# Pick Your Language: How Riot Reporting Differs Between English and Hindi Newspapers in India[*]

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Riot reporting is one aspect of newspaper coverage that can drive people into the streets in acts of collective protest or violence. Media observers and scholars have proposed that the language of Indian newspapers, be it English or vernacular, partially dictates the kinds of riot events reported and the quality of those reports. I tested whether this conventional wisdom holds by investigating the content of Indian riot coverage in the English *Times of India* and Hindu *Hindustan*. While *Hindustan* emphasized official statements and interviews with political parties, neither newspaper accurately represented the actual number of riots in their reporting. In fact, coverage in both papers followed predictable patterns likely driven by a new focus on selling newspapers at any cost in order to increase advertising revenue. This study contributes to a growing literature highlighting the similarities between media outlets and the degree to which their reporting is removed from actual events.

Keywords: riots, topic models, communal violence, newspapers, India.

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An Indian newspaper's decision about whether and how to report a riot has potentially deadly consequences. Through gatekeeping — selectively choosing news stories to report — and framing — deciding how to write a story about a news event — newspapers determine whether riots are discussed and how they are interpreted by the public. Ahmed (2010) describes how Gujarati newspapers incited violence through their provocative framing of riot events. Others, including Peterson (1996), discuss how newspapers may intentionally under-report riots in order to calm tensions between the rioting parties.

The importance of newspapers in public perceptions of and reactions to riots is only heightened by the central role newspapers play in India. Over the past few decades, improved technology and increased literacy has meant that the ritualistic newspaper reading practices of elite urban Indians have developed in poor and rural areas, expanding access to news and increasing the importance of newspapers. Riots are prevalent in India, and investigations into their motivations and how newspapers report on them has occurred since the 1960s (Bayley, 1963; Nayar, 1975). In the first scholarly study of riots, Bayley immediately recognized the relationship between riots and newspapers, stating that newspapers report "only a small fraction of the total number of public demonstrations, select[ing] those incidents which are most dramatic and 'newsworthy'" (Bayley, 1963, p. 312).

Besides deciding whether to report a riot, newspapers have a unique role in describing riots. Readers have preconceived notions about the reasons that riots start and about people who participate in riots. In choosing the frame for a riot story, newspapers can disseminate information detailing one of many possible perspectives. Often, journalists facing impending deadlines simply describe a communal (Hindu-Muslim) frame for a riot and report it without thorough investigation (Peterson, 1996). Assuming the riot is part of a communal conflict when

it in fact has a different cause can be a deadly mistake, as readers are prone to react and may even start riots themselves in response to newspaper reporting (Neyazi, 2010).

Scholars widely accept the notion that the media are not unbiased reporters of information. Numerous studies have examined how various media sources, particularly newspapers, have covered collective action events (Earl et al., 2004; Marsh, 1991; Murthy et al., 2010; Myers and Caniglia, 2004; Ortiz et al., 2005). This work has sought to compare media reports to actual collective action events (Weidmann, 2015). In doing so, media reports are treated as biased representations of actual events, and scholars have attempted to explain the magnitude and direction of this bias.

Anecdotal evidence from the Indian case suggests that most of the bias and influential framing in Indian riot reporting comes from vernacular newspapers, not their English language counterparts. Vernacular newspapers are thought to be prone to highlighting communal differences, printing rumors and speculation, and selectively reporting riot events. Initial forays into how different language news media report different types of events have been case study driven (Ahmed, 2010; Mody, 2015; Priyadarsini, 1984; Sengupta, 2014). While individual riot events are important, a time-series approach is necessary to evaluate the overall impact of language on riot reporting.

I investigated the ways in which the English *Times of India* and Hindu *Hindustan* report on riots. Previous observational analyses have proposed that vernacular newspapers like *Hindustan* employ poorly trained journalists who print unverified stories for the sole purpose of selling newspapers, while English language newspapers are higher quality (Joshi, 1996; Ramaprasad et al., 2012). The language difference in Indian journalism is thought to be the most consequential divide among newspapers (de Souza, 2010). I collected riot reporting from these

two newspapers from 2009 to 2018 in order to conduct the first long time span comparison of English and vernacular newspapers in India. I tested a number of frequently mentioned hypotheses regarding the inferiority of vernacular newspaper riot reporting. I found that neither the English nor the vernacular paper's reporting comported with official riot statistics. *Hindustan* relied on press releases and mentioned political parties more than the *Times of India*. However, the two papers were strikingly similar in the other topics that they reported, their emphasis on reporting in regions where they are dominant, and many of their attitudes toward communal violence. I conclude that the ongoing fight for advertising revenue in India has pushed English and vernacular newspapers to cover the same riot-related topics in similar ways. The press still has the ability to cover riots however they choose, but their emphasis has shifted to selling newspapers to advertisers, not to Indian citizens. Newspaper coverage of riots and protests is common worldwide; this study suggests that scholars may need to more carefully investigate the reporting strategies of media sources before counting on them to accurately portray both the frequency and the motivations behind riot events. Additionally, recent public policy interventions in India like the Sustainable Access in Rural India project — which provides Internet access to underserved communities — may increase the amount of news but may not significantly change the diversity of stories and perspectives reported.

## Newspapers in India

Newspapers once consisted exclusively of summaries of events taking place in a town or city (Carey, 1997). Their purpose was to provide residents with all of the information necessary to be informed citizens and to conduct their lives. During these early years, historians needed only to pick up an old newspaper to get an accurate and complete account of all events of public

concern. As transportation infrastructure improved, individuals could travel longer distances more easily. This meant that the amount of news relevant to any particular reader increased because readers were familiar with and could travel to locations farther away (Natarajain, 1955). Volunteer reporters could no longer do the work of summarizing all of the news, so the job fell to paid journalists to curate news content for readers, presenting them with the most important and relevant stories (Carey, 1965). Social responsibility was no longer a priority for newspapers, as journalists were now in the business of making money as well as objectively reporting news-worthy events (Vilanilam, 1975).

Since the advent of television and now the Internet, newspapers are seen as less influential by the average Western citizen (Rowe, 2011). In India, however, newspapers are still the primary way news is disseminated to the public. The Indian newspaper market remains fruitful, with rural areas left untapped and readers consuming as many as seven newspapers daily (Baumann et al., 2017; Peterson, 1996). Single newspaper copies are often read dozens of times, and groups gather daily to exchange newspapers and to discuss the news (Peterson, 2015). Newspapers significantly influence individuals' actions. A single story about an issue can draw crowds into the streets or cause national leaders to make immediate policy changes (Neyazi, 2010; Sonwalkar, 2003).

The news media in India is hardly homogeneous. Scholars have devoted significant resources to understanding how certain newspapers operate, the types of stories they publish, and the quality of their journalism. In particular, several studies have compared how different newspapers report the same events and the distribution of topics in different newspapers (Ahmed, 1986; Billett, 2010; de Souza, 2007; Krishnatray and Gadekar, 2014; Murthy, 2000; Simmons et al., 1968).

A commonly discussed theme is the bifurcation between English language and vernacular newspapers (de Souza, 2010). English language newspapers are thought to be read by the upper-middle class and big city elites (Sonwalkar, 2002). In particular, the *Times of India* (TOI) is the most circulated English language newspaper in the world, and many readers and scholars admire it as journalism of the highest quality and most impartiality (Neyazi, 2011; Varshney and Wilkinson, 1996). However, most working-class Indians read vernacular newspapers, especially those in Hindi (ABC, 2017; Jeffrey, 1993; Udupa and Chakravartty, 2012). These newspapers have a reputation for printing 'news' from any source, unedited and unverified, in order to fill pages and excite readers with unimportant, but flashy minutiae (Sonwalkar, 2002).

This paper tests these stereotypes in the modern Indian newspaper environment by comparing riot reporting in the TOI with a leading national Hindi language newspaper, *Hindustan*, from 2009 to 2018. Though many authors have suggested it (Borah, 2008; de Souza, 2010), I present the first systematic comparison of framing and gatekeeping between English and Hindi language newspapers while also considering the critically important topic of riot reporting.

## The Present Indian News Environment

News reporting in India has shifted from reporting 'hard news' to producing content amenable to advertisers. Rao (2008) describes this shift as part of a pro-commercialization movement wherein particularly English language newspapers find stories to match a particular news narrative. The TOI was the first newspaper to switch to this sensationalist model, despite the reputation that English newspapers have for employing the best journalists and printing the highest status newspapers (Sonwalkar, 2002). Now the advertiser, not the reader, became the key audience for news content (Downey and Neyazi, 2014; Jeffrey, 1994). The TOI distinguished

itself for a brief period as India's advertising leader, though it was not long before Hindi newspapers began to catch up (Neyazi, 2011).

Around the time the TOI began its push toward lifestyle content and culture supplements that increased advertising revenue, Hindi media was starting its period of rapid growth built on the new English newspaper model (Chadha, 2017; Jeffrey, 1993). Hindi newspapers carved out a niche in the market by making their content hyper-local (Neyazi, 2010). Initial challenges in transporting newspapers to rural areas meant that each region got its own newspaper edition with news specifically targeted to that area (Wasserman and Rao, 2008).[1] Hindi newspapers increased revenue by trying to reach rural consumers using many of the same tactics that the TOI used to reach mostly urban Indians who had traditionally read vernacular newspapers (Neyazi, 2009). The advertising revolution took over English newspapers in the late 1990s, just before hyper-localization infected Hindi newspapers in the early 2000s. Since then, advertising has become even more important and 'brand managers' responsible for figuring out how to sell more papers and appeal to new audiences hold positions of high esteem (Peterson, 2015). The impact of this shift in journalistic priorities on newspaper content is of great interest to scholars studying how media can shape societal views and actions.

## The TOI and *Hindustan*

There are at least 80,000 newspapers published in India, including more than 4,500 daily publications (Bhattacharjee and Agrawal, 2018; Sonwalkar, 2002). Several publications stand out as particularly important based on circulation, readership, and ownership (Bhattacharjee and Agrawal, 2018).

The TOI is the most circulated English language newspaper in the world with daily sales of over three million copies (ABC, 2017) and a readership of 13 million people per month (MRUC, 2017). The newspaper publishes 15 main editions from 41 printing centers throughout India (Krishnatray and Gadekar, 2014). A pioneer in the development of modern Indian advertising, the TOI extensively uses supplemental editions, lifestyle sections, infotainment reporting, paid editorials, and cut-rate pricing (Jeffrey, 1994; Ninan, 2007; Rao, 2008; Sonwalkar, 2002).

Hindi newspapers are India's undisputed leaders in readership and circulation, with *Dainik Jagran* accumulating more than four million daily sales and 70 million monthly readers, making it the most read newspaper in the world. Unfortunately, *Dainik Jagran* does not have the extensive online publication archive needed for this analysis, so I collected data from *Hindustan*, another popular Hindi newspaper that circulates three million daily copies with 52 million monthly readers. Baumann et al. (2017) argue that *Hindustan* is a better newspaper to compare with the TOI because of its more national coverage. *Hindustan* has 20 main editions, 159 sub-editions, and prints from 20 locations across India (Hindustan, 2016). It leads newspaper sales in Uttarakhand, Bihar, and Jharkhand and is second in Delhi and Uttar Pradesh.

Both the TOI and *Hindustan* have large country-wide distribution and circulation. The political leanings of the TOI and *Hindustan* are disputed. TOI and *Hindustan* have been accused of political bias in favor of both the government and the opposition (Dutta, 2019; Rowlatt, 2018). Assessing the amount of bias from each source is difficult, since there is no truly complete record of all riots that occur. The next section develops hypotheses about differences in coverage between the TOI and *Hindustan*.

## Theory and Hypotheses

Riots are part of a genre of crime reporting that is a staple of newspapers worldwide (Marsh, 1991). Newspaper reporting of violent crime rarely matches actual crime rates, is often blatantly false, and typically reads more like a police blotter than a piece of analytical journalism (Marsh, 1991; Murthy et al., 2010). This is certainly the case in India where "not all crimes make 'good stories' and not all offenders make good 'media crooks'" (Priyadarsini, 1984, p. 314). On the other hand, crime pays: 'Crime is on top of everybody's concern, crime has to be [in the newspaper]' (Ninan, 2007, p. 106). These facts taken together suggest that newspaper articles about crime correlate poorly with actual crime rates (Earl et al., 2004). In comparing newspaper and police reports of riots, Ortiz et al. (2005) find that 'newspapers are not a transparent conduit of information about protest, and that important systematic selection factors and processes affect the types of data available in newspapers' (p. 398).

**Hypothesis 1:** There will be a weak correlation between government riot reports and articles about riots in both newspapers.

In a study comparing crime coverage between English and Tamil newspapers, Priyadarsini (1984) finds that much of the variation in coverage over time and across newspapers was the result of reporting on different riot events. Conventional wisdom, backed by some sociological and anthropological evidence, suggests that Hindi newspapers' focus on hyper-localization allows these papers to pick-up and report riots that the English press simply does not know about (Friedlander et al., 2001; Neyazi, 2009).

However, it is unclear whether localization is the true cause of differential riot reporting or if the structure of Hindi news organizations is responsible. Localization means locally edited

and published newspaper editions, so many stories may never end up in editions read outside of a given town or sub-region (Ninan, 2007, p. 25). Mudgal (2011) finds that an emphasis on local coverage in Hindi newspapers does mean more local crime stories in national editions of Hindi newspapers, perhaps because crime makes for appealing reading. Though the TOI has localized to more aggressively target advertising revenue (Wasserman and Rao, 2008), the newspaper is less connected to everyday Indians who want to see their grievances discussed in Hindi newspapers (Neyazi, 2011). Localized coverage implies that *Hindustan* will not miss an opportunity to report on riots.

**Hypothesis 2:** *Hindustan* will report a higher percentage of riot stories than the TOI.

A chief difference between English and Hindi newspapers is that Hindi newspapers employ stringers, individuals who write local stories and are paid on a per article basis (Ninan, 2007). In fact, stringers function more like middle-men, collecting copy written by others, (literally) stamping it with their imprint, and sending it directly to the publisher where it is formatted for printing, usually without any editing or fact checking (Ninan, 2007, p. 118). *Hindustan* editors describe the role of stringers as 'content providers' who are used to fill the pages of local newspapers with any kind of story, fabricated or not (Ninan, 2007, pp. 120, 134, 165). Training for even regular journalists at Hindi newspapers is poor, advancement opportunities are rare, and ethics are generally considered lacking (Jeffrey, 1993; Neyazi, 2009; Stahlberg, 2002). Because of the use of stringers and their unverified and under-sourced stories, some scholars expect that riot content differs in the *Hindustan* compared with the TOI (Neyazi, 2010). Though their own rules might not always be followed, the TOI espouses higher journalistic standards and purports to hire only professionally trained journalists (Ganguly et al.,

2007, p. 186; Jain, 2017). Mody (2015) suggests that the TOI's position as a publication promoting journalistic excellence will lead to a more thorough investigation of news stories compared with Hindu publications.

**Hypothesis 3:** The topics discussed in articles about riots will differ between the TOI and *Hindustan*.

Apart from differences in rural coverage of riots, Hindi journalists may be more easily able to get interviews with prominent politicians and to mention these interviews in news articles (Neyazi, 2009; Stahlberg, 2002). Hindi journalists have more access to political parties because most Indians speak and read Hindi, and politicians respond by being more attentive to interview requests from Hindi journalists.

**Hypothesis 4:** Political parties will be discussed more frequently in *Hindustan* compared with the TOI.

Press releases are especially important for Hindi journalists. Rao (2010, p. 47) finds that 20 percent of local news in Hindi newspapers consists of press releases from various organizations printed without evaluation and never rejected. Political parties frequently submit press releases that are printed without any form of review (Pandey, 2017). Press releases provide easy content to fill the pages of Hindi newspapers and their many local editions. Such documents can also be collected and compiled by stringers to streamline the news production process.

**Hypothesis 5:** *Hindustan* will contain more press releases than the TOI.

Sonwalkar (2003) finds that similarly news-worthy conflicts were reported at vastly different rates in English papers because the conflicts were located far away from major media markets. Locations closer to Delhi were overreported, while conflicts that occurred in remote areas were not thought to resonate with the urban (elite) readers of English papers (Lee and Maslog, 2005). This pattern could certainly translate to Hindi language newspapers, but the Hindi papers' emphasis on local news in rural areas might mean that riots in some rural places are reported more than in English papers. It is reasonable to believe that places where *Hindustan* or TOI are the undisputed market leaders will receive more coverage. The TOI has particularly weak sales in South India, so reporting there could be less comprehensive than throughout the rest of the country. On the other hand, *Hindustan* is the market leader or is second in market share in Bihar, Uttar Pradesh, Jharkhand, and Uttarakhand, meaning that reporting might be more frequent in these states.

**Hypothesis 6:** Delhi, as the capital of India, will be reported on similarly in both papers. *Hindustan* will contain more riot stories from Bihar, Uttar Pradesh, Jharkhand, and Uttarakhand compared to the TOI. The TOI will contain fewer riot stories from South India compared with *Hindustan*, but more stories from Gujarat (an area with strong TOI sales).

Riot reporting may also differ in its portrayal of Hindus and Muslims. Narayana and Kapur (2011) find that the TOI portrayed Muslims favorably in 65 percent of articles about riots in Gujarat. They state, but do not test, a hypothesis that vernacular newspapers are pro-Hindu. This does make sense because the readers of Hindi newspapers are typically Hindus (Stahlberg, 2002). In a more direct comparison, Sengupta (2014) studies how English and Hindi newspapers

talked about victims and perpetrators in two riots. Both types of newspapers tended to name Hindu victims, but not Muslim victims (see also Ahmed, 2010).

**Hypothesis 7:** *Hindustan* will discuss Hindus more frequently than Muslims.

To test these hypotheses, I collected articles mentioning the word 'riot' from 2009 to 2018 in both newspapers. I introduce the collection method as well as a brief overview of the topic modeling approach used to evaluate them in the next section.

## Data and Methods

I collected 10,224 articles mentioning the word 'riot' from the TOI (7,365) and *Hindustan* (2,859) written between May 27, 2009 and April 29, 2018. *Hindustan* articles were scraped from the newspaper's website using Python code, while TOI articles were collected by hand using Factiva. The code for collecting the data along with all code for replicating the analysis is available on the author's website. *Hindustan* articles were subsequently translated from Hindi to English using Google Translate. The start date was the first day on which *Hindustan* archives were available; the end date represents when data collection took place. All articles mentioning the word 'riot' were included in the sample. This included regular news articles, lifestyle content, and opinion pieces. Duplicate articles — defined here as those published on the same day in different editions of a newspaper — were excluded using Factiva software and manual checking.

This data collection technique ensured over inclusion of articles, as the word 'riot' is occasionally used in other contexts such as 'riotous laughter.'[2] Other events related to riots were also included, as were opinion pieces about riots. Namely, I did not exclude articles commemorating past riots, discussing legislation or commission reports about riots, or reviewing

riots occurring internationally. Under the assumption that both newspapers are accurately reporting important events, both newspapers should include these types of stories at similar rates. Additionally, reviewing articles to see if they fit a standard for inclusion in the dataset introduces bias regarding the definition of riot reporting, which would eliminate advantages of the unbiased topic modeling technique used.

I utilized a combination of textual analysis techniques that are increasingly popular in social science and communication to test the hypotheses described above. In particular, I tested Hypotheses 1 and 2 by evaluating the distribution of articles in both newspapers over time.

Hypotheses 3, 4, and 5 are tested based off of the results of topic models. Topic models are an automated and replicable method that classifies the subjects (or topics) addressed in a collection (or corpus) of text. This modeling technique has become increasingly popular in social science and communication research (Guo et al., 2016; Maier et al., 2018). The advantage of topic models is that the researcher does not have to identify the topics present in the newspaper articles before starting the research. Instead, the procedure only requires that the researcher select the number of topics, not define the content of a topic (Blei, 2012). After selecting the number of topics, all filler words were removed. These words, like prepositions and salutations, do not contribute to our understanding of the topics present in any given article. Next, an algorithm randomly assigned each word in an article to a topic. This represented a starting allocation of words to topics that the algorithm then systematically improved by changing the topic assignment of each word and seeing whether the resulting distribution of words to topics 'fits better' than the previous distribution. The degree to which words fit into topics is based on the likelihood that words assigned to a topic will appear in the same article. The algorithm continued moving words around from the initial allocation of words to topics until the point at which

moving any one word to a different topic did little to improve the classification of words into topics. Once the algorithm was complete, I examined the words associated with each topic and created a name for the topic based on these words. Each article then contained a proportion of words belonging to each of the topics. We interpret this result by saying that a particular article discusses percentages of each of the named topics. The topic modeling method is relatively replicable once the approach and the number of topics is selected (Guo et al., 2016). Technical details on these procedures are provided in a supplemental file on the author's website.

Hypotheses 6 and 7 were tested by looking at word frequencies in each newspaper's corpus. I also conducted a basic sentiment analysis as an extension of Hypothesis 7. Using a procedure outlined in Hu and Liu (2004), I took a standardized list of positive and negative words and created a sentiment score for each article by subtracting the number of negative words from the number of positive words.

## Results

Figure 1 displays a comparison between riot reports in the TOI and *Hindustan* and government riot statistics from the National Crime Records Bureau (NCRB). The newspaper riot measure on the left *y* axis is the number of articles mentioning the word 'riot' divided by the total number of articles printed in the newspaper in a given year. The right *y* axis in Figure 1 shows the number of riots reported to police in a given year. Police riot reports are then aggregated by the NCRB to produce country-wide yearly riot statistics. Note that the definition of a riot in the NCRB dataset is 'an event involving a group of five or more individuals who are illegally assembled and who use violence in pursuit of a common goal' (Indian Penal Code Section 146). Each time someone reports a riot occurring, it is counted as one NCRB riot report. Thus, the

number of NCRB riot reports takes into account both the number of riots and their relative size (more people will report a larger riot). Both of these factors should lead to more newspaper riot coverage.

Hypothesis 1 states that there will be a weak correlation between government riot statistics and newspaper riot reports. Indeed, while the correlation between the TOI and *Hindustan* is 0.76, the correlation between the TOI and government riot reports is 0.34 and the correlation between *Hindustan* and government riot reports is 0.07. I do not calculate the statistical significance of these correlations because the unit of analysis in the NCRB data differs from that of the TOI and *Hindustan* data. Nevertheless, both the weak correlations and the trends in Figure 1 support Hypothesis 1 and suggest that newspaper riot reporting does not track the prevalence of government reported riots.

Figure 1: Frequency of Riot Reporting



**Newspaper and NCRB Riot Reports**
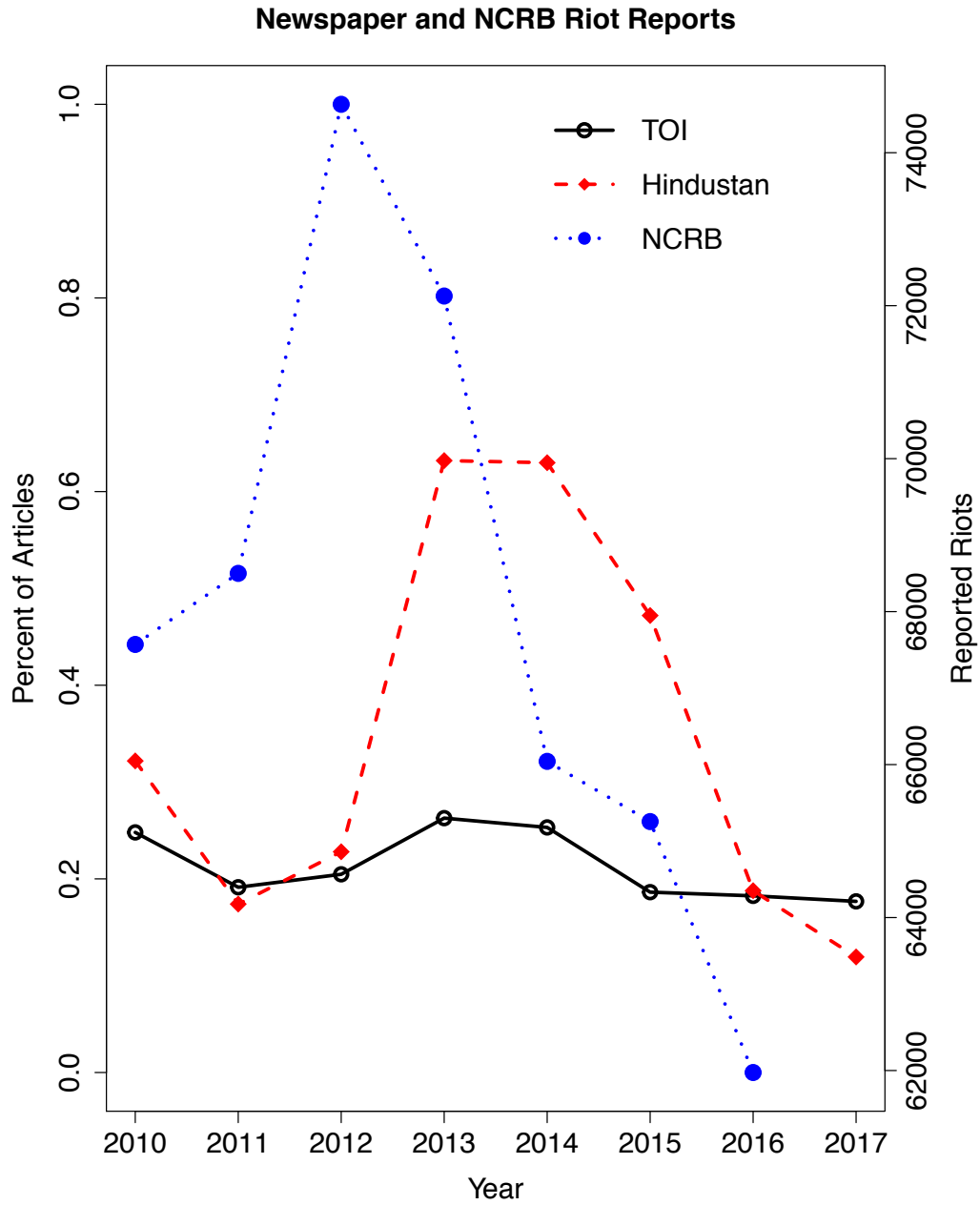
Left *y* axis is percentage of TOI and *Hindustan* articles mentioning riots each year. Right *y* axis is number of riots reported to the NCRB. Correlation between TOI and *Hindustan* is 0.76. Correlation between TOI and NCRB is 0.34. Correlation between *Hindustan* and NCRB is 0.07.

Hypothesis 2 states that *Hindustan* will report a higher percentage of riot stories than the TOI. The mean percentage of articles about riots is 0.21% in the TOI and 0.35% in *Hindustan*. *Hindustan* did display much greater variation in its riot coverage over time, moving from 0.3% to 0.63%. However, for most of the time-series *Hindustan* covered riots more than the TOI. Thus, Hypothesis 2 was supported.

## Topics Discussed

The article frequency analysis in Figure 1 suggests dissimilarities in riot reporting when comparing the two newspapers with official government reports. Since this is the case, it is even more critical to understand if the content of TOI and *Hindustan* riot reports are similar. I develop a topic model with 14 distinct topics to better describe what these articles discuss. The results from the topic model test Hypothesis 3, Hypothesis 4, and Hypothesis 5.

Table 1 presents the topic model results. The TOI and *Hindustan* columns are the average percentage of an article in that newspaper devoted to a given topic across the entire time-series. Discussion of certain topics likely changes over time. The Max Difference column is the largest absolute difference between the average percentage of articles devoted to a particular topic in a given year in the TOI minus that percentage in the same year in *Hindustan*.

Table 1: Average Topic Distributions

| Topic | TOI | Hindustan | Max Difference |
|---|---|---|---|
| Court Statements | 0.100 | 0.088 | 0.049 |
| Police Control | 0.097 | 0.088 | 0.053 |
| Government Reports | 0.079 | 0.066 | 0.022 |
| Police Arrests | 0.078 | 0.063 | 0.021 |
| Riots as a Metaphor | 0.072 | 0.055 | 0.022 |
| Women & Children | 0.072 | 0.053 | 0.029 |
| Political Parties | 0.071 | 0.110 | -0.066 |
| World Without Riots | 0.071 | 0.096 | -0.062 |
| Description of Riot Events | 0.070 | 0.060 | 0.034 |
| Riots in Film/Music | 0.067 | 0.041 | 0.038 |
| Communal Issues | 0.065 | 0.057 | 0.021 |
| Sikhs | 0.059 | 0.071 | -0.039 |
| Riots and Senses | 0.058 | 0.035 | 0.059 |
| Official Statements | 0.045 | 0.120 | -0.126 |

Topic names are interpreted from most influential words. TOI and *Hindustan* columns are average topic proportions across the time-series. The Max Difference column is the largest absolute difference of TOI-*Hindustan* in any year. A positive sign means the TOI reports that topic more, negative means *Hindustan* does.

To discern which topics are covered differently in the two newspapers, we look at topics with the largest Max Difference. This indicates that in at least one year, one newspaper covered that topic more or less frequently than the other newspaper. Additionally, we look at whether one newspaper systematically reported on a topic more or less frequently by comparing the TOI and *Hindustan* columns. These two heuristics, combined with a visual inspection of the topic proportions in each newspaper over time, resulted in four topics that substantively differed between the two newspapers: Police Control, Official Statements, Political Parties, and Riots and Senses.[2]

Hypothesis 3 was not supported; other than differences in these four topics, articles in both newspapers contained much the same content. No one topic dominated riot reporting in either paper, and the correlation between average yearly topic percentages in the TOI and *Hindustan* was high for most topics. About 70 percent of topics appeared with relatively similar frequencies in both newspapers across the time-series.

Among the differences that do exist between the two newspapers, Hypothesis 4 predicts that political parties will be discussed more frequently in *Hindustan* than in the TOI. The topic model results indicate that *Hindustan* had a higher percentage of stories mentioning political parties, supporting this hypothesis. The left panel of Figure 2 shows that 11% of *Hindustan* riot articles discussed political parties, frequently citing both the BJP and Congress as well as including statements from Prime Minister Modi. Political parties constituted only 7.1% of articles in the TOI. A similar pattern appeared when testing Hypothesis 5 by comparing press release topics in *Hindustan* with the TOI (right panel of Figure 2). While the TOI rarely used official statements and press releases (4.5% of articles), *Hindustan* relied on these statements to

construct news pieces (12% of articles). The greater reliance on press releases in *Hindustan* provides evidence supporting Hypothesis 5.

Figure 2: Political Parties and Official Statements Topics Over Time
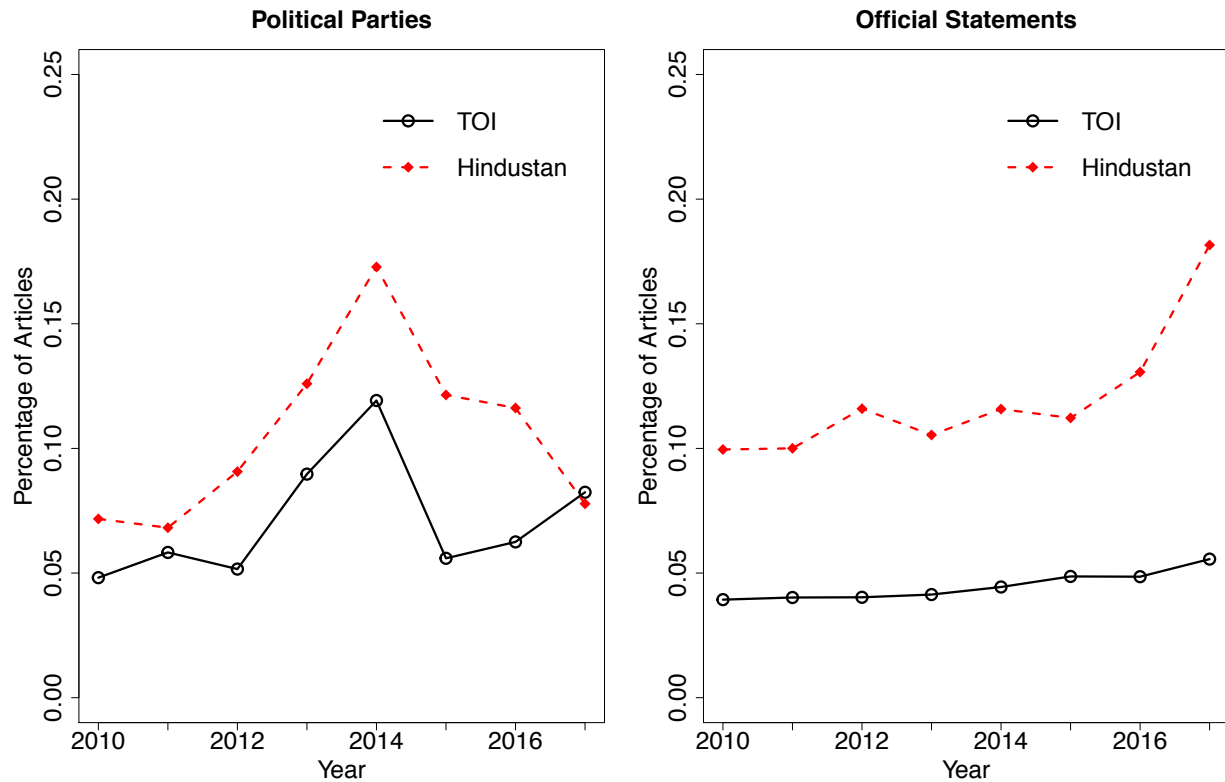


Panels display the prevalence of articles about the political parties and official statements topics in both newspapers over time.

## Keyword Frequencies

With at most moderate differences in the topics the two newspapers discuss when reporting on riots, I now turn to questions of how frequently certain keywords were mentioned. Here I collected the frequency with which place names and religious affiliation were mentioned. Hypothesis 6 posits that newspapers will mention the states and cities where their circulation is

strong. I argue in Hypothesis 7 that this same focus on their target audience should result in *Hindustan* discussing Hindus more frequently than Muslims.

The first subject of interest is whether newspapers reported riots more frequently in areas where they sell a large number of papers or have many readers. *Hindustan* claims that it is the dominant paper in Bihar, Uttar Pradesh, Jharkhand, and Uttarakhand. The newspaper is headquartered in Delhi, though since Delhi is the capital of India, the TOI should cover events in Delhi heavily as well. The TOI is headquartered in Mumbai, which is located in Maharashtra. I looked at Karnataka, the most riotous state in South India, to see if the TOI reported more than *Hindustan* in this state. Gujarat was included because *Hindustan* is not a dominant paper in this state, so the TOI should report riots relatively more there. I searched articles from both newspapers for mentions of these place names.

Places may be mentioned alongside riots for a number of reasons. First, the place might actually have an ongoing riot. Alternatively, Home Ministry Commissions, judicial proceedings, protests about riots, and reactions to riots could occur in a location, causing its name to be mentioned. Thus, I measured the coverage each newspaper provided for all types of riot events; I did not try to estimate a count of the number of riots in a state based on the number of articles mentioning the state name.

Table 2 displays the number of place mentions per article for the locations listed above and shows support for Hypothesis 6. One concern is that one newspaper might be in the habit of mentioning place names more frequently. The first row shows that, on average, two and a half places were named per article, excluding any reporter byline location. *Hindustan* did report on riots more frequently in locations where it is the dominant newspaper. Although *Hindustan* is also dominant in Delhi, the TOI mentioned Delhi a similar number of times. The high number of

mentions per article is surprising because Delhi recorded only approximately 50 reports of riots

each year. Articles mentioning riots and Delhi frequently discussed the Indian Supreme Court,

other federal courts, or Home Ministry Commissions. These are not actual riot events, but they

did take place in Delhi and were focused on riot aftermath. The TOI mentioned Maharashtra and

Gujarat more than *Hindustan*. However, the TOI mentioned Karnataka slightly more per article

compared with *Hindustan*, even though the TOI does not have a strong presence in South India.

Hindi newspapers like *Hindustan* also have a weak presence in South India, so a more

appropriate comparison might be to a Malayalam language newspaper like *Malayala Manorama*

published in Kerala.[3] Overall, newspapers with strong footholds in particular regions were more

likely to report articles about riots and riot activity from those regions.

| Table 2: Mentions of States and Cities | | |
|---|---|---|
| | TOI | Hindustan |
| Any Place | 2.500 | 2.476 |
| Gujarat | 0.637 | 0.495 |
| Delhi | 0.465 | 0.495 |
| Maharashtra (Mumbai) | 0.279 | 0.110 |
| Uttar Pradesh | 0.264 | 0.385 |
| Bihar | 0.103 | 0.396 |
| Karnataka | 0.039 | 0.025 |
| Jharkhand | 0.014 | 0.051 |
| Uttarakhand | 0.008 | 0.018 |

Any Place refers the number of mentions/article for any of the 25 largest cities or any state in
India.

A second question related to article keyword use is how communal aspect of riots were

addressed in each newspaper. Coding riots as being biased toward Hindus or Muslims is a

difficult endeavor given the challenges of precisely defining the ways in which articles might

favor a particular religion. Instead, I separated out articles mentioning 'Muslim,' 'Hindu,' and

'communal' and compared the use and sentiment of these words in both newspapers. Table 3

displays some statistics about TOI and *Hindustan* articles that are helpful in getting a rough

overall picture of how Hindu-Muslim communal violence is reported. Results from Table 3 do

not support Hypothesis 7.

The first three rows are the total number of Hindu, Muslim, or communal mentions

divided by the number of riot articles in each newspaper. Muslims and communal issues were

mentioned much more frequently than were Hindus, and the TOI used these words more often

than *Hindustan*.

Table 3: Hindu-Muslim Riots

|  | TOI | Hindustan |
|---|---|---|
| Hindu Mentions/Article | 0.107 | 0.101 |
| Muslim Mentions/Article | 0.535 | 0.424 |
| Communal Mentions/Article | 0.500 | 0.390 |
| % Articles Hindu | 0.067 | 0.061 |
| % Articles Muslim | 0.182 | 0.145 |
| % Articles Communal | 0.235 | 0.214 |
| Hindu Articles Sentiment | -5.145 | -3.257 |
| Muslim Articles Sentiment | -4.395 | -3.116 |
| Communal Articles Sentiment | -4.876 | -3.841 |

Mentions/Article is the total number of times the word was mentioned divided by the total
number of articles. % Articles is the percentage of articles containing at least one mention of the
word. Sentiment is the sentiment score from Hu and Liu (2004) which is a count of positive
minus negative words in an article. Overall sentiment is -3.45 for the TOI and -3.54 for
*Hindustan*.

The following three rows dichotomize whether an article mentioned the word Hindu,

Muslim, or communal and calculates the percentage of articles that did so for each newspaper.

Compared to *Hindustan*, the TOI had more articles containing these words. However, the

differences between newspapers are smaller here than comparing the number of mentions per

article. This suggests that TOI articles mentioning one of these words tended to repeat it

throughout the article.

Finally, I scored the sentiment in each article, creating a measure of positive minus negative words. The overall sentiment for the TOI and *Hindustan* articles was -3.45 and -3.54 respectively. Articles mentioning keywords in the TOI were universally more negative than those in *Hindustan* and more negative than the overall sentiment for riot articles. Additionally, articles mentioning Hindus were the most negative in the TOI whereas articles mentioning communal violence were the most negative in *Hindustan*.

*Hindustan* did not discuss Hindus more frequently than Muslims, which fails to support Hypothesis 7. Both newspapers tended to name Muslims in articles more frequently than Hindus, but usage was less frequent and sentiment was more positive in *Hindustan* compared with the TOI.

## Discussion and Conclusion

Reading about riots is a fundamental feature of Indian life. Choosing to report a riot and framing it in a certain way can either appease or provoke reactionary violence and unrest. Scholars often assume that the elite status of newspapers like the *Times of India* will mean that news coverage is representative of the most important events in the country and thus will steer clear of reporting that manipulates human emotions. Vernacular newspapers are thought to be content printing rumors and taking political stances that fuel division and violence. In this analysis, I compared the TOI with *Hindustan* to test whether language is really the major distinguishing factor in newspaper reporting that many assume. Though there were some substantive differences in terms of the ways in which riots are covered, there was surprising consistency between the two papers. In both papers, riot reporting was a tool used to sell newspapers and advertisements, not an accurate reflection of actual riot events. *Hindustan* did cover riots more overall compared with

the TOI, but the topics of stories were similar in most cases. The TOI catered to its target readership by emphasizing the role of the police in stopping riots, but *Hindustan* did the same in its discussion of political parties. Differences in the quality of journalism were only reflected in *Hindustan*'s penchant for official statements; both newspapers reported heavily in areas where they sell the most newspapers, and both named Muslims in communal incidents.

The results suggest that the frequency of riot reporting differs between the TOI and *Hindustan*, but that the content of riot reports is often similar. One reason that *Hindustan* may report more riots than the TOI has to do with their publication strategy. *Hindustan* uses stringers and hyper-localization to pick-up and cover stories about which the TOI lacks knowledge. The discrepancy in riot coverage is, therefore, due to structural differences in how English and vernacular news companies are organized (Rao, 2010). However, the convergence in the content of riot coverage is a response to the need to optimize articles to appeal to advertisers whose preferences dictate the tone and content of pieces being reported (Jeffrey, 1993).

Setting aside these differences in newspaper structure, both newspapers covered similar topics when they decided to report on a riot event. For example, the fact that both newspapers devoted as much coverage to describing and providing summaries of ongoing riots (Description of Riot Events) as they did to discussing the benefits of a world where riots do not occur (World Without Riots) is interesting. This suggests more broadly that newspapers frequently discuss the implications that riots have on people and communities. The three ways the term 'riot' is used outside of physical communal violence: as a verbal description (Riots as a Metaphor), in film or music (Riots in Film/Music), and as a way to describe our senses being overpowered as in 'senses run riot' (Riots and Senses) support the idea that the subject of rioting has become commonplace in public discourse. Descriptions of actual riots tended to focus on government or

official sources of information. Courts and police were common subjects, as were statements from government officials and political parties. In fact, the only topic substantively related to riot events not about official sources was the Women and Children topic, which addressed the ways in which women and children were victims of riots.

Both newspapers also seemed to adopt a systematic policy of identifying Muslims and speaking about them negatively while other individuals involved in communal riots were unidentified. Hindus were assumed to be the subject of articles, so when the subject was a Muslim, the Muslim had to be identified. This pattern follows Sengupta (2014)'s findings that Hindu and Muslim victims and perpetrators are treated differently. Interestingly, when Hindus were mentioned, the TOI treated them in a particularly negative light. This could be because Hindus are commonly mentioned by name when they are the perpetrators of violence, not the victims.

The similarities between these two newspapers illustrate a convergence in newspaper quality away from the Carey (1997) model of unbiased bystanders to the Jeffrey (1993) and Sonwalkar (2002) model of journalism *for* advertising purposes. Interestingly, in order to achieve such a convergence, both English and vernacular newspapers had to change. English newspapers, which had been focused on advertising revenue for quite some time, were forced to respond to vernacular newspapers' localization push by creating new sub-region editions and trying to sell advertisements to increasingly local and rural customers. Vernacular newspapers realized that they had to slash newspaper prices and to rely heavily on advertising in order to maintain their expensive local presence and to have any hope of competing with English papers in urban areas.

One question that emerges is if we can ever accurately quantify riots in India using newspaper data. This paper suggests not because newspapers believed to be extremely different in their coverage of riot events ended up discussing most of the same topics. Combining local editions of newspapers does little to increase accuracy because local editions print what local people want to read, which, depending on the details of any given riot, may or may not mean a riot is worth covering. This is not to say that studying riot reporting in Indian newspapers does not have interesting implications. Indeed, the convergence of newspaper reporting likely has substantive impacts on public opinion about riots and communal violence. Journalists are responsible for framing (Goffman, 1986; Pan and Kosicki, 1993) events based on their own ideology as well as perceived public interest. As framing becomes homogeneous, newspapers have begun to struggle to distinguish themselves as well as to promote their relevance as something other than a gossip tabloid.

The India case is important for newspaper scholars because India represents one of the largest and most robust newspaper markets in the world. Comparisons between different language news sources is easier in a newspaper dominated media market, but this research speaks more broadly to the ways in which language or the perceived quality of reporting influence journalistic accounts of collective action. In terms of generalizability, language is often a salient divide in conflict prone areas, so media outlets in these areas may report on conflicts differently depending on their target audience language.

Although this study was able to analyze riot event reporting for a relatively lengthy period of time in an important case, both the methodology and the case itself present limitations and opportunities for future work. Topic models, article counts, and sentiment analysis can effectively describe overall patterns in the data, but future work should take a subset of these

articles and analyze them using hand coding techniques. These techniques will help to find ways other than topics and sentiment where the two newspapers do differ. Additionally, this analysis should be replicated in other country contexts in order to determine whether the convergence of riot related newspaper content extends across countries or is unique to India. As the country context changes, riot related articles can be expanded to include protests and violent collective action events.

Of course, newspapers are not the only source of media in India. Recently, television has exploded in penetration, and access to the Internet has also increased (Chadha, 2017; Downey and Neyazi, 2014). Indians now receive information about riots from newspapers and these other news sources. This makes the Indian news market even more complicated than previously thought and suggests that riot reporting on television and the Internet should also be investigated to see how much reporting is sourced from newspapers and how reporting differs in this complex media system (Chakravartty and Roy, 2013). Future work should investigate these sources both separately and together to see whether the results found here generalize to other forms of media. Initial theorizing from Bamezai et al. (2011) suggests that the rise of the Internet will complement newspaper use, not overtake it, meaning that newspaper riot reporting will remain important and that newspaper convergence on reporting riot related topics may be indicative of a broader trend.

# Notes

[1]Neyazi (2009) and Ninan (2007) debate whether the period of excessive localization has ended.

[2]Although Court Statements and World Without Riots have a fairly high Max Difference, this is because of a one-year spike in coverage, not a longer-term difference between the two newspapers.

[3]This is left to future work especially because of the challenges of translating Malayalam accurately due to the complex script.

# References

ABC (2017). Highest Circulated Amongst ABC Member Publications (across languages) July-December 2017. Retrieved from http://www.auditbureau.org.

Ahmed, S. (2010). The Role of the Media during Communal Riots in India: A Study of the 1984 Sikh Riots and the 2002 Gujarat Riots. *Media Asia,* 37(2): 103–111.

Ahmed, S. (1986). The Language Press in India: A Case Study of Malayalam Newspapers. *Gazette,* 38(1): 71–82.

Bamezai, G., Kesharvani, P., Yumnam, B., Goswami, S., Pradhan, A., Roy, A., and Ambade, B.N. (2011). Impact of Internet on changing patterns of newspaper access and news-reading habits in India. *Media Asia*, 38(2): 110-121.

Baumann, H-C., Zheng, P., and McCombs, M. (2017). First and second-level agenda-setting in the 2014 Indian general election: a time-series analysis of party-media relation. *Asian Journal of Communication*, 28(2): 205-226.

Bayley, D.H. (1963). Violent Public Protest in India: 1900-1960. *The Indian Journal of Political Science,* 24(4): 309–325.

Bhattacharjee, A., and Agarwal, A. (2018). Mapping the power of major media companies in India. *Economic and Political Weekly*, 53(29): 48-57.

Billett, S. (2010). Dividing climate change: Global warming in the Indian mass media. *Climatic Change,* 99(1-2): 1–16.

Blei, David M. (2012). Probabilistic Topic Models. *Communications of the ACM* 55(4): 77–84.

Borah, P. (2008). Examining media content: A case study of newspaper coverage of dowry in India, 1999–2006. *Asian Journal of Communication,* 18(4): 379–395.

Carey, J. (1965). The communications revolution and the professional communicator. *The Sociological Review*, 13(1): 23-38.

Carey, J. (1997). The Press, Public Opinion, and Public Discourse: On the Edge of the Postmodern. In Carey, James (Ed.), *James Carey: A Critical Reader* (pp. 228-258). Minneapolis, MN: University of Minnesota.

Chadha, K. (2017). The Indian news media industry: Structural trends and journalistic implications. *Global Media and Communication*, 13(2): 139-156.

Chakravartty, P., and Roy, S. (2013). Media pluralism redux: Towards new frameworks of comparative media studies 'beyond the West.' *Political Communication*, 30(3): 349-370.

de Souza, R. (2007). The construction of HIV/AIDS in Indian newspapers: A frame analysis. *Health Communication,* 21(3): 257–266.

de Souza, R. (2010). NGOs in India's elite newspapers: A framing analysis. *Asian Journal of Communication,* 20(4): 477–493.

Downey, J., and Neyazi, T.A. (2014). Complementary and competitive logics of mediatization: Political, commercial, and professional logics in Indian media. *The International Journal of Press/Politics*, 19(4): 476-495.

Dutta, A.N. (2019). How the Times of India, The Hindu, and the Telegraph were 'banned' from receiving gov't ads. Retrieved from https://theprint.in/india/how-the-times-of-india-the-hindu-the-telegraph-were-banned-from-receiving-govt-ads/255412.

Earl, J., Martin, A., McCarthy, J.D., and Soule, S.A. (2004). The Use of Newspaper Data in the Study of Collective Action. *Annual Review of Sociology,* 30(1): 65–80.

Friedlander, P., Jeffrey, R., and Seth, S. (2001). Subliminal Charge: How Hindi-Language

    Newspaper Expansion Affects India. *Media International Australia incorporating*

    *Culture and Policy,* 100: 147–165.

Ganguly, S., Diamond, L., and Plattner, M.F. (2007). *The State of India's Democracy*. Baltimore,

    MD: Johns Hopkins University Press.

Goffman, E. (1986). *Frame Analysis*. Boston, MA: Northeastern University Press.

Guo, L., Vargo, C.J., Pan, Z., Ding, W., and Ishwar, P. (2016). Big social data analytics in

    journalism and mass communication: Comparing dictionary-based text analysis and

    unsupervised topic modeling. *Journalism and Mass Communication Quarterly*, 93(2):

    332-359.

Hindustan (2016) Annual Report 2015-2016. New Delhi: Hindustan Media Ventures Limited.

Hu, M., and Liu, B. (2004). Mining and summarizing customer reviews. *Proceedings of the*

    *Tenth ACM SIGKDD International Conference on Knowledge Discovery and Data*

    *Mining*. Seattle, WA.

Jain, S. (2017). *Rethinking Media Systems: Insights from a Case Study of Paid News in India*

    (Doctoral dissertation). University of Westminster, London.

Jeffrey, R. (1993). Indian-language newspapers and why they grow. *Economic and Political*

    *Weekly,* 28(38): 2004–2011.

Jeffrey, R. (1994). Monitoring Newspapers and Understanding the Indian State. *Asian Survey,*

    34(8): 748–763.

Joshi, S. (1996). Mass media and cultural identity: Issues of ethnic co-existence in India. *Asian*

    *Journal of Communication,* 6(1): 124–139.

Krishnatray, P., and Gadekar, R. (2014). Construction of death in H1N1 news in The Times of India. *Journalism,* 15(6): 731–753.

Lee, S.T., and Maslog, C.C. (2005). War or peace journalism? Asian newspaper coverage of conflicts. *Journal of Communication,* 55(2): 311–329.

Maier, D., Waldherr, A., Miltner, P., Wiedemann, G., Niekler, A., Keinert, A., Pfetsch, B., Heyer, G., Reber, U., Haussler, T. and Schmid-Petri, H. (2018). Applying LDA topic modeling in communication research: Toward a valid and reliable methodology. *Communication Methods and Measures*, 12(2-3): 93-118.

Marsh, H.L. (1991). A comparative analysis of crime coverage in newspapers in the United States and other countries from 1960–1989: A review of the literature. *Journal of Criminal Justice,* 19(1): 67–79.

Mody, B. (2015). How well do India's Multiple Language Dailies Provide Political Knowledge to Citizens of this Electoral Democracy? *Journalism Studies,* 16(5): 734–749.

MRUC (2017). Indian Readership Survey 2017. Retrieved from http://mruc.net/press.

Mudgal, V. (2011). Rural Coverage in the Hindi and English Dailies. *Economic and Political Weekly,* 46(35): 92–97.

Murthy, C., Ramakrishna, C., and Melkote, S.R. (2010). Trends in first page priorities of Indian print media reporting-A content analysis of four English Language newspapers. *Journal of Media and Communication Studies,* 2(2): 39–53.

Murthy, D. (2000). Developmental news coverage in the Indian press: An analysis of four dailies. *Media Asia,* 27(1): 24–53.

Myers, D.J., and Caniglia, B. (2004). All the Rioting That's Fit to Print: Selection Effects in

    National Newspaper Coverage of Civil Disorders, 1968-1969. *American Sociological*

    *Review,* 69(4): 519–543.

Natarajan, J. (1955). *History of Indian journalism.* Delhi: Publications Division, Ministry of

    Information and Broadcasting.

Narayana, U., and Kapur, P. (2011). Indian media framing of the image of Muslims: An analysis

    of news coverage of Muslims in English newspapers of India. *Media Asia,* 38(3): 153–

    162.

Nayar, B.R. (1975). *Violence and Crime in India: A Quantitative Study*. Delhi: Macmillan

    Company of India.

Neyazi, T.A. (2009). *Media Coverage and Hindi Newspapers: Changing Institutional and*

    *Discursive Dimensions, 1977-2007* (Doctoral dissertation). National University of

    Singapore.

Neyazi, T.A. (2010). Cultural imperialism or vernacular modernity? Hindi newspapers in a

    globalizing India. *Media, Culture & Society,* 32(6): 907–924.

Neyazi, T.A. (2011). Politics after vernacularisation: Hindi media and Indian democracy.

    *Economic and Political Weekly,* 46(10): 75–82.

Ninan, S. (2007). *Headlines from the Heartland: Reinventing the Hindi Public Sphere*. Los

    Angeles, CA: Sage Publications.

Ortiz, D., Myers, D., Walls, E., and Diaz, M.E. (2005). Where do we stand with newspaper data?

    *Mobilization: An International Quarterly,* 10(3): 397–419.

Pan, Z., and Kosicki, G. (1993). Framing analysis: An approach to news discourse. *Political*

    *Communication,* 10(1): 55–75.

Pandey, A. (2017). Gujarat Elections Through the Eyes of the Hindi Media.

Peterson, M.A. (1996). *Writing the Indian Story: Press, Politics and Symbolic Power in India* (Doctoral dissertation). Brown University, Providence, RI.

Peterson, M.A. (2015). Speaking of news: Press, democracy, and metapragmatics in a changing India. *American Ethnologist,* 42(4): 673–687.

Priyadarsini, S. (1984). Crime news in newspapers: A case study in Tamil Nadu, India. *Deviant Behavior,* 5(1-4): 313–326.

Ramaprasad, J., Liu. Y., and Garrison, B. (2012). Ethical use of new technologies: Where do Indian journalists stand? *Asian Journal of Communication*, 22(1), 98-114.

Rao, U. (2008). Writing Infotainment: Commercialisation and the Emergence of a New Style of Political Reporting in India. *Proceedings of the 17th Biennial Conference of the Asian Studies Association of Australia*. Melbourne, Australia.

Rao, U. (2010). *News as Culture: Journalistic Practices and the Remaking of Indian Leadership Traditions*. Anthropology of Media. New York, NY: Berghahm Books.

Rowe, D. (2011). Obituary for the newspaper? Tracking the tabloid. *Journalism*, 12(4): 449-466.

Rowlatt, J. (2018). The story barely reported by Indian media. Retrieved from https://www.bbc.com/news/world-asia-india-44280188.

Sengupta, R. (2014). Representing the spiral of violence: Secular media's coverage of the Muzaffarnagar and Saharanpur riots.

Simmons, R.E., Kent, K., and Mishra, V.M. (1968). Media and developmental news in slums of Ecuador and India. *Journalism Quarterly,* 45(4): 698–705.

Sonwalkar, P. (2002) 'Murdochization' of the Indian Press: From By-Line to Bottom-Line. *Media, Culture & Society,* 24(6): 821–834.

Sonwalkar, P. (2003). *Violence as Non-Communication: The News Differential of Kashmir and Northeast Conflicts in the Indian National Press* (Doctoral dissertation). University of Leicester, Leicester, UK.

Stahlberg, P. (2002). *Lucknow Daily: How a Hindi Newspaper Constructs Society*. Number 51 in Stockholm Studies in Social Anthropology. Stockholm: Almqvist & Wiksell International.

Udupa, S., and Chakravartty, P. (2012). Changing with *The Times of India* (Bangalore): remaking a post-political media field. *South Asian History and Culture*, 3(4): 491-510.

Varshney, A., and Wilkinson, S. (1996). *Hindu-Muslim Riots 1960-93: New Findings, Possible Remedies*. New Delhi: Rajiv Gandhi Institute for Contemporary Studies.

Vilanilam, J.V. (1975). Developmental News in Two Leading Indian Newspapers: A Quantitative Analysis. *Media Asia,* 2(1): 37–40.

Wasserman, H., and Rao, S. (2008). The glocalization of journalism ethics. *Journalism: Theory, Practice & Criticism,* 9(2): 163–181.

Weidmann, N.B. (2015). On the Accuracy of Media-based Conflict Event Data. *Journal of Conflict Resolution,* 59(6): 1129–1149.