebook Pages sharing pink slime sites to better understand how these organizations are operating in comparison to organizations that own multiple authentic local news websites. It finds that pink slime sites utilized more positive narrative maneuvers than those of local news sharers. Both news types utilized distraction but to fulfill separate goals - pink slime used it against local and state elections while authentic local news focused on national elections and figureheads. Furthermore, local news employed the neutralize tactic in order to reduce positive sentiment around national politicians.

Keywords: Pink slime · local news · BEND .

1 Introduction

Leading up to the 2020 U.S. Presidential Election, a number of seemingly hyper-local websites emerged; however, these sites had no reporters in the local community. Additionally, many of these sites were owned by single organizations who were interested in spreading the same (often national) messaging to local communities, exploiting their trust in local reporting. While Americans trust in national media has declined in the past 6 years, Americans of all political leanings have retained a high level of trust in local news reporting [7]. While 20% of local newspapers have closed their doors in recent years [10], the owners of these inauthentic local sites are filling the space with information that is not original nor human-produced. The journalist Ryan Smith coined the phrase "Pink Slime" to describe these sites that are filled with low-quality reporting [11].

Over 1,000 of these pink slime sites are publishing "news" to local communities; the articles are then shared to social media platforms like Facebook. This

^{*} This work was supported in part by the Office of Naval Research (ONR) Award N00014182106, the Knight Foundation, the Center for Computational Analysis of Social and Organizational Systems (CASOS), and the Center for Informed Democracy and Social-cybersecurity (IDeaS). The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of the ONR or the U.S. government.

C. Lepird et al.

2

paper analyzes the methods and maneuvers the organizations controlling the pink slime sites are employing to influence local communities whose votes are important to national elections.

1.1 Background and Related Work

Priyanjana Bengani, a senior research fellow at Columbia Journalism School's Tow Center for Digital Journalism published the most prominent and comprehensive analysis of the origins of the pink slime sites and how they are controlled by a few organizations [3]. The largest of these organizations, Media Metric, controls over 900 sites targeting local areas in the country.

Bengani later collaborated with researchers at Stanford to see how these sites were consumed during an election. They found that leading up to the 2020 U.S. Presidential Election 3.7% of Americans were exposed to news from these sites [9], with Facebook being one of the primary referrers to the sites. While this figure is lower than the 39.1% and 36.4% who were exposed to misinformation and local news sites, respectively, during the same time period, the number of pink slime sites and organizations have grown. While 22% of the pink slime articles at the time had to do with local gas prices, very few individuals consumed these sites; rather, the most consumed pink slime news articles pertained to politics, despite there being very few articles on the topic [9]. Furthermore, they found that while supporters of Donald Trump were significantly more likely to visit misinformation sites, Biden supporters were significantly more likely to visit pink slime sites.

2 Data and Methods

2.1 Data Collection

To find the news site domains we were interested in studying, the researchers consolidated a list of known pink slime sites [8] as well as the list of authentic local news sites owned by companies [2]. Using the CrowdTangle API [1], for each of the domains on the list, the 1,000 most recent instances of a link to the domain being shared on a Facebook Page was collected. In total 335,609 posts were collected from 12 pink slime organizations and 8 local news organizations. Of the 12 pink slime organizations, there were 1,238 domains linked to from 285,640 posts. Of the 8 local news organizations, there were 50 domains linked to by 49.969 posts.

2.2 Linguistic Cues

Once the Facebook post data was collected, the text of the posts was analyzed for specific linguistic cues using the Netmapper software [6]. For each segment of text in a post, the software appended metadata about the post's sentiment based on the number of terms specific to certain emotions, use of pronouns, and icons present. The cues extracted from the post help to classify which BEND maneuvers are taking place.

2.3 Organization Risk Analyzer - Pro Software

The Organization Risk Analyzer (ORA)-PRO software [6] was used to visualize and analyze the dynamic meta-networks present in this dataset. In addition, we ran the BEND and Community Assessment report on the Facebook posts and their linguistic cues.

2.4 The BEND Framework

The CASOS Center at Carnegie Mellon University has produced substantial research in the field of categorizing online influence operations; they have published a set of 16 defined maneuvers utilized in influence operations, referred to as the BEND framework [5]. The 16 categories can be broken into narrative (based on the text messaging and the way in which it is presented) and network (based on the way in which the messaging is spread and communities are formed around the key actors) maneuvers. This framework allows for a more defined, measured, and analytical way to compare ways in which influence tactics are employed in information operations.

While BEND has largely been utilized for analyzing behavior on Twitter (such as narratives around vaccines [4] and elections), this research will implement the methodology to categorize the maneuvers of sharers of pink slime and local news through Facebook.

When BEND is applied to Twitter data, the networks that the maneuvers were built on were for User x User by shared hashtag, retweet, or reply. Due to the way in which Meta shares Facebook data via CrowdTangle, information about direct relationships between Facebook Pages was unavailable. Instead, the network that was used for this study (Facebook Page x Domain x Facebook Page) is more limited because it does not imply a direct interaction between the two users.

3 Analysis and Results

3.1 Data Analysis

After performing topic modeling on the titles of the shared links, the largest common topic found pertained to elections. Since research shows that the most consumed pink slime sites are those pertaining to politics [9] and in order to analyze how these two groups discussed the same topic, the posts were filtered down to ones mentioning elections, judicial selections, and voting. This left 385 posts linking to 47 local news domains and 465 posts linking to 76 different pink slime domains. The local news posts ranged from November 17, 2022 to January 12, 2022. The pink slime posts ranged from January 27, 2020 to May 12, 2023. The posts linking to local news sites averaged a higher number of likes (27.2) than that of pink slime (21.7).

Table 1 illustrates the percentage of Facebook posts that contain each of the BEND Maneuvers (a note that a post can contain multiple BEND Maneuvers).

4 C. Lepird et al.

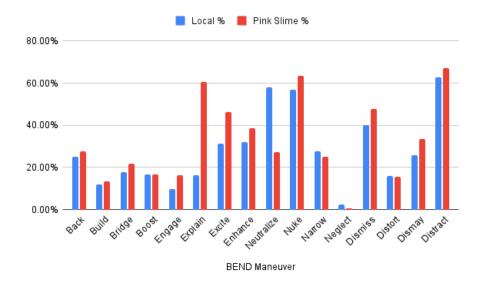


Fig. 1. Percentage of Posts Using BEND Maneuvers by News Type

Most interestingly, many more pink slime posts utilize the Explain, Excite, Nuke, and Dismiss maneuvers than local news. Local news posts, however, were more heavily involved in the Neutralize maneuver. Both groups had over half of their messages falling in the Distract category.

For those sharing pink slime sites, the Explain maneuver can be seen in titles like "Ninety-three percent of Arizona Catholics say religion should not play a factor in judicial selection" and "Townsend: Audit of secretary of state's use of private funds in elections necessary 'to feel good about yes vote' on budget." The text of these posts convey statistics or quotes that provide insight into the topic. Meanwhile the messaging around Excite can be seen in posts like "Allen: 'We must restore our trust in the election process'" and "Coyne: 'We are thrilled with this year's local election results and are very proud of whatever impact we had in producing them" Much like with the Explain posts, the titles for Excite rely heavily on quotes. The narrative is one meant to bring positive emotion towards the audience. More than half of the messages fall into the Explain and Excite categories, keeping a majority of the messaging positive in sentiment. The remainder of maneuvers analyzed fall into the categorization of negative in their influence.

Examples of pink slime sites being shared with a Nuke message include "Arizona legislators protest election results, request decertification" and "Kansas legislature overrides Kelly's veto of election integrity bill." When the Dismiss maneuver is analyzed for the pink slime sites, examples include "Harbin: Georgia is experiencing 'more election irregularities because our Secretary of State could not get the job done" and "Nagel: 'Democrats in Springfield are offering

temporary election year gimmicks that attempt to trick voters instead of truly help them", the later of which links to an article owned by the LGIS pink slime organization targeting a small city in Illinois. By referring to the state's capitol (Springfield), it gives the appearance of local news coverage; however, the same author also wrote articles for a different pink slime organization, Media Metric, targeting Grand Haven, Michigan. These Dismiss campaigns are aimed at minimizing the efforts of individuals or groups.

When the maneuvers for local news are analyzed, Neutralize (the largest increase over pink slime) is seen in messages like "Trump: People who think 2020 election was fair are 'very stupid'", "Donald Trump's response to criminal charges revives election lies" and "School elections are now political: NYC Community and Education Council voting is getting too nasty." Broadly, these messages are designed to reduce positive messaging on a topic or individual.

Both of the groups utilized the Distract maneuver heavily, a narrative maneuver that attempts to make other topics seem more important through misdirection. For pink slime this was seen in messaging like "Rats and needles hot election issue in Rogers Park Aldermanic race" and "Kansas challenger for secretary of state: Opponent's refusal to sign election integrity pledge 'should be a red flag for any Republican voter'". In local news, Distract looks like "Biden launches 2024 campaign; jury selection to start in Trump rape lawsuit; N. Dakota's near total abortion ban; and more morning headlines" (linking to an Idaho-based local news site) and "Did they vote twice in the 2022 election? RI investigating 5 cases of potential double voting."

4 Discussion

For both sites controlled by pink slime organizations and sites controlled by organizations owning multiple local news domains, the top-ranking BEND maneuver utilized was Distract - a negative narrative maneuver. However, pink slime sites used distraction in messaging pertaining to local and state elections while the local news sites had a greater focus on national elections and events in other regions. Surprisingly, mentions of former President Trump were see in 3.2% of posts linking to pink slime sites, but he appeared in 8.1% of local news headlines; current President Biden was mentioned in only 1.5% of pink slime sites but in 8.6% of pink slime text.

Interestingly, sites controlled by pink slime organizations were shared on Facebook with more positive messaging than posts from local news organizations. Explaining and excite were utilized to highlight facts and nuance from both hyper-local and national political topics. When they used negative messaging through Dismiss, not-local reporters highlighted reasons of local concern to dismiss efforts by political parties.

Facebook Pages sharing local news sites heavily utilized the Neutralize maneuver to dismiss positive stories about national politicians and local organizations.

5 Conclusions

This research illustrated that the BEND Framework can be applied to data from the Facebook platform. Furthermore, it found similarities and differences in the way in which Facebook Pages utilized the BEND maneuvers to share pink slime sites and local news sites. While both pink slime and local news most heavily deployed the Distract maneuver, they did so with separate objectives. Pink slime sites also had high incidence of Explain, Excite, and Dismiss while local news relied heavily on Neutralize (largely to reduce positive messaging around national politicians). While the pink slime sites highlighted the local cities and states that the sites target in their messaging, the sites owned by authentic local news organizations had a greater element of national politics and focus on other states.

References

- 1. CrowdTangle, https://www.crowdtangle.com/
- Who owns the media?, https://www.freepress.net/issues/media-control/media-consolidation/who-owns-media
- 3. Bengani. P.: Hundreds of 'pink slime' local news outlets and distributing algorithmic stories conservative talking points. https://www.cjr.org/tow_center_reports/hundreds-of-pink-slime-local-newsoutlets-are-distributing-algorithmic-stories-conservative-talking-points.php/, publication Title: Columbia Journalism Review
- 4. Blane, J.T., Bellutta, D., Carley, K.M.: Social-cyber maneuvers during the COVID-19 vaccine initial rollout: Content analysis of tweets 24(3), e34040. https://doi.org/10.2196/34040, https://www.jmir.org/2022/3/e34040, company: Journal of Medical Internet Research Distributor: Journal of Medical Internet Research Label: Journal of Medical Internet Research Publisher: JMIR Publications Inc., Toronto, Canada
- 5. Carley, K.: BEND: a framework for social cybersecurity. 6(2), 22–27
- 6. Carley, L., Reminga, J., Carley, K.: ORA & NetMapper, 11th International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation;
- GOTTFRIED, J., LIEDKE, J.: Partisan divides in media trust widen, driven by a decline among republicans https://www.pewresearch.org/facttank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-declineamong-republicans/
- 8. JOURNALISM, T.C.F.D.: Domains as of august 3, 2020, https://datawrapper.dwcdn.net/TqILa/2/
- 9. Moore, R., Dahlke, R., Bengani, P., Hancock, J.: The consumption of pink slime journalism: Who, what, when, where, and why? Publisher: OSF Preprints
- 10. Takenaga, L.: More than 1 in 5 u.s. papers has closed this is the result. https://www.nytimes.com/2019/12/21/reader-center/local-news-deserts.html
- 11. Tarkov, A.: Journatic worker takes 'this american life' inside outsourced journalism https://www.poynter.org/reporting-editing/2012/journatic-staffer-takes-this-american-life-inside-outsourced-journalism/