The Twitter Citizen: Contributing to Civil Society Discussion or Adding to the Noise?

by

Brett Bergie

A thesis submitted in partial fulfilment of
the requirements for the degree of

MASTER OF ARTS
in
PROFESSIONAL COMMUNICATION

We accept the thesis as conforming to the required standard

                                                     Sept. 9, 2013

Dr. Jaigris Hodson, Thesis Faculty Supervisor	Date
School of Communication & Culture	
Royal Roads University	

                                                     Sept. 9, 2013

Dr. Gil Wilkes IV, Internal Committee Member	Date
Faculty of Communication Studies	
Mount Royal University	

                                                     Sept. 9, 2013

Dr. Roger Gibbins, External Committee Member	Date

                                                     Sept. 9, 2013

Dr. Phillip Vannini, Director	Date
School of Communication & Culture	
Royal Roads University	

The Twitter Citizen: Contributing to Civil Society Discussion or Adding to the Noise?

Abstract

This study examined the civic properties afforded by Twitter and considered whether hashtag communities achieve issues-pluralism in order to facilitate at least some viewpoints to popular expression otherwise absent from print media. Data sources included Twitter hashtag communities that formed around the 2013 Alberta Budget and the associated print media coverage. This inquiry found that while diverse actors contribute to the formation of Twitter hashtag communities, the associated discussion failed to drive issues-pluralism. Twitter's most apparent value to civil society is information exchange—both in terms of tweet content and hyperlinked content and multimedia. In spite of this strength, Twitter is ill-suited as a communicative forum for civil society. Discussion uptake and opinion expression were relatively modest among participants, and the conversation was overwhelmingly dominated and driven by agents of traditional news media intent on perpetuating roles in content gatekeeping and who operated in the service of profits.

Keywords: public debate, public sphere, public opinion, Twitter, print media

THE TWITTER CITIZEN: CIVIL SOCIETY DISCUSSION OR NOISE 3

<p style="text-align:center">Table of Contents</p>

Introduction

Civil, social, and political discussion among diverse actors makes an important contribution to the vitality of a democratic society. Some scholars have argued that publics can participate in open discourse and deliberation as well as exchange a wide range of information, viewpoints, and opinions through a network of communicative democratic spaces, known collectively as the public sphere (Gimmler, 2001; Dahlgren, 2006). Since the popular adoption of the Internet and Web 2.0 communication technologies, which enable Internet users to contribute web content with ease and participate in online social networks, scholars have wondered aloud about its capacity and limitations to constitute a more participatory and heterogeneous democratic discussion space (Gimmler, 2001; Bohman, 2004; Castells, 2008; Pariser, 2011). In addition, Web 2.0 tools like Twitter—a micro-blogging and social networking medium—help to transform people's relationship with media, from being passive consumers to critical observers (Benkler, 2006) and participants in bidirectional discussions that bypass government and media control (Castells, 2008). These considerations suggest a potential for citizens to harness new communicative and discursive spaces to foster issues-pluralism from which some viewpoints attain popular expression that might not have otherwise been reached.

This study considered hashtag Twitter discussion on the 2013 Alberta Budget and examined how the budget was discussed in print media. Created in 2006, Twitter has grown to host over 200 million active user accounts (Tsukayama, 2013, para. 3), suggesting a reasonably accessible medium with maturing functionality. In particular, Twitter users can deploy the @reply function to engage others in direct discussion and self-organize through the #hashtag to coalesce discussion around themes, subjects, and interests. The Alberta Budget was selected because it is a major public policy address of a Canadian provincial government with a scope

that touches all areas of public policy and public spending. Therefore, it was anticipated that an indefinite public would organize around relevant hashtags on Twitter to discuss the budget. Of concern to this study was whether Twitter provided opportunities for a discussion community of equal and diverse participants to form and foster pluralist civil, social, and political expression in which some viewpoints attained popular expression otherwise absent in print media. This study collected 2,608 relevant tweets over a three-day period that contained either or both the #AbBudget and #Budget2013 hashtags by setting up tweet archives through Tweet Archivist, an open-source software tool. Sweeps in the LexisNexis database were conducted to locate and collect 35 relevant print media articles over a five-day period that covered the Alberta Budget. Tweets and print articles were manually coded and analysed using content and discourse analyses.

This study found that Twitter may not be a suitable platform for civic expression as discussion uptake and opinion expression were relatively modest among participants, and traditional media agents dominated the Twitter discussion with adverse affects, including permeating the discussion with traditional media content and fragmenting the community by driving participants to traditional media platforms to prolong legacy revenue streams. By consequence, the discussion that unfolded on Twitter was laden with and driven by private interests.

Literature Review

The Public Sphere

The public sphere is a conceptual network of communicative spaces in which citizens come together, hold a plurality of ideas, resolve disputes, raise and discuss issues they see as relevant and important, and critique the state (Habermas, 2006; Dahlgren, 2006; and Gimmler,

2001; Warner, 2013). These are ideally open, discursive spaces conceptually distinct from both the state and economic apparatuses (Habermas, Lennox, and Lennox, 1964). Within these communicative forums, there are no formal decision-making mechanisms (Dalgren, 2006), just spaces for the circulation of ideas that have the potential to facilitate the development of public opinion and will-formation. Castells (2008) suggested that civil society is the organized expression of the views exchanged and deliberated over within the public sphere. He observed that "[w]ithout an effective civil society capable of structuring and channelling citizen debates over diverse ideas and conflicting interests, the state drifts away from its subjects" (p. 78). Bohman (2004) suggested three necessary conditions of a public sphere. First, a public sphere must be a social space that facilitates the expression of views, invites deliberations, and fosters the exchange of opinions. Second, participants must exhibit a commitment to freedom and equality in the communicative interaction. On this point Bohman elaborated by outlining a condition for turn taking where participants hear and respond to ideas and reasoning insofar as they shape the overall conversation. Third, communication must address an indefinite audience. Bohman elaborated that it is insufficient for the conversation merely to be overhead: in order to meet this condition, a conversation must be taken to address anyone (p. 133-134).

According to Habermas (1964), the ideal public sphere never fully materialized in practice. He argued that the pinnacle of the public sphere formed in the 18th Century when a new middle class—the bourgeoisie—established and met in public spaces and participated in rational civil discourse and acted as a public body (Habermas, Lennox, and Lennox, 1964). Eventually, this class made demands for democratic representation and insisted "the state take [its] views, honed and tested by rational-critical argument, into account" (Warner, 2013, p. 286). Other

scholars have taken issue with Habermas's claim that the bourgeois public sphere most approximated the ideal form, notably Fraser (1990) who critiqued Habermas's bourgeois conception as a "masculinist ideological notion that functioned to legitimate an emergent form of class rule" (p. 62). Scholars have also challenged Habermas's assumption that a single comprehensive public sphere is consistent with the ideal. They have instead suggested that a multiplicity of competing publics or counterpublics play important contributing roles in democratic vitality (Fraser, 1990; Warner, 2002). Other scholars have suggested that the public sphere is a network of spaces, with varying degrees of access and influence among individual settings (Gimmler, 2001; Dahlgren, 2006). Both viewpoints suggest that conceptual attributes of the public sphere can manifest among different communities or publics and within new communicative spaces.

The critical functions of the public sphere idealized by Habermas eroded as private and public became less distinct and more intertwined. Large corporations bought up and controlled the press and attended to profits (Warner, 2013), facilitating access to the public sphere to non-bourgeois stratum of society (Habermas, Lennox, and Lennox, 1964) and the fragmentation of the public into competing interest groups (Fraser, 1990). According to Habermas, the character of the public sphere was altered, a transformation he termed 'the refeudalization' for its reintroduction of representative public properties. As large organizations and interest groups strove for political influence and sought compromise with the state, they circumvented broader public participation and debate in the process (Habermas, Lennox, and Lennox, 1964; Warner, 2013; Gerhards and Schäfer, 2010). Warner (2013) elaborated on Habermas's argument by observing that the state, political parties, interest groups, and large corporations have become

adept at manipulating the public sphere for profit and political power. Through marketing tactics, deployed by both political and commercial industries, political and economic players manipulate public opinion by creating uncritical customer/voter affinity that translates into increasing sales/votes over inordinate periods of time (p. 286-287). He wrote, "The ultimate goal in political marketing is thus the same as in commercial marketing: to "win" a loyal customer base, one that trusts [a] brand to do the thinking for them […]" (Warner, 2013, p. 268). A culture of rational critical debate is diminished in the process.

Scholars such as Dahlgren (2006) and Agre (2004) have noted that public sphere theory tends to emphasize genuine deliberation and rational discussion among citizens. The risk then is that scholarly inquiry may overlook civil properties that manifest from everyday discussion (including emotional discussion), experiences, and reflections (Dahlgren, 2006; Agre, 2004), suggesting:

> If we wish to be conceptually precise, we could say that 'messy conversation' is part of the larger terrain of civil society, but as it begins to take on political connotations, as it becomes in some sense civic, it activates the [informal track of the] public sphere. (Dahlgren, 2006, p. 279)

Similarly, Agre (2004) suggested in his critique of literatures on prominent political theories that the ability to bring an issue to the public fore relies on strategic and tactical work in which relationships and trust or, in other words, social networks act as enabling assets (Agre, 2004).

If the public sphere is comprised of a network of diverse and communicative spaces, then critical evaluation must be directed at communities that form in new spaces to discuss civil, social, and political matters at least some of the time. Do the properties of these new

communicative spaces and the behaviour of participants animate the public sphere and thus add to its network? Since the popular adoption of the Internet, scholars have wondered aloud about its capacity and limitations as a new arena for a more participatory and heterogeneous democratic discussion and information exchange (Gimmler, 2001; Bohman, 2004; Castells, 2008; Pariser, 2011). Specifically, Web 2.0 is of interest for its properties that enable users to add or respond to web content with ease (e.g., weblogs and discussion boards) as well as form networks with peers and communities (e.g., social media) (Gerhards and Schäfer, 2010; Small, 2011; Larsson and Hallvard, 2011; Kim, Hsu, Gil de Zúñiga, 2013). These are important properties that suggest a potential for broad, diverse actors to assemble, self-organize, and transform everyday experience and critical observation into civil, social, and political discussion and public opinion formation. The functional characteristics of public sphere theory offer a framework from which to assess and evaluate the richness of democratic discussion in new communicative spaces and communities.

Citizens Changing Relationship with Media

Social media, a prominent component of Web 2.0, allow users to form social networks based on interests and interpersonal relationships, including offline social networks (e.g., school and work relationships) for the exchange of information, viewpoints, news, and other user-generated content (Kim, Hsu, and Gil de Zúñiga, 2013). These characteristics transform the relationship between citizens and mass media: the means of content production and reaching large networked publics are increasingly accessible and widely available from people's homes, workplaces, and pockets through a range of devices with Internet connectivity (Gerhards and Schäfer, 2010); networked media also enable and reorient individuals from passive media

consumers to critical observers and potential participants of a conversation (Benkler, 2006).

Considering these trends, Castells (2008) perceived a horizontal network of citizen actors

engaged in bidirectional discourse and, importantly, bypassing mass media and government

control (p. 90). Through these horizontal networks of communication, users exchange

information and facilitate ad hoc mobilizations of citizen expression (p. 86). The potential effect,

according to some scholars, is that the many contribute to setting the agenda of public

discussion, not the few inside the traditional mass media (Benkler, 2006; Gerhards and Schäfer,

2010). Access, immediate participation, and peer-to-peer and bidirectional communications

transform the old model of prohibitively expensive unidirectional communication (Jenkins, 2006,

p. 208-209) in which media owners enjoy inordinate power over shaping public opinion

(Benkler, 2006, p. 12).

Does it follow then that these trends point to the demise of tradition media markets and

industries? Jenkins (2006) argued no. He described a significant shift in paradigm, from

medium-specific content and delivery to content that flows across multiple media platforms: in

other words, media convergence (Jenkins, 2006, p. 243). Studies concerned with political debate

on Twitter during the 2010 Swedish Election and 2012 U.S. Presidential Election respectively

illustrated a form of media convergence; both showed spikes in Twitter activity directly linked to

either televised debates or media coverage of offline events such as political rallies or

conventions during the campaigns (Larsson and Hallvard, 2011; Wang, Can, Kazemzadeh, Bar,

and Narayanan, 2012). Other researchers found that the majority (over 85 per cent) of trending

topics on Twitter were headlines such as breaking news or more persistent news subjects, such as

professional sports teams, cities, and brands (Kwak, Lee, Park, and Moon, 2010). Jenkins (2006)

observed that while convergence is driven by economic interests (e.g., to sell to consumers

through multiple channels and build consumer loyalty), the relationship between the media

industry and user participation is at a moment of transition, suggesting that "[t]he question is

whether the public is ready to push for greater participation or willing to settle for the same old

relations to mass media" (p.243).

These shifts and transitions elicit important questions about whether the general public is

seizing opportunities to fundamentally alter its relationship with media in favour of fostering a

more participatory, peer-to-peer, and bidirectional arena for civil discussion, thereby realizing

the potential Benkler (2006) and Castells (2008) have suggested possible. Alternatively, Jenkins

(2006) and Pariser (2011) have observed that traditional media actors are adapting to and

harnessing new media technologies to advance their own economic interest as well as their

powerful influence on shaping public opinion. Are these two viewpoints incongruent and

mutually exclusive? Or are the new media sufficiently robust and dynamic to enable both public

actors to contribute to a participatory, heterogeneous civil discussion on one hand and traditional

media actors to adapt and apply influence on public content consumption and public opinion

formation on the other?

Twitter as a Communicative Arena

Twitter is a popular micro-blogging social media platform, which allows users to create

posts of up to 140 characters, each known colloquially as a 'tweet'. Users can subscribe to

others' 'feeds' by 'following' them, and the relationship of following and being followed

requires no reciprocation. Tweets can take the form of a unidirectional broadcast or the basis of a

bidirectional conversation. Through cross-referencing functionality, Twitter users can address

one another specifically through the @reply (also known as a 'mention') format, though such conversation snippets are still circulated through the network as opposed to being private between the 'mentioned' users. In spite of the constraints associated with developing a tweet, Tumasjan, Sprenger, Sandner, and Welpe (2010) found that substantive issues can be expressed in 140 characters or fewer (p. 180) and that Twitter is not just about the dissemination of one's political opinions but also about discussing opinions with others: up to a third of all messages captured by the study were part of a conversation (p. 183). Twitter user practice includes sharing status updates and also secondary material, such as links and photos, which in effect extends Twitter's affordances well beyond the 140-character tweet constraint (Bruns and Burgess, 2012).

An important mechanism for organizing discussion on Twitter is the hashtag, which is user generated and bears a strong relationship to the discussion topic or theme. A hashtag is created by placing a hash sign (i.e., #) in front of an alphanumeric phrase or code that bears some relationship to a theme. Yang, Tao, Zhang, and Qiaozhu (2012) considered how Twitter users deploy hashtags and observed dual purposes: first, it is tag of content, and second, it is a symbol of community membership. The hashtag #BPspill illustrates the act of bookmarking content on the British Petroleum oil spill in the Gulf of Mexico, while #VoteForObama illustrates a symbol of community membership (Yang, Tao, Zhang, and Qiaozhu, 2012). Hashtag communities have an important distinction from follower-followee networks. In a follower-followee network, content flows from a particular user to only those who have opted to follow the user. Tweets that include a hashtag effectively form a bridge between the discussion community, which is held together by the hashtag, and each member's own network (Bruns and Burgess, 2011). Tweets that include a hashtag are disseminated to anyone following that hashtag. Twitter applications

facilitate access to tweets from specific accounts or use of search functionality to view tweets

containing particular search keywords or hashtags (Bruns and Burgess, 2012). Given these

features and open access, tweets are generally directed at and available to an indefinite audience.

When inconsistencies in hashtag adoption emerge, Twitter users actively coordinate to

resolve such conflicts and promote the adoption of the preferred hashtag (Bruns and Burgess,

2011). Alternatively, users will also work to split themes and discussion as the conversation

diverges or shifts. However, hashtag consistency and adoption are perpetual problems because

users may misspell hashtags or leave them out entirely, resulting in conversation contributions

existing outside of the themed thread (Larsson and Hallvard, 2011; Bruns and Burgess, 2011).

There is also an ongoing risk of conversations springing off of a hashtag discussion to the

exclusion of everyone else following the hashtag. This can happen because of the communicative

overlap in Twitter. For instance, two discussion participants in a hashtag community may also

belong to one another's follower-followee networks and as soon as the hashtag is omitted from

an evolving discussion or dispute, the participants are no longer discussing among (or in full

view of) the hashtag community (Bruns and Burgess, 2011). Discussion of current events can

dynamically unfold on Twitter—even in real time—in large part because of the hashtag and

instant publishing. This is a significant departure from traditional print media, for which stories

are written, edited, and published, often after an event has occurred (Bruns and Burgess, 2011).

Other studies' findings on Twitter discussion suggested some incongruence between the

medium and democratic discussion space and raised questions about the quality of interaction

between actors on Twitter (Larsson and Hallvard, 2010; Small, 2011; Chew and Eysenbach,

2010; and Tumasjan, Sprenger, Sandner, and Welpe, 2010). Critical observations have noted a

tendency on Twitter for a small cohort of prolific users to dominate discussions (Tumasjan,

Sprenger, Sandner, and Welpe, 2010; Small, 2011) and that tweets seem largely concerned with

dissemination rather than conversation (Larsson and Hallvard, 2010). Building on this latter

finding, Small (2011) noted that conversation contributions measured by retweet and @reply

activity comprised a relatively small portion of tweets, as did opinion expression (p. 887-888).

By performing a content analysis of tweets gathered from a generic Canadian political hashtag,

#cdnpoli, Small (2011) found that informing was the primary function of tweets. "The majority

of tweets were informative, that is, they disseminated online information through the hashtag"

(Small, 2011, p. 883). Similarly, Chew and Eysenbach's (2010) study on tweet content during

the 2009 H1N1 outbreak found that that most commonly tweeted material was news and

information on H1N1. Information is not without value to democratic discussion, however.

Indeed, Small (2011) suggested that sharing information is an important attribute of citizenship

and basis for democratic discussion (p. 890). Other scholars have argued that the potential for the

Internet to be an instrument of empowerment or subordination depends upon the manner in

which users deploy it: if users are concerned for and deliberate about reflexive and democratic

discourse, then the potential exists they will achieve it (Bohman, 2004, and Iosifidis, 2011).

Consider that over 200 million active users contribute over 400 million tweets per day

(Tsukayama, 2013, para. 3) on an indefinite range of subject matter and themes. Are

communities of such magnitude static, or are they—as Bohman (2004) and Iosifidis (2011)

suggested—agile, adaptable, and self-organizing? That Twitter users can themselves foster

conditions to enhance the quality of interaction and thereby the quality of outcomes is an

empowering notion, if true.

Research Design

Research Methods

Twitter hashtags, as described above, create a data gathering opportunity to locate and capture tweets that form around political events and, perhaps, capture political discussion. Hashtags also organize communicative space for an identifiable community of Twitter users. As Small (2011) has shown, Twitter users organize ongoing political discussion around general political hashtags, as in the case of #Cdnpoli, which is a hashtag about Canadian politics and in particular federal politics, and is a common tag for discussion among people of all political party affinities (p. 879). The tag attracted a broad range of users, including active citizens, bloggers, media organizations, journalists, and interest groups (p. 882). In addition, hashtags can relate to more specific and time-limited political events, as in the case of #DNC2012 for the 2012 Democratic National Convention, in order to organize relevant Twitter discussion over a fixed period (i.e., the useful life of an event).

This mixed methods study focused inquiry on the 2013 Alberta Budget and considered data collected from relevant Twitter discussions and print media articles, columns, and op-eds. A focus on the provincial budget was appropriate to this study's purpose because government budgets deal with all areas of public policy and program spending and are controlled, predictable events, as explained below. Given this, it was expected that the Alberta budget would attract an active and multi-faceted discussion on Twitter from a broad cross-section of society, though not necessarily a representative sample. In other words, a person with a loved one residing in a long-term care setting might have a burning issue to discuss as well as a unique perspective to add on that area of public policy. Similarly, a farmer operating adjacent to a sour gas well might take an

active interest on land-use policy relative to incongruent industries in relative proximity. It was also anticipated that discussion would unfold among a variety of actors, including informed citizens, academics, and journalists, who would impart thoughts on areas public policy based on intellectual curiosity rather than direct practice.

Data and Data-Gathering Tools

Sampling Techniques

The first principal data source for this study was obtained from the micro-blogging service Twitter. Bruns and Burgess (2012) noted that Twitter's Application Programming Interface (API) enables research into news and current events by tracking keywords and/or hashtags to capture any associated tweets (p. 805). This effort can be aided by open-source solutions, such as Tweet Archivist (http://www.tweetarchivist.com), which is a commercial Twitter data provider that allows customers to subscribe to and build an archive of tweets based on a keyword, hashtag, or phrase. Any established archive is collected on a server controlled by Tweet Archivist, and the data can be exported into an Excel file on demand. Once the archive for this study was initiated, every tweet that met the search criterion was captured and archived until the researcher closed the archive. All tweets collected were publicly available online; none were password protected, and none required an actual Twitter account to view. This study collected tweets posted on or between March 5, 2013 and March 7, 2013 and only those that contained either or both of the following hashtags: #ABbuget and #Budget2013. In total, 2,608 were used in this study.

To supplement the dataset on tweets, print media articles covering the 2013 Alberta Budget were collected and analysed in order to provide a point of comparison on the nature of

discussion unfolding on Twitter and in print. For instance, are some tweets taking a form of popular expression that is otherwise not evident in the print media, or is the Twitter discussion merely amplifying topics and ideas raised in print? Sweeps in the LexisNexis database were conducted to identify and locate print media articles, columns, and op-eds that related to or discussed the 2013 Alberta Budget via a simple search for a keyword, as modelled by Epstein and Segal (Epstein and Segal, 2000, p. 73). Relevant articles formed a basis to assess the interaction with and engagement in different public policy and spending areas of the budget as represented in print media and a point of comparison to the budget discussion on Twitter. Search criteria included search terms 'Alberta Budget,' published in 'all news—English,' and published on or between March 4, 2013 and March 8, 2013. This query yielded 104 news articles, columns, and op-eds. However, after eliminating duplication (e.g., syndicated stories), the total sample registered 35 print media sources.

Study Conduct

Preliminary queries through Tweet Archivist and search.twitter.com enabled a number of hashtags aided in determining those hashtags that the Twitter community had selected or preferred to organize discussion around the Alberta Budget. This resulted in identifying #ABbudget as a preferred hashtag for archiving relevant tweets. In the days leading up to the Alberta Budget presentation, the Alberta Government invited interested people through its websites (http://alberta.ca and http://budget2013.alberta.ca) to participate in the budget discussion through the hashtag #Budget2013. Members of the Legislative Assembly, among others, also helped to raise the prominence of this particular hashtag to organize budget

discussion. Based on these outcomes, two separate archives were established on Tweet Archivist, #Abbudget and #Budget2013, to collect and archive tweets containing either or both hashtags.

Both archives commenced tweet collection on March 3, 2013 and completed collection on March 15, 2013. During this period, just under 20,000 tweets were collected from the two hashtag archives. Monitoring two hashtags produced many duplicate tweets because some contributors supplied both hashtags (#Abbuget and #Budget2013) in their tweets, and this duplication had to be resolved. The more generic hashtag #Budget2013 yielded a huge volume of noise from international or other Canadian jurisdictions, which required elimination from the data sample. The data sample was culled further in favour of focusing on the immediate days leading up to the delivery of the Alberta Budget, the actual presentation of the budget, and the immediate hours following the presentation, effectively 2,608 unduplicated tweets posted on March 5, 6, and 7, 2013.

The sample periods for both Twitter data and print data were brief. This determination was based on provincial budget presentations being controlled and predictable events. They are matters of routine and tradition and follow a particular sequence of events of which informed citizens, media professionals, and other actors are familiar: the presentation is scheduled in advance and broadly communicated; government and opposition parties set expectations; there are controlled leaks of information; the budget presentation is delivered and carried live through multiple media channels (e.g., television, radio, online audio/video streaming); news media and other groups participate in budget lock up in order to release budget highlights and analysis as soon as the government-imposed embargo is lifted; and the government, opposition parties, and advocacy/interest groups push out their communications and analysis (i.e., they communicate

their spin or preferred budget narrative) to the public. Given these considerations, it was expected that discussion on the budget would immediately swarm both print media and relevant Twitter hashtag communities in anticipation of, real time with, and following the scheduled budget presentation.

Methods of Analysis

The data were analysed using content and discourse analyses. The research question of concern to this study was whether the discussion on Twitter supported the functional characteristics of the public sphere, including the formation of a community of equal and diverse participants concerned with pluralist civil, social, and political expression. There were four units of analysis in this study. The first was each individual tweet. The tweet needed to include either or both of the hashtags #ABbudget or #Budget2013. Each tweet was read and manually coded for its discussion properties. Analysis considered indicators of dialogue, such as the exchange of views, turn taking, and speech acts that contribute to the course of the interaction. These indicators were adapted from Bohman (2004, p. 133–134). In Mascaro, Black, and Goggins (2012) study on civic discourse on Twitter during the two candidate debates of the 2012 recall election of the Wisconsin Governor, the authors coded discussion participants by those who tweeted once over the two debates, those who tweeted once in one debate and more than once in another debate, and those who tweeted more than once in each debate (p. 307). Following from this model and given this study's concern for discussion, two groups of Twitter contributors were identified: a prolific group of users posting 10 tweets or more over the sample period and a moderate group of users posting at least three and up to nine tweets.

Second, each tweet was read and manually coded to determine whether civil properties were assumed, an approach adapted from Chew and Eysenbach (2010) and Small (2011). Indicators included raising opinions or concerns, commitment to equality and respect, and tweets that addressed an indefinite public (Bohman, 2004). The coding scheme was adapted from Small (2011) and grew in all units of analysis as new themes emerged from the data or as infrequently used categories were collapsed into larger concepts. Where multiple codes applied to a tweet, all applicable codes were used. (See Table 2: Coding Scheme.)

Third, Twitter profiles were considered in order to code types of discussion participants as established societal actors, e.g., news media personalities, politicians, associations, and labour unions, as modelled by Small (2011). Having attributes of organization and communications capacity outside of Twitter to disseminate widely was the principal basis upon which actors were considered established. All others were assumed to fall under the category of active citizens. Twitter public profiles can include full name (or alias), location, brief biography, a web URL, and number of tweets of the user.

Fourth, tweets and print articles were read and coded for subject matter. These included themes such as taxes, funding cuts, accountability, government accounting practices, economic diversification, and vulnerable populations. (See full roster of coded subject matter on page 46). After coding, consideration was given to whether discussion on a particular theme in Twitter attained some level of popular expression that was not otherwise represented in print.

Findings and Discussion

In this section, analysis will focus on identifying discussion participants and contribution volume by user-type, comparing subject matter between Twitter discussion and print coverage of

the Alberta budget, identifying incidents of discussion and civil engagement on Twitter, and considering the influence of traditional media actors on the Twitter hashtag communities. This study sought to examine whether Twitter affords opportunities for diverse participants to form a community concerned with civic, social, or political viewpoint exchange and from which some attain popular expression otherwise absent from print media.

Who Participates?

In total, 1,004 unique Twitter accounts contributed 2,608 tweets that included one or both of the hashtags #ABbudget and #Budget2013. Twitter users established #ABbudget to capture discussion on topics related to the 2013 Alberta Budget, and the Government of Alberta established and promoted #Budget2013 on its websites (http://alberta.ca and http://budget2013.alberta.ca) to serve the same purpose. Post frequency was relatively modest in the immediate days leading up to the budget. Unique tweets (i.e., unduplicated) posted on March 5, 2013 and March 6, 2013 were 32 and 84 respectively. The greater part of the data sample was contributed on March 7, 2013—the date when Alberta Budget 2013 was presented in the provincial legislature—when 2,492 unique tweets were posted.

The table below shows that the hashtag communities drew broad engagement from a wide range of actors. Contributors included active citizens, journalists, media outlets, labour unions, advocacy organizations and interest groups, financial institutions, elected officials, political parties, and government officials. While this range suggests some heterogeneity of participants, some actors contributed to the discussion with disproportionately more volume than others. The news media, in particular, collectively formed a dominant force that drove discussion, a dynamic that will be explored in more depth below.

Table 1: Prolific and Moderate Discussion Participants and Tweet Volume as a Per Cent of
Full Bank of Tweets

Affiliation	Number of unique Twitter Accounts	Total Tweet Volume	Per Cent of Full Bank of 2,608 Tweets	Notes
Active Citizens	134	729	28	
News Media	53	552	21	Established actors (from 85 unique Twitter accounts) contributed 35 per cent of all captured tweets
Financial Institution	1	91	3	
Elected School Board Officials	5	74	3	
Advocacy Organization	9	67	3	
Labour Unions	4	43	2	
Politician	6	38	1	
Alberta Government	4	37	1	
Political Party	3	23	1	
Total	**219**	**1,654**		

Prolific contributors consisted of 43 participants (or 4.3 per cent of the total Twitter

accounts in the sample) who contributed 10 tweets or more. In total, this prolific group

contributed 838 tweets or 32 per cent of the data collected from Twitter. This finding is generally

in line with Tumasjan, Sprenger, Sandner, and Welpe (2010), who found that the Twitter

discussion in their study was dominated by a small number of users: 4 per cent of users

accounted for fully 40 per cent of the messages (p. 183). Among this group of contributors was a

heavy traditional news media presence: 16 of the unique accounts represented in this group were

news media outlet or journalist accounts. Other established social, political, and economic actors

included, elected school board officials (3), labour unions (3), provincial politicians (2),

advocacy groups (2), a political party (1), government (1), and a financial institution (1). The

remaining 14 top contributors had no perceivable affiliation to established social, political, or

economic actors and were assumed to be active citizens.

A group of moderate discussion participants comprised of 176 individuals and

contributed at least three and up to nine tweets each during the sample period. Considering the

short sampling period, just three days, the minimum threshold of three unique tweet

contributions was demonstrative of at least more than a fleeting interest in or contribution to the

discussion. Certainly those contributors who registered post counts at the mid- and high-end of

the group demonstrated an active interest and sustaining engagement in the discussion. As a

whole, this group contributed 816 tweets or 31 per cent of the data collected from Twitter.

Within this group, the Twitter users whose accounts are affiliated with traditional news media

(both outlets and journalists) totaled 37. Other established actors were represented as follows:

associations (7), politicians (4), government (3), political parties (2), elected school board

officials (2), and a labour union (1). One hundred and twenty individuals within this group have

no perceivable affiliation to established social, political, or economic actors and were assumed to

be active citizens.

Combining both the prolific and moderate discussion groups into a whole captures the

most active participants in the discussion, each of whom contributed at least three tweets and up

to 91 tweets for the most active contributor. On the whole, these active contributors collectively

contributed 1,654 tweets or 62 per cent of the total tweet sample. Twitter accounts with no

apparent affiliation to established economic, political, or social actors contributed 28 per cent of

the total bank of 2,608 tweets. Established actors as a cohort contributed 35 per cent of the total

bank of tweets; the most active among them were traditional news media personalities or news

media outlets, which collectively contributed 21 per cent of the total volume of tweets. Among

established actors, the news media were dominant participants relative to post frequency. These

results are more intense than those documented by Small (2011) whose political discussion study

on the Canadian politics hashtag #Cdnpoli showed media participation at 9.6 per cent of total

tweet volume (p. 882). The next most frequently contributing cohort of established actors were a financial institution, elected school board officials, and advocacy organizations, all at 3 per cent of the total bank of tweets. The relatively low post count from elected officials, particularly Members of the Legislative Assembly, mirror the results in Small's study (2011), which showed politicians at 1.4 per cent of total tweet volume. Remaining then are 785 unique Twitter accounts that contributed only one or two tweets (or the remaining 954 tweets) to the Twitter discussion. No effort was made to investigate these public profiles to distinguish between established social, political, or economic actors and active citizens as their individual contributions to the discussion were minimal or fleeting.

How Does Subject Matter Compare Between Twitter and Print Media?

Twitter participants and print journalists addressed a wide range of subject matter related to the Alberta Budget on both the Twitter and print media channels. In sum, raised subject matter drove the development of 30 unique codes (a sum that excludes one code capturing irrelevant and unknown subject matter). (See Appendix for Table 3: Subject Matter Frequency of Occurrence and Per cent of Twitter and Print Media Datasets.) Some codes, however, are unique to a particular medium, rather than distributed across both, such as activity that promoted traditional media content on other platforms, which only materialized on Twitter and was coded as 'media shill.' Given the domination of established actors in the Twitter discussion, particularly news media actors, it is unsurprising that engaged subject matter on Twitter was generally consistent with that addressed by print media. Of some surprise, given the diversity of participants contributing to the hashtag communities, is the general consistency of weight (i.e., incident frequency) given to each subject matter in both Twitter and print. As an example, tweets

that addressed the Alberta deficit/debt accounted for 5.3 per cent of the total volume of tweets posted on the Alberta budget while print articles that addressed the same subject accounted for 7.4 per cent of the total subjects engaged by that medium.

There are 25 instances of shared subject matter (of 30 codes for subject matter) in both Twitter and print. The weight distribution between the two datasets on each subject varies by a mean of only 2.8 per cent, suggesting that subject matter addressed on either medium was given approximately the same weight (i.e., incident frequency), on average, by its respective agents. Of those 25 codes represented in both datasets, seven registered weight distributions between the two datasets at or in excess of 2.8 per cent (i.e., the mean): 'anticipation' (6.3 per cent additional weight in Twitter), 'economic diversification' (2.8 per cent additional weight in print), 'finance policy' (7.1 per cent additional weight in print), 'funding cuts' (4.4 per cent additional weight in print), 'public engagement' (8.0 per cent additional weight in Twitter), 'resource revenue' (7.4 per cent additional weight in print), and 'tax' (4.8 per cent additional weight in print). There were only two instances then—'anticipation' and 'public engagement'—where discussion on particular subject matter on Twitter achieved more weight than attained in print.

Tweets that expressed sentiments of anticipation, excitement, anxiety, or that suggested future orientation were coded as 'anticipation.' Examples include "Off to #yeg for #abbudget. Excited and Nervous about tomorrow. #petersdrivein & tunes should make it a nice drive up. #abgov #ableg #abpse," (2013, sic) and, "Sure feels like many people are holding their breath, waiting for #ABbudget #Budget2013. Sure is quiet around here. #ABleg" (2013, sic). In the first tweet, the author expressed both excitement and trepidation about the upcoming budget and noted future oriented activities, the drive to Edmonton (the provincial capital) with music and a

planned stop at Peters' Drive-In (an iconic Calgary-based small business). In the second

example, the author attempted to capture the collective mood and anxiety among his or her

associates in the lead up to the Budget presentation. There were 264 tweets that expressed some

form of anticipation.

Tweets that contained some attribute of deliberate public engagement such as sharing a

resource and inviting people to engage it, recognizing a process of public engagement,

encouraging some kind of collective action, or addressing a question with the expectation of

response from an undefined audience were coded as 'public engagement.' These generally took

the form of shared links, information, or event details and, importantly, included a clear

statement inviting people to do something to engage the resource, event, or question. A Member

of the Legislative Assembly (MLA) tweeted, "Please take some time to go through our

Responsible Change Budget. #buildingalberta #ABBudget http://t.co/1CHZJphSuW" (2013, sic).

In this example, the MLA encouraged the hashtag community to follow his supplied hyperlink to

consume a government-issued media release on Budget highlights. The tweet was constructed in

a way that suggests the intent was to engage the public, and the tweet gave a clear direction on

what action was expected, evidenced by the phrase "take some time to go through [the

government's budget]" by following the link. Another example includes, "So much for Alberta

being debt free.... What does everybody think. Is it a REVENUE or SPENDING problem?

#Budget2013 #ableg" (2013, sic). In this example, the author is looking to generate some

discussion among an indefinite audience and defines the parameters of debate: whether Alberta's

deficit and anticipated public debt is a consequence of a revenue or spending problem. There

were 360 tweets (or 13.8 per cent of the total tweet dataset) engaging the public or inviting public engagement.

Concerning attributes of civil society, something important happened on Twitter that deserves more exploration. One of the areas in which Twitter discussion separated itself from print media coverage was the area of public engagement. As demonstrated, Twitter users were deliberate about engaging the public by phrasing tweets to elicit some type of specific action or reaction from discussion participants. Considering only weight distribution given to the range of subject matter belies the full extent to which users may be expressing properties of civil society on Twitter. Thus, a deeper investigation and discussion are required. However, the general agreement in weight given by the Twitter community and print media across a broad range of subject matter also requires greater reflection. This general agreement suggests that news media actors are also driving the discussion, in addition to participating heavily on Twitter. Are these trends incongruent, or is there some type of happy merger forming on Twitter whereby news media actors can exercise disproportionate influence (i.e., exercise their traditional role) while regular citizens can still find meaningful ways to contribute to and enrich democratic discussion? In the sections that follow, this paper will explore the properties of civil society that emerged in the Twitter discussion on the budget and attempt to capture the nature and effect of news media participation in the discussion.

What Properties of Civil Society Emerged in the Twitter Discussion?

Discussion Properties

Tweets organized by hashtags tend to appear disjointed from conversation rather than form a tidy sequence, where one tweet bears a direct relationship to others that either

immediately precede or succeed it. What then are the elements of discussion within a body of tweets organized around a hashtag? Other studies suggested visible @replies (Small, 2011; Bruns and Burgess, 2011) and retweets that include a new comment (Small, 2011), particularly a high volume of such tweets, as appropriate indicators of discussion.

@Replies are strong indicators of dialogue because they directly engage a named user and either encourage a response or react in some way to another user's post. While specific users may be named in the tweet, this attribute does not prevent others in the network or hashtag community from seeing the tweet and responding. One hundred and eighty-two tweets in the sample were directed at least one other Twitter user via the @reply function. Furthermore, Twitter users used the @reply function in two distinct ways. The first is to simply name drop or 'mention' someone without the intention of engaging the other person, such as, "Watching @DougHornerMLA deliver Budget 2013 #abbudget" (2013, sic). This type of @reply is likely to go without a response from the named user because it lacks any kind of clear frame of reference. Given this lack of direct engagement to invite discussion, such @replies were excluded from analysis. The second use of @replies was much more important for the purposes of this research. In these instances, users named another individual by his or her Twitter alias in a way that engaged him or her in direct dialogue. Twitter users directly engaged one another 108 times in the captured data, accounting for 4.1 per cent of the total sample, which is congruent with Small's (2011) study that found @replies comprised 3.1 per cent of tweets (p. 888). An example was, "I look forward to seeing a post from [@specific user] on the #abbudget. You will be treating us to one, yes? #ableg" (2013, sic). In this instance, the tweet author directly engaged a named individual by his or her Twitter username and offered a specific frame for reply: his or

her perspective on the budget. The engagement is deliberate, and the request is clear. One could expect a reply that follows in turn and is specific to the matter.

@Replies presented an unanticipated problem. They were among the most difficult tweets from which to discern the subject or the context, which is illustrated by this tweet: "[@specific user] [@specific user] how do you figure? Experts project higher average numbers than in #ABbudget - would love to see your evidence…" (2013, sic). In this tweet, a disagreement of viewpoints emerged in discussion in which the poster was seeking some resolution, as demonstrated in his or her request for evidence. An outside reader, however, cannot be certain of the point with which the poster was taking issue, what experts to which the poster was referring, and what area of the budget to which the poster was drawing attention. This is a limitation of the platform. Given the constraints of a 140-character message, context is often abandoned. Twitter compensates for this by allowing users to click and expand conversations, so long as participants persisted in their use of the @reply function. This function reveals the full conversation thread, but this requires an extra step as well as a commitment to read several older messages along a thread, which is antithetical to the nature of Twitter, a real-time and instant information network. In other words, the point is not to respond to yesterday's tweet; it is to respond to one very recently posted. Given this, the immediate challenge for congruence between Twitter discussion and the public sphere is that @replies lose their publicness as the context holding the exchange together becomes known only to the participants while eluding all others—effectively excluding them.

Only 28 tweets or 1.1 per cent of the data sample were modified retweets that included the addition of a concise editorial comment. This occurred when an existing tweet was modified

and circulated again by a different user through his or her network and the hashtag stream, when the original tweet included a hashtag (as all tweets in this study did). Modified retweets can include a generic comment such as, "Some good insights MT_@[specific user] Just in time for #ABbudget: Beyond the Bubble @cleanenergycan http://t.co/Noo2XcW7jj #cdnpoli #ableg #climate" (2013, sic). This modified tweet, encourages the poster's followers to read the linked content because the poster had indicated his or her endorsement, as expressed by modified portion, "[s]ome good insights." It also exemplifies active engagement with them, not passive observation. In essence, this user was saying, "Hey, I read this and thought it insightful; you should read it, too." Modified retweets can also be used to engage the original poster, as this tweet shows: "Or [w]e are not balancing the budget at all RT @GregWeadickMLA: We are not balancing the #ABbudget on the backs of municipalities. #ableg" (2013, sic). Through this modified tweet, the retweeter reframed the issue first implied by a government backbench MLA. The government member asserted that the province is not balancing the budget on the backs of municipalities. The choice of phrase could imply inadvertently that the government presented a balanced budget, which it did not, so the Twitter user who modified the tweet contested the implied assertion. When posts are retweeted (including modified retweets), the original poster is notified through Twitter, which may draw the original poster's attention and, in turn, a subsequent response.

The behavior exhibited in these data show that discussion pick-up was quite low (at only 5.2 per cent of tweets in the sample), as it is measured by direct participant engagement through @replies and modified retweets. This low rate of discussion suggests a risk that participants may be merely broadcasting at one another. According to Bruns and Burgess (2011), not all users

who include a particular hashtag on their tweets necessarily monitor and respond to the unfolding

conversation coalescing around that hashtag. They suggest that some users are merely trying to

expand the exposure of their tweets rather than participate in the ongoing discussion of hashtag

community (Bruns and Burgess, 2011, p. 5). Barney (2004) explained that digital

communications are compelling because of their convenience. One can disseminate a message to

many different recipients instantly and with ease. But in the case of Twitter, to extend Barney's

arguments to that medium, there is no requirement to stay alert to the unfolding interaction over

an extended period by speaking, listening, deliberating, and thinking (p. 60). In an environment

where tweets lose currency quickly, only the latest posts count at any given moment one enters

the Twittersphere. This is a challenging environment in which to form a conversation because

reams of tweets are systematically discarded in favour of those that are more recently posted. It

is a conversation estranged from a common beginning and course of development.

Exchange of Views, Ideas, and Reasoning

Many tweets, (1,270 or 49 per cent of the sample) framed around budget content were

generally neutral in expression. The basis upon which this was determined was whether a tweet

excluded an overt expression of approval or disapproval. There simply were too few attempts by

users to signal agreement or disagreement. The nature of many tweets approached opinion

expression but ultimately fell short—oftentimes the position of the contributor was merely

implied rather then definitively stated. This is exemplified in a tweet issued by the official

account for the Alberta Liberals, the third party in the legislature: "70% of Albertans are open to

progressive taxes says @RajShermanMLA #ABbudget #bankruptbudget #ableg #ablib" (2013,

sic). Here, the tweet is merely amplifying a poll outcome, disconnected from context and source.

What is the reader meant to understand from this? Presumably that the Alberta Liberals join with the reported 70 per cent of Albertans at being open to progressive taxes, but openness is hardly an endorsement, particularly on a major area of tax policy. A troubling thought that arises from this post (and others like it) is the presumption that even the actors of an opposition party— which is in the business of offering a different governing vision for the province than the government of the day—struggles with articulating a clear opinion through the medium of Twitter.

Within the category of neutral expressions, an interesting pattern emerged that suggests a penchant among users for quoting lines or distilling specific commitments from the budget speech, for example, @ctvedmonton wrote, "#ABbudget: Alberta's publicly-funded post secondary institutions will get $2 billion in base operating grants. #yeg #ableg" (2013, sic). In this example, there is no context or benchmark from which other discussion participants could judge the merit of this announcement. In particular, the tweet does not account for the fact that base operating grants to institutions were actually reduced by 7.3 per cent in the 2013 Alberta Budget from the year previous. A degree of interpretation and context setting is missing in tweets of this type. Instead, they served to repeat uncritically the government's budget commitments and amplify its preferred budget narrative. In other words, tweets such as this one served to reiterate the messages of those in power.

Critical observation or opinion expression was not entirely void from the Twitter discussion. Some Twitter users made connections between policy announcements and other policy goals: One user wrote, "A stunning $39m cut from job training budgets. Good luck w/ that 'poverty elimination' promise" (2013, sic). This user points out the apparent incongruence

between a prominent public policy goal to reduce poverty rates while axing public training programs designed to engage cohorts of the population underrepresented in skills training and the workforce. In sum, 413 tweets or 15.8 per cent of the total data sample expressed opinion, which is generally in line with Small's (2011) study that found that 11.4 per cent of the sampled tweets expressed opinion. Opinion expression is important in political or civil discussion because it implies reasoning, invites deliberation and vetting from others on both premises and assumptions, and fosters the exchange of opinion among different actors (Bohman, 2004).

Another participant wrote, "#ABbudget let's hope for: progressive ic tax and that the province runs a deficit w a clear plan for saving. With int rts so low, red is OK" (2013, sic). This tweet articulates two opinions: first, the poster favours major tax reform shifting from a flat income tax regime to a progressive income tax structure, and second, the user outlines support for borrowing in a low-interest climate, even if the consequence is a budget deficit, qualified by an expectation for a savings plan. Such positions on tax structure and government deficits are taboo subjects in Alberta's political landscape, making this contribution to the discussion important for showing that the platform and user base did not prevent it. This tweet also featured a significant amount of compressed language, suggesting some effort and contemplation on the part of the author to squeeze in his or her perspective in 140 characters or less. While this might suggest an onerous effort is required to communicate opinion within a tweet, this particular example is an anomaly among the body of tweets coded as opinion expression; most were specific to one opinion and avoided excessive compressed language excepting well-known abbreviations (e.g., PC for Progressive Conservative Association of Alberta).

Overall, the community was timid with opinion and viewpoint expression, which is problematic for meeting the public sphere requirement of opinion exchange (Bohman, 2004). Exchange implies a conversation around opinions, giving one and receiving another or exchanging views and reasoning to arrive at opinion, collectively held. Castells (2008) elaborated on the idea of exchange and called for citizen debates over diverse ideas and conflicting interests (p. 78). Opinion was expressed in the data, but the notion of opinion exchange and active debate over diverse ideas and conflicting interests were not met.

Information Exchange

Small (2011) noted that Twitter users collect political information from the Internet and share with their followers as well as followers of relevant hashtags. In her study, 47 per cent of the examined tweets shared links to online information (p. 884). Twitter users in this study were relatively active with sharing online information. There were 542 posts, or 20.8 per cent of the sample, that shared information directly through attached hyperlinks. The different results between the two studies may be due to data skewing resulting from the presence of two political blog aggregators in Small's (2011) data that automated the dissemination of blog post titles and links (p. 882). Such aggregator activity was not apparent in this study's data, and the likely reason for which was that this study considered a time-specific hashtag community whereas Small's study considered an ongoing hashtag community.

Hyperlinks in these data included traditional media resources (321 instances or 59.2 per cent), civic resources (130 instances or 24.0 per cent), alternative media (57 instances or 10.5 per cent), partisan resources, (29 instances or 5.4 per cent), and labour resources (3 instances or 0.6 per cent). Shared content included traditional media budget coverage and commentary,

traditional media audio/visual coverage of the budget speech, the Legislative Assembly of

Alberta's webcast of the budget presentation, and detailed budget documents (e.g., the

government's strategic plan, ministry estimates, ministry business plans, operational plan, capital

plan, savings plan, and economic assumptions). After a digestion period, some individuals began

sharing more precise budget content, such as graphs on specific areas of public funding, the

spread between Alberta Crude prices and West Texas Intermediate prices, or public education

resource allocation at the school district level—for example: "Here are the school board

#abbudget breakdowns individually. http://t.co/2C9tzFhdVV #ASBA #abed" (2013, sic). Users

also shared their own photographs often capturing scenes unfolding in the Legislature Building's

rotunda, where politicians, media, organizational representatives, and members of the public

muster in the immediate period following the budget speech.

      In a unique instance of information exchange, a Twitter user wrote directly to the

premier's communications office through Twitter to express annoyance about budget news

releases being readily available though unaccompanied by the detailed budget documents. This

user wrote @ABPremierComms and said, "[W]here are estimates and fiscal plan tables? news

releases are not budget docs #ableg #budget2013 http://t.co/7c9zcBdBTw" (2013, sic). The

request was met with a reply from @ABPremierComms, "[@specific_user]

http://t.co/6aytwMYvio #ableg #budget2013" (2013, sic). The embedded hyperlink pointed the

Twitter member to the web location of the requested documents. This exchange is significant as

it showed the ease at which members of the public can connect with staff working closely with

the premier to have inquiries answered and attain public documents. It also showed that Twitter

can be an efficient medium for government to engage citizens directly and exchange information, without being dependent upon mediation from traditional media.

Budget documents are complex, and confusion emerged among Twitter discussion participants about particular areas of public investment or funding cuts. Twitter users often expressed confusion and openly and directly sought clarification from the community: "@specific_user can you help me understand #abbudget means for @AthabascaUniv? thanks!" (2013, sic). Another example: "@specific_user I'm assuming no increases for FCSS, but any cuts? #abbudget #ableg" (2013, sic). These types of tweets showed that Twitter users comprehend the medium to be more than an arena for dissemination. It can also be a medium to pose questions and tap an informed community for response.

Benkler (2006) suggested that this information sharing culture is a way for networked communities to accredit information through endorsement, which is both participatory and significant for enriching a discussion (p. 218). These data and observations suggest that the hashtag community was particularly keen to exchange information, including rich information (e.g., multimedia, detailed budget documents); there were deliberate efforts to clarify understanding, seek others' perspective, and communicate directly with decision-makers. To wit: the hashtag community comprehended itself as an informed, participatory community. Small (2011) observed the importance of information exchange within hashtag communities: "Given the information they share, it is evident that contributors are heavy consumers of political information […] they disseminate this information to others. Given that information is central to citizenship, this function should not be understated" (Small, 2011, p. 890). There is a culture of information sharing and a commitment to equal access evidenced here.

Traditional Media Influence

As demonstrated, news media actors drove the hashtag discussion and the flow of content. Curiously, this dominance was an accepted part of the culture within the hashtag community. Evidence of this acceptance is provided in at least two important forms. First, the amplification of established voices attained through retweet activity was significant. Within the data, Twitter users redistributed 1,163 tweets or 44.6 per cent of the dataset as retweets (including retweets redistributed with an editorial comment), 706 of those messages or 27.1 per cent of the dataset originated from accounts controlled by established actors, including traditional media, government, politicians, labour unions, and political parties. At 555 or 21.3 per cent, the majority of retweets of established actors originated with traditional media actors. Second and as noted in the previous section, Tweets contained hyperlinks in 539 instances in the captured discussion; 321 of those were links pointing to digital traditional media content (e.g. print media sites or online television news video). Traditional media content permeated the Twitter discussion and was further amplified by other Twitter participants who, by sharing hyperlinked content, more often pointed readers to traditional media content than any other form of online content by a wide margin.

Traditional media actors designed tweets to fragment the Twitter community by driving participants to traditional media platforms. In doing so, they served an economic interest because migration meant being exposed to advertising that drives revenues to traditional media outlets. Tweets from news radio programming or television news actors directed Twitter discussion participants to their respective schedule- and platform-dependent broadcasts, e.g., "Also on CTV News at Noon: @BillFortierCTV has a preview of the #ABbudget, which will be tabled

tomorrow. #yeg #CTVYEG" (2013, sic). These actors also included links in their tweets that

directed Twitter participants to digital multimedia radio or television broadcasting on the web.

Print media actors supplied links that point to digital content elsewhere on the web. This

behaviour illustrates what Jenkins (2006) referred to as media convergence. Consumers are

prompted to seek out information dispersed over several platforms (p. 243).

Driving users to traditional media sites are strong examples of how the public and private

spheres have become interwoven. Consider the effects of these tweets posted by traditional

media actors: ABPrimetime "INTERACTIVE: We'll be re-tweeting your comments on the

#ABbudget all day, maybe some of your thoughts will make it on the show @ 7pm#ableg"

(2013, sic) and GlobalEdmonton "Join the Alberta Budget conversation on our live blog by using

#GNlive http://t.co/tNUpTzrMCi #abbudget #yeg #yyc" (2013, sic). In the latter case, the outlet

created its unique hashtag, further fragmenting the discussion community, to help establish and

populate a competing live blog with user-generated content. The blog pulls content from Twitter

when users assign the #GNlive hashtag. The media outlet was counting on contributors to follow

the hyperlink to the actual live blog, where participants could see their contribution and maybe

start posting directly to the live blog (rather than the Twitter hashtag directly). The loss for the

Twitter community is at least twofold: the user is no longer following and reacting to the

discussion there, and those posts contributed directly to the live blog are not simultaneously

posted back on Twitter.

By annexing Twitter, the media outlets sought to create an active audience with a vested

interest in the traditional media programming (based on the appeal of seeing one's own content

on the air) and prolong old models of revenue generation. The media created a pretext of civic

discussion (e.g. a live blog), essentially recreating what already existed—a forum for civic

discussion unfolding on Twitter—in order to encourage participant migration from one platform

to another. A conversation on Twitter does not create revenues for news media outlets the same

way it does when hosted on their own platforms, which is where their advertising placements

reside (Warner, 2013, p. 286). The private or economic interest of news media drove their

agents' participation on Twitter and, in turn, drove the discussion and behavior on Twitter in

general.

The literature on the general nature of online participation elicits concepts of horizontal

networks of citizen actors engaged in discourse, bypassing media and government control

(Castells, 2008, p. 90) and the many contributing to agenda setting and helping issues rise to

public salience (Benkler, 2006, p. 204). This study's findings are incongruent with these notions.

The data show traditional media actors attending to profits, driving discussion, and enjoying

significant amplification from the general user base. With the means of dissemination so

accessible to the masses, the associated outcome seems to elicit a mass participatory culture

intent on reiterating the message of those in power—far from the functional notions of active

citizens setting the terms of discussion and driving it away from or in some kind of balance with

the traditional gatekeepers.

Limitations and Areas for Further Study

Some limitations of the study have already been described. They include the prospect that

Twitter users who intended on contributing to the hashtag discussion may have been omitted for

misspelling the hashtag, opting for economy of words, or omitting it inadvertently. Additionally,

the data sample is not representative of the population, preventing the study's findings to be

generalized to the broader population. Lastly, while the study collected tweets from both

hashtags and considered them as a single body of evidence, one cannot be certain if Twitter users

themselves were following both hashtags and making reflections or contributing accordingly.

Some areas in the study that invite investigation include the idea that political decisions

(e.g., voting intentions) are made on low-information rationality, yet on Twitter, a platform on

which posts are snippets of information, relatively few tweets conveyed clear opinion. Why is

that happening? Responding to that question seems important. Another important question is

what barriers or value system is preventing ordinary Twitter users from driving political

discussion more actively and thus diminishing the ability of traditional actors from controlling

debate?

Conclusion

This study sought to examine the civic properties that Twitter affords and determine

whether hashtag communities achieve issues-pluralism and facilitate at least some viewpoints to

popular expression otherwise absent from print media. As anticipated, this study observed that

hashtag communities did spring up in the days leading up to a major government address, in this

case a provincial budget. Two event-specific hashtag communities formed with some degree of

overlap, and discussion activity started at least a few days before the budget and intensified on

the day of the budget presentation.

In total, 2,608 tweets were read and manually coded as part of the study. Discussion pick-

up seemed quite low. Indicators of dialogue or discussion, as measured by @replies and retweets

with additional and new commentary, were relatively scant amid the body of data. It was not

clear, then, if tweets were posted with an expectation of response. Importantly, this study noted

that @replies tend to abandon context and diminish their publicness by consequence. Twitter users tended to stray away from providing interpretation on budget announcements or public policy shifts—instead, posts tended to only amplify the government's preferred budget narrative. Opinion expression was not particularly strong, with just 413 tweets (or 15.8 per cent of the sample) expressing opinion. Given the nature of a provincial budget address, which affects all areas of public policy and spending, it was expected that opinion expression would have been much more evident (by frequency of incidents) in the discussion.

The hashtag community seemed particularly keen to exchange information, including rich information (e.g., multimedia, detailed budget documents). Indeed, 542 tweets included hyperlinks. In 321 instances, those links pointed to traditional media content. Civic resources (e.g. links to the budget documents or the Legislative Assembly's budget webcast) also ranked highly, at 130 hyperlinks shared. Also present in the discussion were deliberate efforts to clarify understanding, seek others' perspective, and communicate directly with decision-makers.

Traditional media has embraced Twitter as a way to quickly share news, drive traffic to its news sites, and build bonds and relationships with consumers. The Twitter discussion was absolutely dominated by traditional media actors, which is an accepted part of the Twitter culture given amplification of those in power and further sharing of traditional media content through hyperlinks. Media sought to fragment the discussion community by driving participants to traditional news outlet sites. The range of topics covered on Twitter and print media mirrored one another and were given approximately the same weight, an unsurprising finding given the dominance of traditional media actors within Twitter.

This inquiry suggests that while diverse actors contribute to the formation of Twitter hashtag communities, the associated discussion failed to meet the functional characteristics of the public sphere and failed to drive participant views to popular expression that were otherwise absent from print media. Twitter's most apparent value to civil society is information exchange—both in terms of tweet content and hyperlinked multimedia. However, this study suggests that in spite of this strength, Twitter is ill-suited as a communicative forum for civil society. Discussion uptake and opinion expression were relatively infrequent among participants, and the conversation was overwhelmingly dominated and driven by agents of traditional news media intent on perpetuating their traditional gatekeeping role and who operated in the service of profits. Indeed, a diverse discussion was not evident, only one that had reiterated the message of those already in power and was laden with narrow private interests.

References

Agre, P. E. (2004). The practical republic: Social skills and the progress of citizenship', in A.

Feenberg and D. Barney (eds) *Community in the Digital Age*, pp. 201–23. Lanham, MD:

Rowman and Littlefield

Barney, D. (2004). The vanishing table, or community in a world that is no world. *Topia, 11*(4),

49 - 66

Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and

Freedom*. New Haven: Yale University Press

Bohman, J. (2004). Expanding dialogue: The Internet, the public sphere and prospects for

transnational democracy. *The Sociological Review, 52*(1), 131-155. DOI:

10.1111/j.1467-954X.2004.00477.x

Bruns, A. and Burgess, J. (2011). The use of Twitter hashtags in the formation of ad hoc

publics. In *6th European Consortium for Political Research General Conference*, 25 - 27

August 2011, University of Iceland, Reykjavik

Bruns, A., and Burgess, J. (2012). Researching news discussion on Twitter: New methodologies.

Journalism Studies, 13(5-6), 801 – 814

Castells, M. (2008). The new public sphere: Global civil society, communication networks, and

global governance. *Annals of the American Academy of Political and Social Science,

616*(1). 78 – 93. doi: 10.1177/0002716207311877

Chew, C. and Eysenbach, G. (2010). Pandemics in the age of Twitter: Content analysis of

Tweets during the 2009 H1N1 outbreak. *PLoS ONE 5*(11), 1 – 13.

doi:10.1371/journal.pone.0014118

Dahlgren, P. (2006). Doing citizenship: The cultural origins of civic agency in the public sphere.

      European Journal of Cultural Studies, 9(3), 267 – 286, DOI:

      10.1177/1367549406066073

Epstein, L. and Segal, J. (2000). Measuring issue salience. *American Journal of Political*

      Science, 44(1), 66 – 83

Fraser, N. (2007). Transnationalizing the public sphere: On the legitimacy and efficacy of public

      opinion in a post-Westphalian world. *Theory, Culture & Society, 24*(4), 7 – 30, DOI:

      10.1177/0263276407080090

Gerhards, J., and Scäfer, M.S. (2010). Is the internet a better public sphere? Comparing old and

      new media in the USA and Germany. *New Media & Society, 12*(1), 143 – 160. DOI:

      10.1177/1461444809341444

Gimmler, A. (2001). Deliberative democracy, the public sphere and the internet. *Philosophy*

      and Social Criticism, 27(4), 21-39, DOI: 10.1177/019145370102700402

Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an

      epistemic dimension? The impact of normative theory on empirical research.

      Communications Theory, 16(4), 411 – 426. doi:10.1111/j.1468-2885.2006.00280.x

Habermas, J., Lennox, S., and Lennox, F. (1964). The public sphere: An Encyclopedia Article.

      New German Critique, No. 3, 49 – 55

Iosifidis, P. (2011). The public sphere, social networks and public service media*. Information,*

      Communication & Society, 14(5), 619 – 637. DOI: 10.1080/1369118X.2010.514356

Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New

      York University Press

Kim, Y., Hsu, S.H., and Gil de Zúñiga, H. (2013). Influence of social media use on discussion

      network heterogeneity and civic engagement: The moderating role of personality traits.

      Journal of Communication, 63(3), 498 – 516. DOI: 10.1111/jcom.12034

Kwak, H., Lee, C., Park, H., and Moon, S. (2010). What is Twitter: a social network or a

      news media. *Proceedings of the 19th International Conference on World Wide Web*:

      ACM Press, pp. 591 - 600. Doi: 10.1145/1772690.1772751

Larsson, A.O., and Hallvard, M. (2011). Studying political microblogging: Twitter users in the

      2010 Swedish election campaign. *New Media & Society, 14*(5), pp. 729-747. Doi:

      10.1177/1461444811422894

Mascaro, C., Black, A., and Goggins, S. (2012). Tweet recall: Examining real-time civic

      discourse on Twitter. *CSCW '13, Proceedings of the 2013 Conference on Computer

      Supported Cooperative Work Companion*, 259 – 262. Doi: 10.1145/2441955.2442016

Pariser, E. (2011). *The Filter Bubble: What is the Internet Hiding from You.* New York: Penguin

      Press.

Small, T. (2011) "What the Hashtag? A Content Analysis of Canadian Politics on Twitter."

      Information, Communication & Society 14(6): 872-95. DOI:

      10.1080/1369118X.2011.554572

Tsukayama, H. (2013, March 21). Twitter turns 7: Users send over 400 million tweets per day.

      The Washington Post. Retrieved from

      http://articles.washingtonpost.com/2013-03-21/business/37889387_1_tweets-jack-

      dorsey-Twitter

Tumasjan, A., Sprenger, T.O., Sandner, P.G., Welpe, I.M. (2010). Predicting elections with

Twitter: What 140 characters reveal about political sentiment. Proceedings of the Fourth

International AAAI Conference on Weblogs and Social Media (ICWSM), 2010.

Wang, H., Can, D., Kazemzadeh, A., Bar, F., Narayanan, S. (2012). A system for real-time

Twitter Sentiment Analysis of 2012 U.S. Presidential Election cycle. *Proceedings of the*

50th Annual Meeting of the Association for Computational Linguistics. Republic of

Korea. 115-120

Warner, J. (2013). The new refeudalization of the public sphere. *The Routledge Companion to*

Advertising and Promotional Culture. Matthew P. McAllister and Emily West, eds. New

York: Routledge

Warner, M. (2005). *Publics and Counterpublics*. NewYork: Zone Books

Yang, L., Tao, S., Zhang, M. and Qiaozhu, M. (2012). We know what @ you #tag: Does the dual

role affect hastag adoption? In: The 21st International Conference on the World Wide

Web. 261 – 270.

Appendix

Table 2: Coding Scheme

	Category	Definition	Example
Course of Interaction			
Q1, Q2	Neutral	A tweet that excludes an overt expression of approval or disapproval	Govt will borrow $4.3b for capital projects. New savings plan puts non-renewable resource revenue away BEFORE spending #ABbudget #ableg
Q1, Q2	Non-civic replies/mentions	A tweet that includes an @reply function but only to mention rather than engage in discussion	@EdmontonChamber to hear update from @Premier_Redford. Full room w strong showing of MLAs & Min #Ableg #abpoli #budget2013
Q1, Q2	Retweets	A tweet that retweets or recirculates a previously posted tweet but excludes any modifications	RT @Scott630CHED: Budget preview, @Premier_Redford says pop increase + inflation = 4%. Increase in spending will be less #ABbudget
Q1, Q2	Irrelevant	A tweet that lacks relevance to the budget	#abbudget #abpoli#ableg, did the cuts announced already impact technology services at the legislature? very poor quality and choppy video
Q1, Q2	Flaming/shaming	A tweet that expresses a personal attack against another discussion participants	N/A
Civic Talk			
Q1, Q2	Opinion	A tweet that includes an overt expression of approval or disapproval	Proud to be a part of a government which delivers for Albertans today & looks down the road to ensure success 20 years from now #abbudget
Q1, Q2	Replies	A tweet that includes the @reply function to facilitate discussion with the named user	@[named user] @lethsnews Hear! Hear! And it's not just #uleth students, it's PSE students PERIOD. #abbudget
Q1, Q2	Retweet with editorial	A tweet that retweets or recirculates a previously posted tweet and that includes the addition of new, modified material	Key word being plan RT @Metro_Nolais: Alberta's savings to grow to over $24B over next three years under Tory plan #Budget2013 #abbudget
Q1, Q2	Coordinating action	A tweet that includes an overt call to action	WATCH LIVE NOW: Finance Minister Doug Horner delivers 2013 Alberta Budget: http://t.co/Yx2sEvxArF #ABbudget #yeg #ableg
Q1, Q2	Sharing alternative media	A tweet that includes a hyperlink pointing to alternative media (e.g., independent media, user photographs)	Sandra Azocar talking with CTV & expressing concerns about health cuts in today's budget. #ableg #abbudget #abhealth http://t.co/JlgUKO1fWY
Q1, Q2	Sharing civic resource	A tweet that includes a hyperlink pointing to civic material (e.g., video stream of the budget speech, budget documents, organized group media releases)	For all the other policy nerds out there, #Budget2013 docs are now live at http://t.co/5JVWghYUBx
Q1, Q2	Sharing partisan resource	A tweet that includes a hyperlink pointing to material created by a political party	Waiting to see what's in #Budget2013. Check http://t.co/Da4Cm7gCvK for our plan to get the province back on track. #abparty #ableg

Q1, Q2, Q3	Sharing traditional media resource	A tweet that includes a hyperlink pointing to a traditional media content	And an analysis of the budget speeches since 2009. #ableg #ABbudget http://t.co/zraDGizWQO
Established Societal Actors			
Q1, Q3	Associations	A tweet disseminated by an association	Fraser Institute's Mark Milke discusses #abbudget tonight, 7PM (MST) on @ABPrimetime #abpoli #ableg
Q1, Q3	Echoes of established voices	A retweet that recirculates first disseminated by any established societal actor	RT @marksuits: Complete #ABbudget coverage coming up in a few minutes at http://t.co/Fc5n8kGaJU #ABleg
Q1, Q3	Government	A tweet disseminated by the Government of Alberta (inc. premier's office, ministries)	#budget2013 embargo lifted. Budget 2013 is now public information. Media free to share information now. #ableg
Q1, Q3	Labour unions	A tweet disseminated by a labour union	How will the #abbudget affect health care? Ask #HSAA president Elisabeth Ballermann in the Rotunda after it is presented
Q1, Q3	Media	A tweet disseminated by a media personality or outlet	Also on CTV News at Noon: @BillFortierCTV has a preview of the #ABbudget, which will be tabled tomorrow. #yeg #CTVYEG
Q1, Q3	Parties	A tweet disseminated by a political party	Watch @bmasonNDP's message to Albertans after this Broken Promises Budget: https://t.co/VtNndlq7sY #ableg #Budget2013
Q1, Q3	Politicians	A tweet disseminated by an elected official (provincial and municipal politicians)	#Budget2013 maintains investment in families & communities #ableg #buildingAlberta http://t.co/fSexHbsSNA

Table 3: Subject Matter Frequency of Occurrence and Per cent of Twitter and Print Media

Datasets

Subject Matter	Definition	Number of Tweet Mentions	Per cent of Tweet Total Frequency	Number of Print Mentions	Per cent of Print Total Frequency
Access to Participate	Tweets or print articles that addressed an access to participate issue (e.g., access to budget lockup)	77	1.9	8	1.9
Accountability	Tweets or print articles that addressed or assigned accountability	74	1.8	17	3.9
Advocacy	Tweets or print articles that advanced a specific interest	126	3.1	10	2.3
Alberta Deficit/Debt	Tweets or print articles that addressed the Alberta deficit or prospect of debt	215	5.3	32	7.4
Anticipation	Tweets or print articles that expressed anticipation about the	264	6.5	1	0.2

	budget or an aspect of the budget				
Broken Promises	Tweets or print articles that addressed government broken promises	63	1.6	8	1.9
Difficult Decisions	Tweets or print articles that addressed the notion of difficult decisions being made to manage the budget	25	0.6	5	1.2
Economic Diversification	Tweets or print articles that addressed economic diversification	38	0.9	16	3.7
Event with Treasury and Finance Minister	Tweets or print articles that addressed a past or upcoming event with the Treasury and Finance Minister	17	0.4	0	0.0
Finance Policy	Tweets or print articles that addressed an area of the budget at a finance policy level (e.g., shift in policy as a consequence of changing fiscal priorities)	232	5.7	55	12.8
Funding Cuts	Tweets or print articles that addressed specific funding cuts	378	9.3	59	13.7
Government Accounting	Tweets or print articles that addressed government accounting practices	75	1.8	17	3.9
Government Direction	Tweets or print articles that outlined a broader government direction	170	4.2	11	2.6
Inefficiency	Tweets or print articles that addressed an inefficiency (e.g., government waste)	0	0.0	1	0.2
Investment Priorities	Tweets or print articles that addressed an area of public policy as an investment priority	331	8.2	45	10.4
Jurisdiction	Tweets or print articles that raised a jurisdictional relationship	45	1.1	3	0.7
Lukaszuk in Vietnam	Tweets or print articles that addressed the Enterprise and Advanced Education Minister's absence from the province	7	0.2	2	0.5
Media Shill	Tweets authored by journalists or media outlets designed to promote traditional media content on other platforms	224	5.5	0	0.0
Observation from Event	Tweets that took the form of live tweeting (i.e., properties of citizen news reporting)	288	7.1	0	0.0
Population Growth	Tweets or print articles that address provincial or municipal population growth	17	0.4	10	2.3
Premier's Birthday	Tweets or print articles that	7	0.2	1	0.2

	addressed the premier's birthday (which was on Budget day)				
Public Engagement	Tweets or print articles that addressed some form of public engagement (e.g., encouraging people to watch the budget speech)	360	8.9	4	0.9
Public Policy	Tweets or print articles that addressed some component of the provincial budget in a policy oriented manner (e.g., connecting workforce development goals with foreign qualification recognition)	290	7.1	25	5.8
Public Sector Cuts	Tweets or print articles that addressed public sector workforce cuts	81	2.0	22	5.1
Resource Revenue	Tweets or print articles that addressed resource royalties and revenues	58	1.4	38	8.8
Securing Future	Tweets or print articles that addressed the notion of prudence	39	1.0	1	0.2
Speculation	Tweets or print articles that speculated about budget outcomes (e.g., speculation that the province has a spending problem)	72	1.8	0	0.0
Tax	Tweets or print articles that address taxes and tax policy	90	2.2	30	7.0
Transparency	Tweets or print articles that addressed or expressed concern government/policy transparency	22	0.5	1	0.2
Unknown/Irrelevant	Tweets or print articles in which the subject matter was either unknown or irrelevant	327	8.1	0	0.0
Vulnerable Populations	Tweets or print articles that addressed or expressed concern for vulnerable populations	46	1.1	9	2.1
Total Frequency		4,058		431	