Don’t trust #CDNMedia: A corpus-assisted discourse analysis of Twitter posts from eight Canadian communities during #elxn42

Jaigris Hodson, PhD.

*College of Interdisciplinary Studies, Royal Roads University, Victoria, BC, Canada*

Corresponding Author: Jaigris Hodson. Address: 2005 Sooke Rd. Victoria BC, Canada, V9B 5Y2. Phone 250-391-2600 X4598. Email jaigris.hodson@royalroads.ca

Word Count, inclusive:
Don’t trust #CDNMedia: A corpus-assisted discourse analysis of Twitter posts from eight Canadian communities during #elxn42

In this paper, the 2015 Canadian federal election is a case study, examining how Twitter is used to spread political news in eight Canadian communities outside major urban centres. For the month prior to the election, we examined Twitter content from eight communities across Canada, each with differing levels of traditional local media access (television, radio, and print). Preliminary analysis has revealed that statistically significant key terms discussed on Twitter did not reflect any specific locally important issue. Corpus assisted discourse analysis identified the hashtag #cdnmedia as a statistically significant categorization device developed in our Twitter communities. Further analysis of this hashtag showed a discourse that was highly partisan, and which presaged the social media attack on “media elites” observed in the 2016 U.S. election. This analysis suggests that despite its potential, Twitter may not currently provide a useful counterbalance for a declining local traditional news environment in smaller communities, but rather, connects and isolates communities suspicious of traditional media sources.

Keywords: Twitter, Local News, Election Information, Politics, Fake News, Community, #cdnmedia

Introduction

Originally designed for networking and to deliver mostly inconsequential information, social media is becoming more prevalent in political landscapes (Warren, 2011), while traditional local news environments are diminishing. Part of a global trend, local news outlets in Canada are closing faster than new ones spring up to replace them (Lindgren, Corbett and Hodson, 2017). This trend is concerning in light of a report by the Knight Commission (2009) which described the availability of local information as something which is “as vital to the healthy functioning of communities as clean air, safe streets, good schools, and public health” (2009, n.p). When the news being shared is political in
nature, one can argue that it is uniquely vital to society, as political news helps citizens make informed decisions, particularly during election time (Knight Commission, 2009). As traditional media outlets close, and particularly in light of recent Facebook algorithm changes, many people turn to alternative sources of news, like Twitter to find out about current and politically relevant information in their communities (Heravi and Harrower, 2015; Newman, 2009). This trend presents us with questions: Does Twitter currently function as an alternative political news source for communities outside major media centres, particularly when traditional news outlets are being closed? And if not, how is it currently functioning with respect to election news?

This paper will begin to answer these questions by way of an exploratory study which looked at key trending topics within eight Canadian communities with differing access to major media outlets during the 2015 federal Election in Canada. We start with a discussion of how Twitter has the potential to be an alternate source of local political news. Then we detail the results of our case study of election-related news in eight Canadian communities. Our results show that despite Twitter’s promise to level the information playing field, there is evidence of political polarization and conjecture within election related tweets, and crucially, at the local level, meaningful community news is scarce during election time. This suggests that Twitter has yet to realize its vast potential for local news dissemination in many communities in Canada.

**Twitter’s Promise**

*Local News in a Digital Age*

A growing body of international scholarship is connecting the decline of local news to social injustice and adverse social outcomes (Shaker, 2014). Tracking local news outlet closures and launches with an online map, Lindgren and Corbett (2016) have found that
the amount of local news available to citizens depends very much on where they live, with those in smaller Canadian communities most at risk (Lindgren, Corbett and Hodson, 2017). As local community news outlets are consolidated and/or closed, communities are forced to find new ways to connect with one another and share what matters to them. At the same time, traditional news outlets are, in many cases using social media platforms like Twitter to share news and draw users to their websites (Mitchell et. al., 2015), and younger generations are turning to social media for news (Anderson & Caumont, 2014; Hermida et al., 2012).

Journalists themselves see social media as both a threat and an opportunity for local news providers who simultaneously are compelled to adapt to a new media environment, and a multitude of new voices, while also recognizing the increased opportunities for relationship building, dialogue and storytelling (Carlsson and Nilsson, 2016). Focus group research suggests that a digital system that can aggregate local news from various sources and deliver the information to a community can be of great benefit to smaller communities, who have seen their access to local news drop over the last decade (Kavanaugh et. al., 2014). Through hashtags, which function as an information filtering system (Small, 2011), Twitter could potentially step in to fill this role – providing aggregated information to communities on current issues or events, such as elections.

**Twitter and Local News**

While a recent US based study found there was little discussion on Twitter about the high-profile local news stories covered by traditional media (Mitchell et. al., 2015), other newsrooms have discovered they could benefit from creating stories of interest to local communities (Ghosh, 2016). Similarly, the social connections afforded by Twitter increase people’s affinity for local news personalities and networks, meaning that by
making a social connection with others using Twitter, local news personalities could be increasing exposure to local news (Greer and Ferguson, 2011). When a large event or disaster occurs, journalist participation on Twitter becomes even more important, as journalists tend to play an important influencer role and thus serve as hubs for ad-hoc networked publics (Dailey and Starbird, 2014).

Twitter’s news relevance is increasingly evident. More users follow news outlets through Twitter than Facebook (Ju, Jeong, and Chyi, 2014). Furthermore, a Pew Research Center study showed that more than twice as many users followed breaking news on Twitter than on Facebook (59% versus 31%) (Barthel et al., 2015). In a Canadian context, Twitter is even more popular. According to a recent report by the Social Media Lab, 42% of online Canadians have a Twitter account (Gruzd, Jacobson, Mai, and DuBois, 2018). Moreover, research has shown that Canadians use Twitter, and hashtags such as #cdnpoli, to search for relevant real-time political news, and also to keep others informed (Small, 2011).

**Political News Challenges in an Online Information Flood**

Despite the fact that social media sites like Twitter offer an opportunity for new actors to take part in local news production and dissemination, the current state of political news in the West is rife with challenges. While Twitter and similar platforms have indeed resulted in unparalleled information flow between many different and often disparate publics (Rambukkana, 2015), its strength may also be a key challenge of the platform. In other words, the very affordances (Halpern and Gibbs, 2013) that make it possible for anyone to contribute and share information on Twitter have also led to a media environment where information overload, or what some would prefer to call “filter failure” is an issue (Shirky, 2008). To get around this problem, people tend to use both top-down and bottom up mechanisms. The top down mechanisms stem from the
platform itself and consist of algorithms that filter the content users see in their Twitter feeds based on user habits and preferences, effectively giving them more of what Twitter thinks they want to see (Pariser, 2011). Bottom up methods are developed organically by the users themselves, and involve the use of user-generated hashtags to find and sort information (Small, 2011). Both filtering strategies may inadvertently lead to polarization, as people choose to interact more with online communities where their existing points of view are reflected (Hai and Wa, 2017).

There may be a tendency for the more partisan or polarized actors to post on social media in the first place. The consumption of partisan news seems to be correlated with anger, and this anger has been shown to drive posting to social media (Hasell and Weeks, 2016). Scholars have found that on social media, content that reinforces pre-existing ideas made people perceive they better understood complex political issues (Wojcieszak et al., 2016), even if understanding was not actually present. Furthermore, the tone of coverage matters greatly. Martin (2008) found people with low levels of political awareness and knowledge paid more attention to political issues, and believed more was at stake, when the tone of the news was negative. With strong partisans more likely to actively look for content to support their existing political leanings, and moderates gradually withdrawing from political engagement, Wojcieszak et al. (2016) expressed concern that these trends were leading to more extreme political viewpoints and a more polarized media landscape.

#ELXN42 Methods and Design

Research Questions

This preliminary study uses the folksonomic nature of Twitter hashtags (Chang, 2010; Peters et. al., 2011; Brock, 2012) to identify relevant content for the 2015 Canadian Federal Election. We began with the most popular election-related hashtags, since as
described above, hashtags are an important way that citizens find information on a
trending or timely topic. By looking at the most popular election-related hashtags, we
hope to form an idea of what election news was considered by users to be relevant,
popular, and worthy of being found by others in communities underserved by or at risk
for losing, traditional local news sources, and we hope to gain insight into how much of
this information is locally relevant.

To do this, we used two popular election news related hashtags as a way to find the
most popular political information during the election, and once the content was
collected, we asked the following research question and subquestion, with a focus on 8
geoographically distinct Canadian communities, each with varying levels of exposure to
large media centres:

What were the main trending topics discussed in the month leading up to the
Federal election and what content is being shared across the most popular
hashtags?

• Were there any unusual and yet statistically significant trends that
  warrant additional attention, and if so, what does a discourse analysis
  reveal about these trending topics?

Choosing Eight Communities

We selected eight communities across Canada for this study that were located outside of
the major media hubs of Toronto, Montreal and Vancouver as these are the
communities most impacted by the closure of local news outlets (Lindgren and Corbett,
2016). There were variations in the number of local news outlets in each community
and they also differed in terms of urban form (rural/urban/suburban), geographic
location, population size and proximity to a major news centre. We included some
communities that had recently lost a local news outlet and others where the local news ecosystem had been relatively stable over time. This list of eight is not meant to be exhaustive, rather it represents a snapshot of Twitter use in a sampling of different communities. As such, the eight communities we chose were the following:

(1) **Ontario:**
- City of Kawartha Lakes (three local news outlets)
- Peterborough (seven local news outlets)
- Oakville (two local news outlets)
- Brampton (three local news outlets)
- Thunder Bay (six local news outlets)

(2) **Manitoba:**
- Brandon (two local news outlets)

(3) **British Columbia:**
- Kamloops (nine local news outlets)
- Nanaimo (four local news outlets)

**Twitter Sampling and Scraping Decisions**

Following Lachlan et. al., (2016), we used Tweetarchivist.com to scrape the Twitter API for the two most popular election related hashtags in Canada beginning September 21, 2015, and ending a day after the Canadian federal election (October 20,
Following Small (2011), we chose two of the most popular election associated hashtags. Though some communities had their own politically related hashtags (for example #brampoli), not every community did, and furthermore, these local hashtags, when used, were not directly associated with the 2015 Canadian federal election, which was national in scope. As a result, it was necessary to use the most popular national election related hashtags, as these would be used across all of our communities and allow us to compare apples to apples. We chose #elxn42 as it was identified by Twitter to be one of the most used hashtags in Canada in 2015 (Bowman, 2015), and we chose #cdnpoli as it was used by Small (2011) in her research.

We scraped a total of 1,264,276 twitter posts with the hashtags #elxn42 and #cdnpoli. To narrow this sample down and focus on the eight local news communities identified above we chose tweets that would reveal an affiliation with one of our eight communities. Since Twitter geolocation data is only accurate for a very small percentage of total tweets, we could not rely on geolocation to filter our dataset, so to find tweet content that was relevant to our local communities, we filtered the dataset for the following:

(1) Tweeters who self-identified their location to be in one of our eight communities

(2) Tweets that mentioned one of our eight communities

We used an exhaustive list of related place names in order to find tweets from our eight communities, so beginning with the place names as identified in the list above, we then expanded to also search for shortened or colloquial forms of the place names in order to capture as accurate a sample as possible. We chose this strategy to deliberately include any possible mention of our communities, in order to find as many instances as possible of election news that might be relevant to the eight communities. This way we
could see not only what type of content was most likely to be shared by people with an interest in one of our eight communities, but we could also assess any possible sharing of locally relevant news among people who, by mentioning the name of their communities in their tweets, or listing their communities in their bios, demonstrated an interest in the location. Once we had filtered out all of the tweets that did not mention our communities in the bio or body of the tweet, we were left with 19,159 tweets for analysis.

**Corpus Assisted Discourse Studies**

We used corpus assisted discourse analysis to analyze the collected tweets. Corpus assisted discourse studies is defined as a subset of corpus linguistics in which discourse analysis is conducted with the assistance of digitized corpora (Bednarek, 2006; Partington, Duguid and Taylor, 2013). While this type of approach has been previously used to study news (Bednarek, 2006; Baker, Gabrielatos and McEnery, 2012) and social media data (Koteyko, Jaspal and Nerlich, 2013). Tong and Zuo, 2014), it is less commonly used to study news that is shared on social media networks (Papacharissi and de Fatima Oliveira, 2012), particularly with respect to political news. In this case, we followed closely the method outlined by Papacharissi and de Fatima Oliveira (2012): we scraped tweets using a third-party service, then cleaned the data and began our analysis with frequency analysis, followed by qualitative discourse analysis. We also, following Stubbs (1995), and Hodson (2013), conducted a Chi Squared analysis to determine key word in context (KWIC) against the Open American National Reference Corpus (OANC), which contains more than one million different word forms drawn from common written and spoken English. This method allowed us to see which key terms in the #elxn and #cdnpoli twitter corpus were statistically significant, helping to focus our attention for the qualitative discourse analysis.
Trends

Trends and Key Words

Since hashtags are essential for sharing information and creating online communities as described above, these categorizations have an outsized potential for spreading political messages and local news beyond the #elxn42 and #cdnpoli communities. We identified the 100 most statistically significant keyword by keyness value, and searched the sample for hashtags in order to reveal the top trending categories identified by tweeters. No local community related hashtags (such as #brampoli) were found in the top 100 words by keyness value. Instead, the top 100 included hashtags that were less localized, including bcpoli (509), canadavotes (312), cdnmedia (558), onpoli (589), stopharper (249), and topoli (231). Due to the potential of hashtags to share information beyond their immediate community, we dove further into our top key hashtags by looking at collocated words in the corpus for each hashtag in our top 100 key words. It was there that we uncovered some trends with the hashtag #cdnmedia that prompted further investigation. We focused our discourse analysis on #cdnmedia, hand coding all 558 tweets in the sample and discovered a partisan online community, national in focus, generally united in their distrust of traditional media sources.

The Curious Case of #cdnmedia

Using a chi-squared analysis to compare the top trending hashtags in the sample described above in terms of keyness, or likelihood that a word will occur more often than chance alone would dictate, revealed that the hashtag #cdnmedia was second in our sample only to #onpoli (see Table 1). #Onpoli’s popularity makes sense when the number of Ontario communities and population size of those communities in our sample are taken into account, but the statistical significance of #cdnmedia, which was
not immediately apparent, prompted us to undertake a deeper analysis into this hashtag, by conducting inductive coding of all 558 tweets that used this hashtag.

[Insert Table 1 near here]

All but two of the tweets linked to news stories, other tweets or additional web content. Accessing the links, we found that the content tagged with this hashtag was overwhelmingly partisan and also was mainly being used by the posters who expressed a lack of trust in the mainstream media coverage of the election. Thirty-two percent of the tweets using this hashtag declared that they felt the media in general, specific media outlets such as the CBC or the Globe and Mail, or specific news stories, were biased. Of these, nine percent of the tweets using this hashtag claimed that the media was intentionally dishonest or meddling in the election and 2 percent of the tweets using this hashtag insinuated or outright claimed that mainstream media sources were being bribed by politicians in return for preferred coverage. Words like “cone of silence” were used to claim that certain political actors, usually the Liberal Party of Canada, were having bad news buried or otherwise underreported by traditional media outlets. Tweeters using this hashtag also used phrases such as “willful ignorance”, “cherry picking” and “media party” to describe what they felt was intentional election meddling by traditional media sources.

Previous research has shown considerable political polarization on Twitter (Conover et. al, 2011) with little overlap between left wing and right wing communities. #Cdnmedia is no exception, showing mainly a group in support of the Conservative Party of Canada (see Figure 2). As outlined in Figure 2, combining both the tweets that were supportive of the Conservative Party of Canada or its leader, and those that were against the other parties in the election or their leaders showed a total of 273 out of 558
tweets (49%). The only other party which was given support using the #cdnmedia hashtag was the NDP party, but this party was only supported in 2 tweets out of 558.

[insert figure 2 near here]

Discourse analysis of the tweets in support of the Conservative Party showed that about 12 percent of them referred to polls from traditional media sources which indicated that the Conservative Party of Canada would win the election. This finding is curious when considered with the fact that #cdnmedia was mainly used to accuse the media of bias, but in this case was simultaneously used to highlight data from the traditional media that supported the political views of the poster. When not accusing the news media of dishonesty or bias, #cdnmedia was also used to claim that politicians were dishonest. Sixty-six of 558 posts 12 per cent were made for this purpose. Only one of the 66 posts was used to claim dishonesty in the Conservative Party of Canada, supporting Conover et. al.’s (2011) findings that there is little crossover between partisan communities on Twitter. Of these posts, the main target of the claims of dishonesty was the leader of the Liberal Party of Canada, Justin Trudeau, though some members of Parliament were also mentioned when they ended up in the news for a gaffe or misstep. None of the MPs that tweeters claimed were dishonest were from any of our eight communities, despite the fact that these #cdnmedia tweets represented a significant key hashtag in our eight-community Twitter sample.

Discussion

While the affordances of Twitter mean that this medium offers tremendous potential to assist in the spread of local news in the absence of legacy media sources, the reality of information sharing on Twitter is complex. In practice, political discourse using the hashtags #elxn42 and #cdnpoli confirm Small’s (2011) and Zappavigna’s (2014)
findings. That is, even within locally based Twitter communities, political hashtags function to aggregate information about events and channel users into discursive communities of like mind, rather than providing new information or substantive discussion on locally relevant political news.

As our analysis of #cdnmedia showed, hashtag use during an election certainly does seem to unite people in discursive communities (see Zappavinga, 2014; Small, 2011; Chang, 2010). That said, these communities may not be useful for spreading information that would have been spread through local traditional news sources. These discursive communities may even be detrimental to democratic discourse, in the sense that they spread misinformation or conspiracy. Like the 2011 election, there were pockets of polarization evident in the 2015 election data (Gruzd and Roy, 2012), and a key one revealed by this analysis was distrust in the Canadian media. Instead, national perspectives including conservative-minded media conspiracy theorists dominate, even in tweets scraped from smaller communities. Also evident was the fact that indeed bad news travels farther than good, and people prefer to share information that supports their already existing points of view (Gunnarsson and Lorentzen, 2014; Holbert and Benoit, 2009). This may be useful for getting people out to vote. It is likely less useful for getting them to vote in the best interests of their community (Wojcieszak et al., 2016).

While some users in our sample were alleging a ‘cone of silence’ in the media related to the political coverage, or lack of it in the case of some specific political news stories, what the data really shows is missing from news coverage on Twitter is locally relevant news stories. If there is indeed a cone of silence on the platform, it is one which silences community issues in the promotion of trending topics and clickbait headlines. Stories of alleged media malfeasance probably trend because conspiracy theories are
dramatic and polarization makes people feel good (Conover et. al, 2011). Popular media
figures and political leaders trend because they already possess influence and celebrity
online. In this sense, the cone of silence is one that could potentially create an
information access divide between those in major media centres and those in smaller communities, leaving less opportunity for people to participate in democratic activity
(Knight Commission, 2009).

The state of local news on Twitter, however, is not all bad news. It was
effacing to see tweets about political events and voting related calls to action –
indications that this platform does have some potential to be used deliberately to drive
local publics to events or sources that can potentially play a bigger role in the political
conversation. Perhaps by understanding the ways in which platforms like Twitter excel,
these platforms can be used in a meaningful way for specific, mainly event-related
information transmission during election time.

As an exploratory study, this research has some limitations that can be overcome
in the future. Though we examined the two most popular election related hashtags,
future research could explore whether these trends hold up for other hashtags and
newsworthy issues. Furthermore, future research can expand beyond eight communities
to see if the trends shown here are relevant elsewhere.

Acknowledgements, the authors wish to acknowledge the funding support of the Social
Sciences and Humanities Research Council of Canada (SSHRC) Insight Development Program
References


tracks-what’s-happening-local-news-outlets-across-canada


VanNest, A. 2016. Poll Results: Digital Publishers Can’t Agree on a Definition for Audience


Table 1. Type your title here.

Figure 1. Type your title here. Obtain permission and include the acknowledgement required by the copyright holder if a figure is being reproduced from another source.