Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Abstract

Sinclair Broadcast Group owns over 170 US television stations. Using agenda setting and agenda cutting as a theoretical lens, this study quantifies the effect of Sinclair ownership by analyzing over 340,000 news stories from six station websites over four years through time series modeling. Sinclair ownership negatively changes total news stories output for all six outlets. The percentage of news that is local continues to decline at all but one station. This decline predates Sinclair but continues to date. Stations appear to rely on syndicated (a.k.a., reposted) coverage more than ever, but this again predates Sinclair. An agenda cutting effect was observed; Sinclair cut party politics coverage at all six stations.

Keywords: Media Ownership, Sinclair Broadcasting, Issue Agendas, Time Series Analysis

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

The Effect of Corporate Media Ownership on Depth of Local Coverage and Issue Agendas: A Computational Case Study of Six Sinclair TV Station Websites

The issue of news media ownership, in particular the consolidation of American media into a handful of large corporations, has been one of interest to scholars, government regulators and media critics for decades. In 2017 when Sinclair Broadcasting Group announced plans to purchase the 42 television stations owned by the Tribune Media Company, many expressed concerns (Flint, 2017; Gold, 2017; Kreps, 2017; Stelter, 2018a; Stelter, 2018b*)*. The proposed merger would have made Sinclair, which already owned 173 stations in the United States, the largest owner of broadcast stations in the nation with the ability to reach almost 75% of all US households (Flint, 2017). On the surface, this merger appeared to be another in a series of media mergers that have resulted in most US broadcast stations being owned by a handful of large companies (Vinton, 2016). Large mergers often draw intense scrutiny, but Sinclair brought with it a unique set of considerations and concerns.

Since the 1990s critics have accused Sinclair of acting differently from other television station ownership companies in two specific ways. First, critics claim that Sinclair stripped its news departments of resources thus making local news coverage more difficult. The stations are then forced to devote more time to stories produced by non-local staff despite local coverage being a mandate of federal licensure (Allied Progress, 2017; Martin & McCrain, 2018). Second, Sinclair has been accused of imposing a stronger-than-normal conservative editorial stance on its stations (Gold, 2017). Critics have pointed out that such a disposition would violate two of the normative traditions of journalism in the United States: political neutrality and independence from ownership influence (Society of Professional Journalists, 2014).

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Scrutiny of Sinclair's political leanings has only increased. From 2017 to 2019, Sinclair required all its stations to run a weekly commentary segment called "Bottom Line with Boris" presented by Boris Epshteyn. Epshteyn was a senior advisor to Donald Trump's 2016 presidential campaign and the assistant communications director for the administration for several months before working for Sinclair (Haberman, 2017). Critics have accused Epshteyn of presenting topics in a way that is friendly to the Trump administration. They have also noted that commentary segments are not adequately labeled as such and many viewers may think they are standard news pieces (Farhi, 2016; Gold, 2017).

The criticism of Sinclair reached a fever pitch in March of 2018 when it required all of its stations to produce and air a video featuring their local anchors reading a script that criticized "national media outlets" for publishing "fake stories" and pushing their own "personal bias and agenda" (Stelter, 2018a). The promos mimicked President Trump's use of the term "fake news" to discredit reporting that is critical of the administration (Farhi, 2018; Stelter, 2018b). The spots sparked widespread condemnation from journalistic organizations and schools in the United States (Seaman, 2018; Zurawick, 2018). The homogeneity of the message was made even more apparent by a video posted to deadspin.com. The video layered dozens of the Sinclair anchor promos atop each other, demonstrating the degree of control the broadcast group could exert over its stations (Burke, 2018).

The criticism leveled at Sinclair begs further empirical investigation. As newspapers continue to struggle, local television stations are often one of the only remaining sources of local news available in some areas (Abernathy, 2018). Facebook, looking to promote more local news on its news feed algorithm, recently claimed that 40% of Americans are unable to use the social

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

media site's new local news project because they live in places where there were not enough local news stories to support it (Bauder, 2019).

In light of these concerns, accusations of political bias against Sinclair are particularly worth studying because, given the scarcity of coverage, there are likely few competing viewpoints in local news coverage. Moreover, unlike major TV outlets like Fox News, viewers often do not know who owns the local news organizations they watch. For unobtrusive issues such as politics, or government, audiences are generally dependent on news media for their agendas (McCombs, 2018). However, if Sinclair is tilting its coverage, audiences may be unaware.

With overall viewership down, television news organizations are looking more to the internet as a vital method of reaching audiences (Lysak, Cremedas, & Wolf, 2012*)*. Television station websites are a source of local and national news stories that are often shared on social media platforms like Facebook, giving them a wider audience reach and making them important to study. The present study utilized a time series analyses of Sinclair-produced online news content to reveal general trends in local coverage and issue agendas by leveraging the Global Database of Events, Language and Tone (GDELT; Leetaru, 2015). Through tracking the prevalence of coverage (both local and non-local), the number of stories reposted across multiple Sinclair station websites, and the issues mentioned in that coverage, the following study assesses whether Sinclair ownership generated significant change in the news content of six local Sinclair news stations over the course of almost six years. The findings reveal a deeper understanding of corporate ownership on local news content.

Literature Review

Sinclair Media

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

The origins of Sinclair Broadcasting Group date back to the late 1950s when Julian Sinclair Smith and a group of other shareholders founded a broadcasting trade school in Baltimore, Maryland. The group, then known as the Chesapeake Television Corporation, launched its first television station, WBFF, in 1971. By 1990, David D. Smith, the son of Julian Sinclair Smith, and his three brothers took control of the company and began expanding its reach. Instead of building new transmitters, the company, now called Sinclair Broadcast Group, began buying other station ownership groups and taking control of hundreds of stations in mostly small and medium-sized markets. Sinclair took advantage of loosened ownership regulations as a result of the Telecommunications Act of 1996 to continue its rapid growth (Rathbun, 1999).

Agenda Setting and Sinclair

Large media corporations like Sinclair have the potential to dictate the coverage of the news media organizations they own. One way they can dictate coverage is through directing their newsrooms to cover, or not cover, specific issues. Ever since McCombs and Shaw introduced the agenda-setting theory in the context of news media, research has shown that television networks have significant effects on their audiences (McCombs, 2018). When news organizations cover certain issues more often, the public thinks those issues are more important. Many *external* actors have been found to have an influence on newsrooms and their issue agendas, from partisan media to "fake news" websites (Vargo, 2018).

Far less work has focused on *internal*, organizational forces that alter a newsroom media agenda. In their hierarchy of influences model, Shoemaker and Reese (2014) note that several factors influence media content, including organizational factors. Cultural norms, social institutions, media routines and the journalists all play a significant part in the final media agenda for a newsroom. However, if a media owner is willing to ignore cultural norms — specifically

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

the neutrality and independence of journalists — then their influence from the organizational

level could potentially impact the routines and individual behaviors of the journalists that work

for them.

One tangible effect that news media organization ownership can have on news agendas is

agenda cutting. According to Colistra (2012, p. 100), "Agenda cutting may occur in three ways:

(1) by placing an item low on the news agenda (burying it), (2) by removing it from the agenda

once it is there, or (3) by completely ignoring it by never placing it on the agenda in the first

place." The result of agenda cutting always results in less news coverage from a news media

organization. In a national survey of U.S. journalists, Colistra (2012) found that organizational

forces can cause the agenda cutting effect. She operationalized organizational forces as including

perceived staff sizing issues due to corporate ownership, and perceived pressures from

executives and ownership. In her newer work via a survey of television news reporters, Colistra

(2018) finds that owners and top-level executives have the strongest influence on coverage

decisions, based on reporter perceptions. Most often, management instructs reporters to cut

articles, based on the issue mentioned in the coverage. The agenda cutting effect of corporate

ownership does not appear to consistently cut specific issues. Instead, the inherit political and

economic interests of corporate ownership appear to drive which issues are cut from a

television's news agenda.

Sinclair's Influence on News Coverage

As noted earlier, Sinclair has a history of imposing a conservative editorial stance on the

stations it owns. In 2001, Sinclair required stations to air editorials in support of President

George W. Bush's response to the September 11th attacks (Folkenflick, 2004). A year later,

Sinclair then formed its own corporate news division and produced "The Point," an opinion

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

segment written and presented by Sinclair VP Mark Hyman. The show often took a conservative

stance on issues including abortion, terrorism, and religion. Stations were required to run these

segments and often could not label the segment as an editorial or commentary (Jensen, 2004).

Beyond promoting specific agendas, Sinclair has also been known to cut issues from its

coverage. In 2004, Sinclair would not allow its seven ABC-affiliated stations to air a *Nightline*

segment in which Ted Koppel listed the names of service members killed during the invasion of

Iraq by the United States (Angwin, 2004). Again in 2004, Sinclair planned to air a documentary

critical of Democratic presidential candidate John Kerry and his anti-war activism during

Vietnam two weeks before the election. The release was cancelled only after advertisers began

pulling their sponsorship (Benner, 2004).

During the 2016 presidential election, the Trump campaign reached a deal with Sinclair,

granting them increased access to the candidate in exchange for an agreement to air those

interviews with Trump without any commentary. A *Washington Post* investigation of internal

Sinclair documents and reporting found Sinclair stations "gave a disproportionate amount of

neutral or favorable coverage to Trump during the campaign while often casting Clinton in an

unfavorable light" (Farhi, 2016, para. 9). After the 2016 election, Sinclair hired Epshteyn as

senior political analyst and produced the "media bias" promos mentioned earlier (Farhi, 2018;

Flint, 2017; Gold, 2017; Stelter, 2018a; Stelter, 2018b).

Beyond Sinclair, research has compared the news content of publicly-traded and

privately-held news organizations. Overall, news organizations owned by publicly-traded

corporations produced fewer "substantive" political stories and produced more negative election

coverage (Dunaway, 2013; Dunaway & Lawrence, 2015; Scott, Gobetz, & Chanslor, 2008).

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Other research has found that privately-owned news companies cover certain topics, including

protests, in a less substantial, issue-focused manner (Wouters, 2015).

Agenda Building vs. Agenda Cutting

When talking about the influence that corporations have, agenda-setting theory tends to

use the terminology "agenda building" (McCombs, 2018). Agenda building has been thought of

as an effect that the public relations efforts of corporations have on the media. In a world of

shrinking resources, journalists rely more on press releases and public relations practitioners for

content and data (Kim, Kiousis, & Xiang, 2015). This reliance has created an opportunity for

public relations firms to *build* their agenda in the news by creating public relations tactics that

generate news coverage, a practice commonly referred to as *media relations* in the corporate

world (Curtin, 1999).

It stands to reason that the news agendas of stations acquired by Sinclair may

significantly change after being acquired. We cannot be sure of how the effect might manifest

itself, however. On one hand, Sinclair has been shown to create more political news by

producing specific political coverage to support conservative candidates. Sinclair might build the

agendas of specific political issues to further convey their political viewpoint to their audiences.

However, we are presented with conflicting information as to how we might suspect

Sinclair news agendas to change. In at least one example, Sinclair cut political news coverage.

That, taken with the finding that large media corporations tend to produce less politically-

charged coverage, we could also reasonably expect political issues to be covered less.

To this end, we set out to research the extent to which Sinclair ownership predicts

significant change in news media agendas for political issues in both positive and negative ways.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

  RQ1: Does Sinclair Broadcast Group significantly change the political issue agendas of

the television news organizations it acquires?

Sinclair Cutting Local and Non-local Coverage

  Critical work has argued that large media conglomerates ultimately place financial

success over the production of quality journalism for two main reasons (Dunaway, 2008;

Dunaway, 2013; Napoli, 1997). The first is that corporate management, who often do not live in

the communities their news organizations serve, are likely to place profit ahead of serving distant

populations (McChesney, 2015). Large corporate media companies are also ultimately run by

their shareholders. These shareholders invest in companies because they think they will succeed

financially; they simply are indifferent to whether that company produces news that is important

to their communities (Hamilton, 2004). Congruent with this rationale, research has shown that

corporately owned media outlets do produce less local news content (Scott et al., 2008).

  However, some argue that because producing local news content is expensive, large

media conglomerates have more means to produce more local news (Smith, 2009). One recent

study of local news stations found that publicly-traded companies produced more investigative

news content (Abdenour, 2018). Max Weber's bureaucracy theory of organizations argues that

the larger an organization becomes, the more it must decentralize the decision-making process

(Mansfield, 1973). Thus, middle and lower-level managers may have the freedom to make more

editorial decisions in larger media organizations. Others note that it would be harder for

executives at larger news organizations to know what is happening at the local level, thus giving

middle and lower-level managers more autonomy (Abdenour, 2018; Napoli, 1997).

  Given the conflicting evidence surrounding corporate media ownership and how it affects

the amount of news coverage generated, we ask the following research questions:

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

RQ2: Does being owned by Sinclair Broadcast Group have an effect on the *total amount* of news stories posted to a television news organizations' website?

RQ3: Does being owned by Sinclair Broadcast Group have an effect on the *percentage of local news* stories posted to a television news organizations' website?

Sinclair and News Coverage Homogeneity

For decades, many scholars have argued that less diversity in news media ownership results in less diversity in ideas and content at the story level (Davie & Lee, 1993; Lacy, 1991). Given the advents of the digital age, and the ability of newsrooms owned by the same conglomerate to easily share resources, it has become common practice for newsrooms to simply repost (a.k.a., rebroadcast) news articles from its parent company online. The research cited above has found a relationship between media ownership and homogeneity among story content. Therefore, we ask the following research question:

RQ4: Does Sinclair Broadcast Group ownership significantly increase the percentage of

reposted (rebroadcasted) news stories a station posts?

Method

Selection of Television News Station Websites

Local television stations have had an online presence for decades (e.g., Lysak et al., 2012). Despite research on ownership in television news, there are at current no studies that focus solely on ownership and the effect it has on the online news content produced by local television stations. To study the effect of ownership, data had to span several years, both before and after Sinclair acquisition. The GDELT archives news stories in its Global Knowledge Graph (GKG) collection (Leetaru, 2015) that dates back to April 1st, 2013 (Leetaru & Schrodt, 2013). Inside of those events are news article hyperlinks from a broad array of sources. The tool

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

archives millions of news articles per month using technology similar to Google News. It is free

for academic researchers to download and analyze (https://www.gdeltproject.org/).

Sinclair owns 173 individual television stations in 63 different markets. For the purposes

of this analysis, researchers were interested in stations acquired by Sinclair in the last few years.

In order to build robust, reliable measures of seasonal activity using time series analysis, we

required that each station in this analysis have at least three years of news data in GDELT prior

to the Sinclair acquisition date and at least one year following acquisition. This time frame was

chosen so 1) mid-term and national elections did not excessively skew historical data and 2) so

that ample data points could be used for time series modeling.[1] Given these parameters, six

Sinclair television stations had the necessary data. These include five stations that were acquired

by Sinclair when it bought Bonten Media Group in September 2017. The other station (KHGI-

TV) was acquired by Sinclair in May 2016 when its previous owner, Pappas Telecasting

Company, went bankrupt. For a review of the websites and time frames studied, see Table 1. To

generate general news article counts for these sites, the number of unique URLs generated from

the each domain (e.g., http://nebraska.tv) was counted, by day. In total, 346,586 individual posts

were analyzed.

[Insert Table 1 Here]

Identifying Local Coverage

GDELT uses natural language processing to extract mentions of cities, counties and

states in a news story. It then geo-resolves these areas into a consistent location format. For this

study, we looked at locations that were extracted from text. If a location was mentioned by a

Sinclair station more than 100 times, two coders manually inspected the location and its relation

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[1] After several attempts to build time series models, the authors noted that a four-year sample frame was needed to build models with reasonably accurate fit statistics.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

to the station ($N = 1,610$). These location tags ranged from the very general (e.g., United States) to the very specific (e.g., Brown County Jail, Texas). A location was considered "local" if it was geographically located within the news station's designated market area (The Nielsen Company, 2018). Locations outside the market, or so general that it may cover news outside the market, were coded "non-local." Of the 1,610 judgements, the coders disagreed just once. This disagreement was due to human error and was resolved.

Using the master list of local city locations for each Sinclair outlet, each story from each station was then tagged as local or non-local.[2] These data were then counted and summed by week. Then, a weekly "local percentage" was calculated for each outlet, for each week of the analysis. This was calculated by dividing the total number of local news stories by the total number of news stories (which was calculated as the total number of local stories plus the total number of non-local stories).

Identifying Reposted Articles

This study also sought to identify the number of articles that a news station published that was also published by other Sinclair outlets. Sinclair's news websites all appear to use similar publishing technology. One researcher manually inspected 200 articles from the 6 Sinclair stations and found that in all cases, URLs from the stations used permalinks. A permalink is an automatically generated URL that includes the title of the article (e.g., https://nebraska.tv/news/coronavirus/first-critical-coronavirus-patient-at-mary-lanning-released-after-22-days). Next, the 173 known Sinclair stations were visited and their website domains were recorded. GDELT GKG was then searched to assess whether it contained said outlets. Of the 173, 100 (57.8%) existed in the database. For each GDELT GKG news event, if a URL

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[2] This computational analysis was preformed using Python and its Pandas tabular data format. See: https://pandas.python.org/

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

originating from one of the six stations was found, the permalink was extracted. If an exact

match of that permalink was also found in another domain, that article was considered

rebroadcasted. Two hundred instances of matches were manually inspected by one human coder.

In all cases, if a permalink was identical, the article was indeed exactly the same, and also

published by a Sinclair outlet. Taken together, this suggests that the measure was highly precise,

but perhaps not completely exhaustive. However, the researchers noticed that when a story was

reposted by one Sinclair outlet, it was reposted by many Sinclair outlets the majority of the time.

It was then tagged as local or non-local.[3] These data were then counted and summed by week.

Finally, a weekly "reposted percentage" was calculated for each outlet, for each week of the

analysis. This was calculated by dividing the total number of reposted news stories by the total

number of news stories (which was calculated as the total number of reposted stories plus the

total number of non-reposted stories).

Identifying Issues in Articles

GDELT also annotates news events for "themes" (Leetaru & Schrodt, 2013). These

themes revolve around specific types of news stories. For instance, themes cover broad topics

from "unemployment" to very specific types of stories, including the drug trade and police

brutality. Vargo and Guo (2017) conducted a series of manual content analyses and compiled

these themes into a list reflective of broad issues. Each issue contains a list of corresponding

themes that were found to be externally valid through manual content analysis checks. These

issues are: *taxes, unemployment, domestic economy, trade, terrorism, military, international*

relations, immigration and refugees, healthcare, gun control, drugs, police and law

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[3] This computational analysis was preformed using Python and its Pandas tabular data format. See:
https://pandas.python.org/

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

enforcement, racism, civil liberties, the environment, party politics, election fraud, education,

and the media and internet.

The daily agenda for each news station was calculated by looking at the GDELT themes

tagged for each news story and then aggregating these tags to the broader matching issue. The

result was a time series for each issue, for each news station, by week. Weekly "issue proportion

scores" were created for each station, by taking the number of articles that mentioned a particular

issue, and dividing it by the total number of articles published by that station, for that week.

Time Series Analysis using Facebook's Prophet

The hypotheses and research questions put forward by this paper are all rooted in

statistically significant change across time. For the measures mentioned in the preceding

sections, we ask whether statistically significant change was observed starting at the acquisition

date by Sinclair. We utilized Facebook Prophet, a semi-supervised modular regression model for

time series analysis (Taylor & Letham, 2017). The software can be implemented as a package in

Python or R.[4] We realize the autoregressive integrated moving average (ARIMA) model is more

commonly used in academic settings. However, Facebook Prophet was chosen for several

reasons. It works at "scale," meaning multiple models can be built in a reasonable amount of

time using automation. ARIMA models must be manually configured, and given the number of

models, this would take hundreds of hours. Prophet handles seasonality in a much more intuitive

way than an ARIMA approach, by deliberately modeling for yearly seasonality. We feel this is

especially important in modeling news patterns and cycles.[5] Finally, Prophet allows for

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[4] For a review of Facebook Prophet and the underlying statistical approach used, please see Taylor and Letham, (2017). Facebook Prophet models seasonality intuitively and works natively with R and Python programming languages, to get started: https://facebook.github.io/prophet/

[5] For instance, Prophet can easily learn that an issue, such as 'economy' will receive more coverage following each business quarter. While an ARIMA model might handle this with an AR(90) component, such an ARIMA model would take days to generate and would likely include dozens of insignificant AR lags, thereby overfitting the data.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

changepoint modeling. Changepoint modeling is required because it is a statistical test of

significant change in general trends at a specific date.[6]

Prophet decides whether a changepoint should be accepted into its final predictive model

by using a sparse prior on the magnitude of the rate change (equivalent to L1 regularization).

Prophet assumes a changepoint is significant when a changepoint improves the fit of the

timeseries model. For our analysis, we adopt the changepoint effect size of $\beta > .5$ as being

significant. In the results section, when we refer to a changepoint as being significant, we mean

the changepoint effect size is greater than .5.

All models here are modeled with the full sample frames (3 years pre-Sinclair

acquisition, 1 year post-acquisition). For all models, yearly seasonality was modeled and, as a

result, removed from the change parameter of the model. Allowing for seasonality protects from

finding spurious results in general trends that could be better attributed to annual seasonality of

news coverage volume or issue agendas. For all models, a changepoint was entered at the day of

Sinclair acquisition. In this way, we could assess whether the general trend of a time series

significantly changed after acquisition.

Results and Discussion

RQ1 asked about the effect of Sinclair on the specific issue agendas of its news

operations. For each station, it was determined how often a specific issue appeared in news

stories each week compared to the total story count. This was done to prevent the overall decline

in news content described above from affecting the results. Only one of the 19 political issues

examined, party politics, had a significant agenda cutting or building effect across all six

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[6] Sponsored content time series for corporations are extremely sparse. That is, for the majority of days or weeks in a time series, a brand will not have sponsored content. It is a rare occurrence and as such cannot be modeled as an exogenous variable in an ARIMAX model. More commonly, rare occurrences are modeled as possible changepoints in a general trend component of a time series model.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

websites.[7] See Figure 1 for the average weekly story count for party politics, and to view how that general trend changed for each station across time.

[INSERT FIGURE 1 HERE]

In the above Figure, you can see that the general trend of story coverage declined for each station, and that decline seems to be predicted by Sinclair ownership. Here, we operationalize this negative change as an agenda cutting effect. Given there were 19 issues studied here, we choose not to insert each issue as a figure, but instead, we summarize the observed effects in each general trend component. See Table 2 for a full review. Table 2 can be taken as a summary for whether news coverage increased (agenda building) or decreased (agenda cutting), for each issue after Sinclair assumed ownership.

[INSERT TABLE 2 HERE]

RQ2 assessed the total number of stories published by the six news sites. Total story count, by week, for each station was tallied. A time series model was specified and the general trend component was inspected (see Figure 2 for all six general trends). For all six stations, there was a significant negative change in coverage when Sinclair acquired the station. For the five websites that Sinclair began operating in September of 2017, the general trend component shows a steep decline. For the site that was taken over by Sinclair in May 2016 (Nebraska.tv), the drop-off was more moderate but still apparent. Both of these results indicate that when Sinclair bought these specific news stations, the overall story output on their websites declined, significantly.

[INSERT FIGURE 2 HERE]

RQ3 asked if the percentage of local news coverage would change after a station was bought by Sinclair. See Figure 3 for all six general trends. The analysis shows that for five

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[7] We chose to only report results where all six stations showed a cutting or building effect. We do so because we have less faith in issue detection in GDELT data and want to protect against Type 1 errors as much as possible.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

websites (WCYB, WCTI, Nebraska TV, NBC Montana, and KRCR) news coverage continued to

decline. For KXTS, the local percentage continued to climb post-Sinclair acquisition, but at a

slow rate. These findings suggest that overall, local news coverage is declining at these stations,

but it is unclear if Sinclair is exacerbating that decline.

[INSERT FIGURE 3 HERE]

Finally, RQ4 asked if the amount of reposted (a.k.a. syndicated) news coverage would

change after a station was bought by Sinclair. The analysis shows that for five websites the

number of reposted articles continued to climb. For one station, WCYB, there was no general

trend. See Figure 4 for all six general trends. However, in all six cases, the rate of change did not

increase as a result of Sinclair ownership. While these stations appear to be relying on reposted

coverage more than ever, this general trend began before Sinclair ownership.

[INSERT FIGURE 4 HERE]

Discussion

The one finding that is not ambiguous is the obvious decline in overall online news

content once a station is taken over by Sinclair. This decline provides evidence for the accusation

that Sinclair often depletes its stations of resources (Allied Progress, 2017). This could be due to

reduced staff counts, or a lack of focus on the web and online media for Sinclair as a whole.

Another common critique of Sinclair is its lack of commitment to substantive local news

coverage (Martin & McCrain, 2018). Local news coverage is declining at these stations, but our

data indicate that Sinclair has not exacerbated that decline at these six stations. Despite the

decline in coverage of some topics, overall local coverage, as indicated by the geotags in the

GDELT database, did not significantly decline after Sinclair purchased these stations. That being

said, we can say that Sinclair has done nothing to increase local news coverage. This goes

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

against the notion that increased economies of scale and financial resources lead to more local

news coverage (Mansfield, 1973; Smith, 2009).

Perhaps the most popular criticism of Sinclair as a media company is its purported

political bias. Several media critics and some scholars have pointed to multiple actions on the

part of Sinclair, from must-run commentary pieces to anti-Democratic party documentaries in

election seasons, that demonstrate a conservative and pro-Republican stance (Farhi, 2018; Gold,

2017, Hylton, 2005). When you couple the apparent conservative leaning of a wide-reaching

company like Sinclair with the underlying assumption of agenda setting, that news organizations

set the topic agenda for the public at large, you have the possibility for one media entity steering

the public conversation substantially.

The salience of major political issues was investigated for each of the six Sinclair news

sites in relation to their overall story count. The results did not show a clear conservative shift in

coverage once Sinclair took over, but there are some interesting results to explore. In examining

issues that changed significantly post-Sinclair, only party politics declined and exhibited an

agenda cutting effect across all stations. This comports with what others have found, that

corporate media ownership produces fewer "substantive" political articles (e.g., Wouters, 2015).

Conclusions

The broad goal of this research project was to understand the impact of media ownership

on news content using large-scale data analysis techniques. Sinclair, with its consistent

acquisition of local stations and reputation for influencing news operations, provided a unique

opportunity. The results of the analysis may not provide the "smoking gun" that some critics may

be looking for to prove Sinclair has a clear impact on political coverage. What is clear is that

when these six stations were acquired by Sinclair, their total story counts declined significantly.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

This finding should not be taken lightly. As local print operations struggle financially, local television newsrooms are an increasingly important source of information for communities (Abernathy, 2018). The fact that these six stations were all located in fairly small media markets, where local papers, in general, are struggling the most, only exacerbates the point.

It is also worth noting the general trends found in the analysis. Overall, at most of the stations in the study, local coverage declined and reposted, or "syndicated", stories increased. This trend speaks, again, to a wider crisis in local news coverage. While the impacts of ownership and the specific political agenda of Sinclair are worth further research, journalism scholars and critics should not ignore this broader problem.

Limitations

First, the small number of websites (N= 6) included in the analysis limits the generalizability of the results, considering Sinclair owns over 170 stations. While this analysis did model time, and therefore some sense of causality, it did not control for a number of external factors on media agendas and coverage, including elite media agendas, or the performance of the economy. Using this methodology, future work can assess other possible exogenous variables as predictors of news coverage.

Additionally, there are inherent limitations in the use of GDELT and with the size and scale of the analysis. While we went through great efforts to ensure external validity for our measures, issue detection is not a perfect science at scale with big data. Spurious natural language processing results (e.g., falsely labeling an issue) is inevitable, and could potentially introduce error into our measures. However, we have no reason to believe that this error would have increased or decreased across time, suggesting our measures were at least persistent.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Moreover, while we were only able to analyze general topic shifts, qualitative work can more precisely detect agenda setting at the attribute level, including differences in valence of coverage. Issue ownership literature argues that political parties "own" specific issues (Petrocik, Benoit, & Hansen, 2003). Still, it is difficult to tell from this analysis if a story about gun control, for example, is favorable to Republicans or Democrats.

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

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Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Tables

Table 1 - *Broadcast News Stations Studied*

Station	Website	Sample Begin	Date Acquired	Sample End	Market	DMA Rank	Articles accessed
KRCR	https://krcrtv.com/	9/2/14	9/1/17	9/1/18	Chico/Redding	132	51,959
KECI	https://nbcmontana.com/	9/2/14	9/1/17	9/1/18	Missoula	164	82,456
KHGI	https://nebraska.tv/	5/2/13	5/1/16	5/1/17	Lincoln/Kearney	111	63,274
WCTI	https://wcti12.com/	9/2/14	9/1/17	9/1/18	Greenville/New Bern	107	48,375
KTXS	https://ktxs.com/	9/2/14	9/1/17	9/1/18	Abilene	165	50,263
WCYB	https://wcyb.com/	9/2/14	9/1/17	9/1/18	Tri Cities	102	50,259

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Table 2 – *General Trend Results for Issue Agendas*

Issue	KRCR	KTXS	KECI	KHGI	WCTI	WCYB
Taxes	C+	C+	C+	C+	C+	C+
Unemployment	C+	C-	C+	C-	C-	C+
Domestic economy	**S-**	C-	**S-**	**S-**	**S-**	**S-**
Trade	C+	C+	C+	S-	C+	C+
Terrorism	**S-**	C-	**S-**	**S-**	C-	**S-**
Military	**S-**	C-	**S-**	**S-**	C-	C-
International relations	C+	C-	C+	C+	C-	C-
Immigration and refugees	**S-**	C+	C+	**S-**	C-	C+
Healthcare	C-	C-	**S-**	C-	C-	C+
Gun control	C+	C+	C+	**S-**	C+	C+
Drugs	C-	C+	C+	C+	C-	C+
Police and law enforcement	C-	C-	C+	C+	C-	**S+**
Racism	**S-**	**S-**	**S-**	C+	C-	**S-**
Civil liberties	C-	C+	C+	C+	C-	C-
The environment	C-	C-	**S-**	**S-**	C-	C-
Party politics	**S-**	**S-**	**S-**	**S-**	**S-**	**S-**
Election fraud	C-	C+	C-	C+	C-	C-
Education	C+	C+	**S-**	**S-**	C-	C-
Media and internet	**S-**	C+	**S-**	C+	**S-**	**S-**

S- : a significant negative change in coverage was observed after Sinclair acquisition (agenda cutting)
S+ : a significant positive change was observed after Sinclair acquisition (agenda building)
C+ : a continued positive trend was observed for the entire four years sampled
C- : a continued negative trend was observed for the entire four years sampled

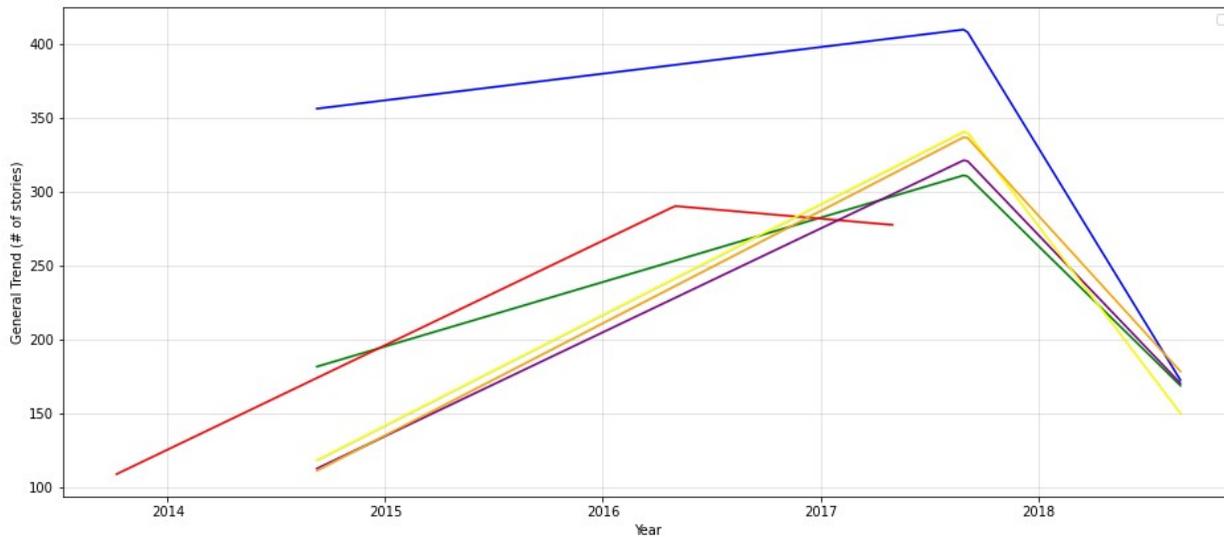**Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas**

Figures

Figure 1 - Change in General Trend for Party Politics Stories
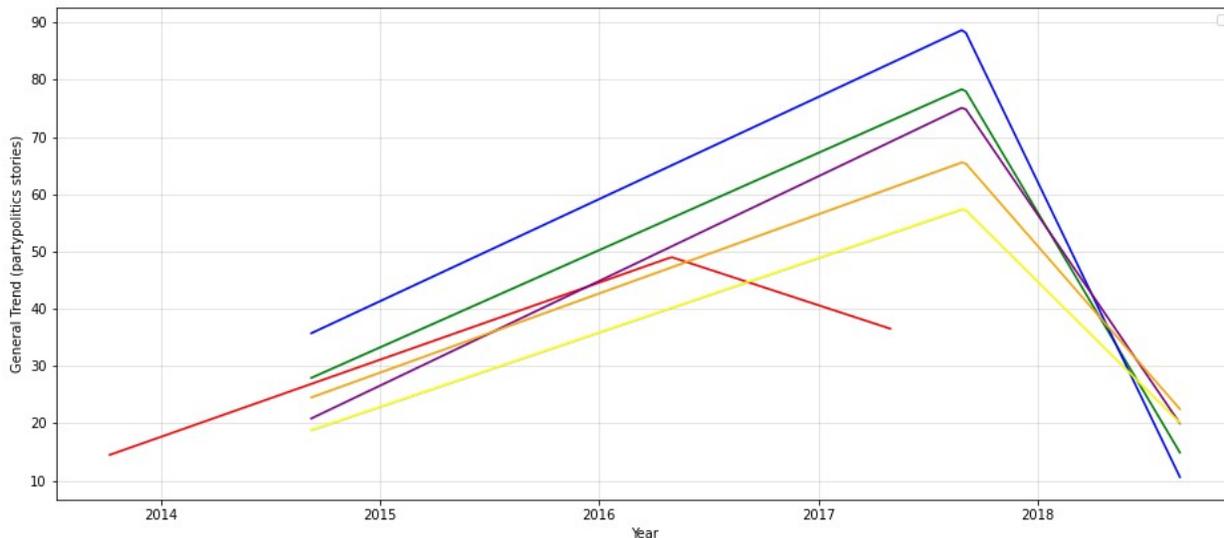
*Note: the elbow in the trend line represents the buyout date. Legend: krcrtv.com: green, nbcmontana.com: blue, nebraska.tv: red, wcti12.com: purple, ktxs.com: yellow, wcyb.com: orange
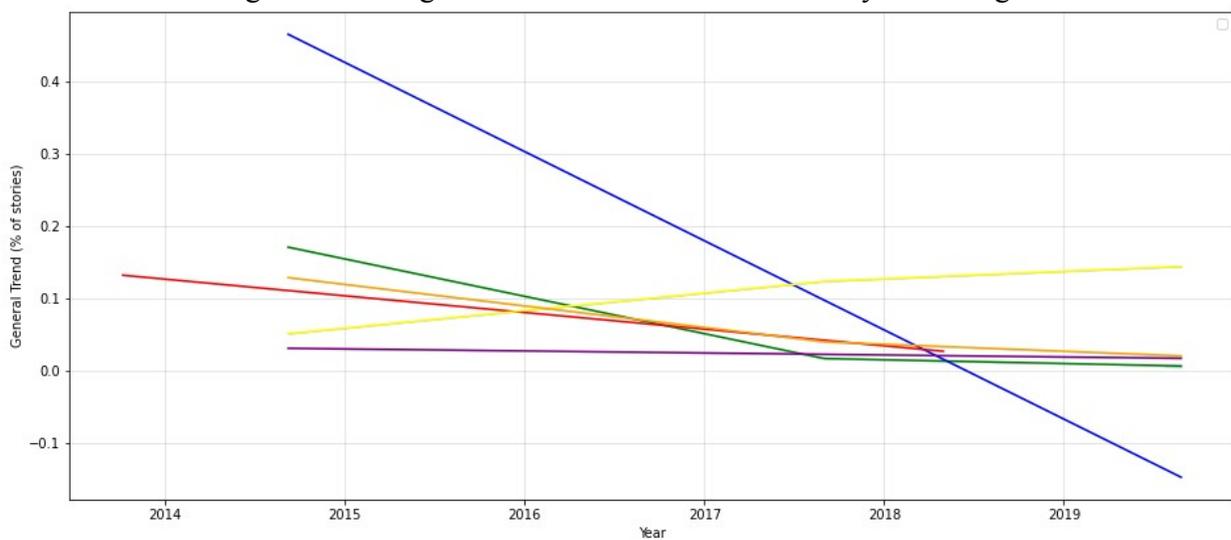
Figure 2 - Change in General Trend for Total Number of Stories

*Note: the elbow in the trend line represents the buyout date. Legend: krcrtv.com: green, nbcmontana.com: blue, nebraska.tv: red, wcti12.com: purple, ktxs.com: yellow, wcyb.com: orange

**Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas**

Figure 3 - Change in General Trend for Local Story Percentage

*Note: if elbows exist, they represent a significant change at Sinclair buyout date.
krcrtv.com: green, nbcmontana.com: blue, nebraska.tv: red, wcti12.com: purple,
ktxs.com: yellow, wcyb.com: orange

Corporate Media Ownership, Depth of Local Coverage, and Issue Agendas

Figure 4 – Change in General Trend for Reposted (Syndicated) Story Percentage
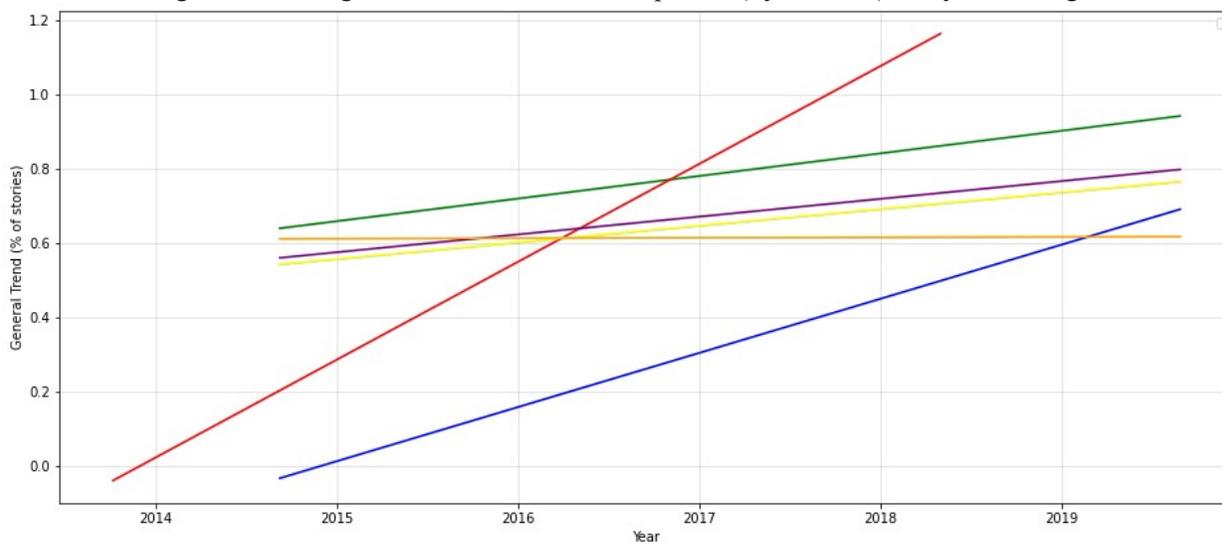
*Note: no significant changes observed at Sinclair acquisition dates
  krcrtv.com: green, nbcmontana.com: blue, nebraska.tv: red, wcti12.com: purple,
  ktxs.com: yellow, wcyb.com: orange