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POLITICAL NETWORKS ON TWITTER

Tweeting the Queensland state election

This paper examines patterns of political activity and campaigning on Twitter in the context of the 2012 election in the Australian state of Queensland. Social media have been a visible component of political campaigning in Australia at least since the 2007 federal election, with Twitter, in particular, rising to greater prominence in the 2010 federal election. At state level, however, they have remained comparatively less important thus far. In this paper, uses of Twitter in the Queensland campaign from its unofficial start in February through to the election day of 24 March 2012 are tracked. Using innovative methodologies for analysing Twitter activities, developed by the research team, this study examines the overall patterns of activity in the relevant hashtag #qldvotes, and tracks specific interactions between politicians and other users by following some 80 Twitter accounts of sitting members of parliament and alternative candidates. Such analysis provides new insights into the different approaches to social media campaigning which were embraced by specific candidates and party organizations, as well as an indication of the relative importance of social media activities, at present, for state-level election campaigns.

Keywords politics; social media; elections; Queensland; Australia

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Introduction

The use of social media, including *Twitter*, for political campaigning is increasingly commonplace; it has spread from the major contests of the 2008 US presidential election and other national elections to more regional and local levels (cf. Larsson & Moe 2012, forthcoming). At such lower levels, given the significantly more limited number of politically active *Twitter* users in these smaller constituencies as well as the more modest party infrastructure available to candidates, political campaigning is likely to differ notably from the well-funded, high-stakes social media campaigns of national elections. Candidates who have a

social media presence may be considerably more likely to post their own messages rather than being able to rely on a well-resourced media staff. The styles of tweeting may also vary between campaign accounts, from broadcast-only models of sharing messages without responding to other comments, to attempts to foster a wider dialogue among *Twitter* users. Finally, campaign accounts may employ different strategies around *Twitter* conventions such as hashtags and @mentions or retweets of other users, and especially of other candidates (whether from the same party or contesting the same electorate).

The use of *Twitter* in elections below the national level remains under-researched at present; a focus on national elections (and national elections in well-resourced political systems such as those of the United States and UK at that) obscures the more mundane, unglamorous experience of electioneering that is shared by candidates and political staffers in the majority of elections. This paper, therefore, examines patterns of political activity and campaigning on *Twitter* in the context of the 2012 election in the Australian state of Queensland. It takes a quantitative approach to the identification and evaluation of politicians' tweeting styles, in order to investigate the strategic choices made by specific parties and individual candidates in planning and conducting their *Twitter* activities during the election campaign, and it examines the *Twitter* activities of the wider Queensland electorate, in order to explore whether candidates' activities generate any substantial resonance; in turn, this provides an insight into the Australian political establishment's current understanding of *Twitter* as a campaigning tool, and into the effectiveness of such strategies at galvanizing electoral support.

Social media have been a visible component of political campaigning and debate in Australia at least since the 2007 federal election (see, for example, Flew 2008; Kirchhoff *et al.* 2009), with *Twitter*, in particular, rising to greater prominence in the 2010 federal election (Bruns & Burgess 2011a). At the state level, on the other hand, they have remained less important; while there is still interest in, and discussion of, state political issues and elections in tweets and blog posts, such coverage represents a much smaller amount of social media activity than found for political themes of national importance. However, the steady growth of social media use in Australia is likely to lead to an increased presence of such media in political campaigning with each new election, across different levels of government. Coming two years after the previous federal election, and one year ahead of the next, the Queensland state election of 2012 demonstrates the evolving uses of *Twitter* by politicians and candidates alike, with clear implications for subsequent campaigns.

We begin this paper by outlining current uses of *Twitter* in Australian political communication in general, before describing prevalent uses of the platform by Australian politicians against the backdrop of current political and media contexts in the country. We then discuss the situation at the start of the 2012 Queensland election campaign, and trace politicians' uses of *Twitter* through the campaign,

before comparing such activity overall discussion in the election-related #qldvotes hashtag. We conclude by situating the activity patterns we have observed during the campaign within the wider electoral context of the 2012 state election, in order to highlight how the specific communicative choices made by each politician and campaign office represent a range of campaigning strategies.

Australian politics and *Twitter*

Online discussions of Australian political issues are now commonplace; the pioneering work of early political bloggers and the development of opinion and commentary websites run by the mainstream media and by independent groups (Highfield & Bruns 2012) have been supplemented by the widespread use of social media platforms such as *Twitter* and *Facebook* in Australia. Indeed, commenting on politics now takes place across a multi-platform media ecology, as social media are integrated into traditional media coverage – for example, the mainstream public broadcaster, the Australian Broadcasting Corporation, has enjoyed considerable success with its integration of live tweeting into the political panel show *Q&A*, under the hashtag #qanda. Some panellists and ABC presenters actively engage with the show's *Twitter* audience before and after the show, and selected tweets are displayed on screen during the show itself. Tweeting about Australian politics is also a high-volume activity; in the first half of 2012, the umbrella hashtag for the discussion of domestic political issues, #auspol, appeared in over one million tweets, averaging over 5,000 tweets per day.

However, while discussing politics on blogs, on *Facebook*, or in tweets is a regular activity for many Australians, the place of the Internet within election campaigns themselves is less established. During the 2007 federal election, the Australian Labor Party (ALP) used sites such as *Facebook* and *MySpace* as part of their wider 'Kevin07' campaign promoting party leader Kevin Rudd as an appealing Prime Minister-in-waiting. The Internet strategy of the other major party, the Liberal Party (which at that point had been in power for 11 years), was less clear, with an attempt to use *YouTube* for policy announcements met with criticism, and the video itself overshadowed by parodies and alternative clips (Flew 2008).

By the time of the next federal election, three years later, online platforms had become more established parts of the media landscape. In particular, *Twitter*, barely established in Australia in 2007, had become an important means for breaking news as it happened. In June 2010, late-night rumours of an ALP leadership challenge between the Prime Minister, Kevin Rudd, and his deputy, Julia Gillard, were confirmed and reported first on *Twitter*, soon accompanied by the #spill hashtag to denote the upcoming vote. Tweets about the leadership spill

were complemented by more in-depth analysis and commentary on other websites, but the ease of publishing, and spreading, short comments on *Twitter* highlighted the role of social media in providing immediate reactions to sudden developments (Bruns 2012; Burgess & Bruns 2012).

Just over three weeks after taking over the role of Prime Minister and ALP leader, Gillard called a federal election for August 2010. During the resulting campaign, online media were used by both major parties as part of their wider strategies – but unlike 2007, neither the ALP nor the Liberal Party had a clearly distinct approach to online campaigning. Politicians and candidates from both major parties, as well as representatives of the minor parties, such as the Australian Greens, and independents, used *Twitter* as a further means to promote their, or their party's, messages, while journalists tweeted updates from the campaign trail. The discussion of the election, and the questioning of candidates and journalists, was not limited to these two groups, though. Among the election tweets, a central hashtag emerged – #ausvotes – which during the five weeks of the campaign featured in over 415,000 tweets (Bruns & Burgess 2011a). Peaking at over 94,000 tweets on election day itself, the use of #ausvotes demonstrates the presence of a large group of *Twitter* users commenting on the election campaign, and also the development of a public, linked discussion around this topic; the use of a common hashtag is not a requirement for tweets about a given subject, but by including such a marker, a tweet is then automatically linked to the wider group of comments that use the same hashtag.

The examples of #ausvotes and, post-election, #auspol have led to derivative conventions for tweeting about Australian politics at the state level, too. Publishing a comment on *Twitter* about the New South Wales state government, for example, might be accompanied by the #nswpol hashtag, while tweets concerning the election in the state of Victoria would include the #vicvotes hashtag. For the 2012 Queensland election, then, *Twitter* users made use of both #qldpol and #qldvotes in their tweets, although the more limited interest in state-level political events also meant that these hashtags were featured to different extents and without universal adoption during the campaign.

Of course, the examples of specific hashtags such as #auspol also show that tweeting a lot in these discussions is not necessarily the same as participating in public debate; while there are thousands of #auspol tweets per day, analysis shows that a very small group of users provide the majority of these comments (Bruns & Burgess 2012). As #auspol became established as the standard hashtag for discussing Australian politics, tweets and users employing this marker contributed to #auspol's transformation into an increasingly antagonistic and partisan hashtag community rather than a space for public debate (Jericho 2012): its leading users form an in-group which is highly active at talking (and often, arguing) amongst itself, but rarely connects with wider public debate about Australian politics on *Twitter*.

The technical limits of tweeting – in particular the 140-character restrictions put on each tweet – also create difficulties for sharing considered, detailed, and nuanced thoughts on an issue. It remains to be seen what, if anything, tweeting alone can achieve within Australian politics, beyond acting as a barometer of public opinion (although it should also be noted that the population of Australian *Twitter* users is not representative of the entire Australian electorate). However, what *Twitter* can provide is a simple mechanism for citizens to invoke politicians – or journalists, sportspeople, celebrities, or anyone else with a *Twitter* account – in their comments, and for these thoughts to be public and visible in a way that emailed communication, telephone calls, letters, or electorate office visits are not.

Politicians' uses of social media

The increasing presence of individual Australian politicians on sites such as *Twitter* is a notable change in their use of online communication platforms. Although politician websites are commonplace, few active federal members of parliament started blogging, for example, as a further means of communicating with their electorate or publishing their own views on current political issues (Highfield & Bruns 2012). This has changed with the advent of more recent social media platforms: a study examining tweeting patterns by politicians at the federal, state, and local government levels in 2009 drew initially on a (not exhaustive) list of 152 *Twitter* accounts (Grant *et al.* 2010); as of July 2012, at least 146 of the 226 members of the federal Upper and Lower Houses had *Twitter* accounts.

This growing adoption of social media has the potential to increase the interactions between citizens and politicians, raising the level of participation in public debate, by putting these different voices in the same space. Prior to the advent of *Twitter*, citizens could already communicate with politicians via Internet-mediated platforms. However, in Australia, using such means as email to get in contact with politicians was an action carried out primarily by those with higher levels of engagement with both politics and the Internet (Gibson *et al.* 2008). Emailing a politician or their staff is also a private form of communication, limiting any discussion to the people sending and receiving the email. Tweeting at a politician, on the other hand, takes this initial communication (except if it is a direct message or involves 'private' *Twitter* accounts) and makes it publicly visible, potentially accessible by all *Twitter* users and by anyone else reading tweets on the *Twitter* website itself.

Politicians, both in Australia and internationally, have developed different strategies for their use of *Twitter*, given this generally public nature of tweets and replies. Grant *et al.* (2010), comparing Australian politicians with a random sample of other Australian *Twitter* users, found that the politicians were more active in terms of the number of tweets published. However, these

higher numbers of tweets did not mean that politicians were in conversation on *Twitter*; their tweets were mostly broadcasting messages at their followers, rather than engaging with other users. Similar general patterns have been found in a national election context in the UK, where tweets-as-broadcast were the preferred style for politicians and candidates (Broersma & Graham 2012); however, the same study found that Dutch politicians at the national level, in contrast, were more likely to interact and engage in dialogue with other *Twitter* users.

Replying to other accounts may in turn depend on the identities of the people tweeting at politicians; in Austria, for example, a study of groups of politicians, journalists, citizens, and domain experts found that the politicians were most likely to @mention their peers within the same group (Maireder forthcoming; Maireder *et al.* 2012). The established political commentariat of professionals engaged in political debate – politicians, journalists, and experts – also formed a dense, interlinked network through their @mentions and retweets, indicating that the traditional participants in these discussions remained key figures when the conversation took place on *Twitter*. However, Maireder, Ausserhofer, and Kittenberger also note that some non-professional users are able to join these public debates; overall, to which users a politician will respond on *Twitter* is also dependent on the politician themselves, and especially on their own approach – broadcast or conversation, for example – to tweeting.

The electoral positioning of parties and their candidates is also likely to influence the social media strategies adopted by each political actor. For example, while major parties are essentially guaranteed mainstream media coverage, smaller parties may choose to adopt social media as a key tool for publicizing their messages, in order to make up for their more limited mainstream media presence. Such an approach may be particularly sensible in a highly limited media ecology as Queensland represents it: state-wide traditional news media options are limited to one daily state-oriented newspaper (the *Courier Mail*, operated by Rupert Murdoch's News Ltd.), as well as the national newspaper *The Australian*, from the same owner, to and five commercial and public service television operators, alongside a range of radio channels.

Queensland's population is dispersed across a very large geographical area, but a significant percentage of its inhabitants live in and around the state capital of Brisbane, in the state's highly urbanized south-east corner; this also generates substantial diversity in the state's electorates, which range from the large rural – agricultural and mining – areas of north and west Queensland to the suburban divisions of Brisbane itself. An associated concentration of media organizations in the south-east corner means that different electorates are unlikely to receive a comparable amount of coverage in the news media; in theory, this may mean that candidates outside of Brisbane could take to *Twitter* more readily to connect with their constituents through social media. At the same time, however, the rural nature of these electorates, and the limited communications

infrastructure available outside of Australia's major cities, works against such ambitions; *Twitter* accessibility and take-up remains considerably stronger in urban than in rural areas.

Further, the styles of *Twitter* activity adopted by parties and politicians are likely also to depend on their current electoral fortunes (their likelihood of success or defeat in the election, as indicated by current opinion polls). Politicians who are all but assured of winning their local electoral contest, or even overall power in a state, may see social media equally as much as an opportunity to connect with voters as it presents a threat of making inappropriate statements which could be exploited by the political opponent, and may therefore choose to develop a minimal social media presence only. Conversely, politicians who are likely to be defeated at the ballot box may choose to utilize social media as a last-ditch means to mobilize supporters and campaign vigorously on *Twitter*. Candidates locked in a tight electoral contest may use the medium to engage and challenge their opponents, hoping to win the debate or goad the other side into tweeting in anger. Any such choices, of course, may also be negotiated between individual candidates and their party campaign offices, and may be influenced by the candidate's level of experience in using *Twitter*.

Finally, some politicians (particularly high-profile figures) are not necessarily the authors or publishers of their tweets – instead, those roles fall to their staff at least in part. Visible distinctions may be made between tweets written by staff and by the politician themselves; for example, ahead of the 2012 state election, Queensland Premier Anna Bligh's *Twitter* account @TheQldPremier featured tweets which were authored either by her staff (and signed as 'Prem_Team') or by herself (and left unsigned). For many of the minor candidates, on the other hand, dedicating staff to manage social media accounts is an unavailable luxury, and their tweets are more likely to be entirely their own work.

Candidates' approaches to *Twitter* in the 2012 Queensland state election

This article explores how these different approaches to tweeting were adopted by candidates in the 2012 Queensland state election. To identify how these accounts used *Twitter* during their campaigns, we located some 80 candidate accounts before the start of the election campaign, and tracked their activities throughout the campaign using *yourTwrapperKeeper*, an open-source tool for capturing *Twitter* data. *yourTwrapperKeeper* queries the *Twitter* API for defined keywords and hashtags, archiving relevant tweets containing each of these individual terms; by using the candidate accounts' *Twitter* handles as keywords, we were able to capture all public tweets which originated from or @mentioned these accounts. The 80 candidate accounts tracked here represent nearly one-fifth of the total candidates running in the election (430 candidates across 89 electorates); the majority of

accounts are operated by candidates from the two major parties in Queensland politics. These numbers provide an indication of the relative take-up of *Twitter* as a communication tool in the Queensland state election: far from universal, but increasingly strong especially amongst the serious contenders for election to parliament. In addition to the candidate accounts, we also established archives for the major political party accounts, and for the election-related hashtag #qldvotes.

The collected data were then processed using a series of Gawk scripts developed for the analysis of large *Twitter* data sets (Bruns & Burgess 2011b). These scripts enable the filtering of tweets based on such factors as date, @mentions, hashtags, or other keywords, as well as the subsequent processing of the data sets in order to establish key activity metrics (cf. Bruns & Stieglitz 2012). In the discussion which follows, we examine *Twitter* activity patterns for these accounts, as well as for the overall #qldvotes hashtag, over the course of the 2012 Queensland election campaign.

The campaign itself must be seen in the wider context of Queensland and Australian politics, of course: the ALP state government in Queensland had been in power since the election of popular Premier Peter Beattie in 1998; his successor Anna Bligh had taken over as Premier in 2007 and won a subsequent state election in 2009, becoming the first popularly elected female state Premier in Australia, but had increasingly fallen out of favour with state voters during her second term as Premier. This decline was reversed briefly in response to her widely acclaimed crisis management during the January 2011 Queensland floods, but virtually all opinion polling ahead of the election still predicted a substantial landslide win for the opposition Liberal/National Party (LNP) under the former Lord Mayor of the state capital Brisbane, Campbell Newman (who was not a Member of Parliament at the time).

While the majority of elected MPs was expected to come from these two parties, a number of minor party candidates did have a realistic chance of election in individual electorates. Bob Katter, the outspoken Federal Member for Kennedy, in Queensland's north-west, had launched his own party in 2011 to promote agricultural and conservative views; Katter's Australian Party (KAP) subsequently nominated candidates for 76 of the 89 state electorates. Meanwhile, the Queensland branch of the Greens nominated a candidate for each electorate, and the conservative Family First party was represented in 38 electorates. Finally, the remnants of the right-wing One Nation party, which had a major impact in the 1998 Queensland election, nominated six candidates. Independent candidates also ran in many electorates. As in other Australian elections, voting in Queensland is compulsory; at the close of enrolments for the 2012 election, 2.7 million voters were registered with the state electoral commission, with just under 2.5 million voting in the election itself (including informal votes).

Although the results of previous elections had been relatively close between the ALP and Liberal/National coalitions (and later between the ALP and the

merged LNP itself), the 2012 election was not anticipated to follow this trend, with the LNP expected to form the new government. In late January 2012, Premier Bligh announced a delay in setting the official election date in order to enable the report of a state commission of inquiry into the 2011 floods to be delivered before the election; this in itself signalled the start of a ‘phony campaign’ between the two major parties, however. An official Writ of Election was eventually issued by the Governor of Queensland on 19 February 2012, setting 24 March as election date. The election finally did result in the expected landslide result, with Queensland’s unicameral, Westminster-style electoral system delivering a parliament dominated by 78 LNP members, compared to Labor’s seven seats, two KAP members, and two independents.

Tweeting styles of the major political accounts

In the following analysis, we therefore focus on the months of February and March, taking in both the ‘phony’ and the official election campaign as well as its immediate aftermath. We begin by examining the tweeting styles of the key political accounts (Figure 1), including the party accounts @QLDLabor and @LNPQLD as well as the accounts of Premier Bligh (@TheQldPremier) and her opponent @Campbell_Newman and their respective deputies, Treasurer and Deputy Premier @AndrewFraserMP and Shadow Treasurer @TimNichollsMP. (This excludes the nominal pre-election Leader of the Opposition, Jeff Seeney, who occupied this parliamentary leadership role before Newman’s entry into parliament and subsequently became Deputy Premier, but who was the most prominent Queensland politician *not* to operate a personal *Twitter* account during

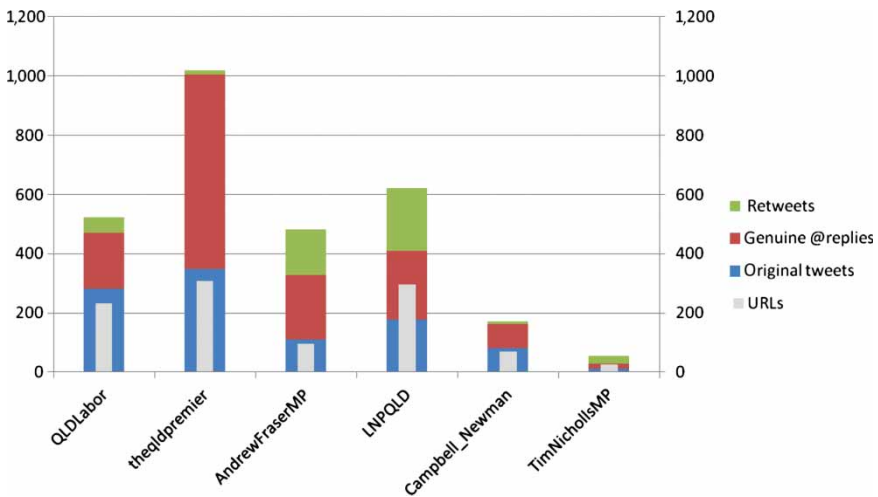


FIGURE 1 Parties’ and leaders’ tweeting styles, 1 February–31 March 2012.

the election. Seeneey, or his staff, did eventually create a *Twitter* presence, @Jeff-Seeneey, on 19 October 2012 – some seven months after the election.)

Figure 1 shows clear differences between the six accounts. Premier Bligh's account is considerably more active than the others, and indeed sent more tweets during the campaign than the three LNP-aligned accounts combined; she also sent a considerably higher percentage of genuine @replies (as opposed to retweets, or tweets which make original statements without mentioning any other users) than the other accounts. A substantial number of these @replies were not signed with the 'Prem_Team' handle, and must therefore be assumed to have been posted by Bligh herself; this points to a deliberate strategy of citizen engagement and conversation through *Twitter*.

Her deputy Andrew Fraser, on the other hand, posted substantially more retweets, but here, too, it should be noted that many such retweets contain conversational elements: they quote a previous tweet but add further commentary, agreement or rebuttal to the tweet itself. Compared to Bligh's conversational approach of focusing on @replies, such interaction through retweeting can be seen as a somewhat more combative, debate-like style of interaction which seeks to address and where necessary correct specific political points, rather than generally establishing an image of approachability.

Both Bligh (17 tweets per day) and Fraser (8) tweeted at relatively high volumes over the two months covered in our analysis; this cannot be said for their opponents Newman (<3) and Nicholls (<1), however. On the conservative side, it is the @LNPQLD party account which provides the central pivot point for LNP-related *Twitter* activity, while its ALP counterpart @QLDLabor is largely overshadowed by the personal effort of the Premier. This is largely in keeping with the overall political landscape ahead of the election, of course: in anticipation of a landslide election result, LNP candidates did not need to go out of their way to engage the electorate by using social media, and could let the party office take care of media activities. (Many of the @Campbell_Newman updates were themselves signed by his campaign staff, indicating relatively limited genuine *Twitter* activity by the candidate himself.)

Indeed, avoiding substantial use of *Twitter* also meant minimizing the potential of making embarrassing campaign gaffes which could be exploited by Newman's opponents. This appears in keeping with an overall strategy of campaigning from a position of electoral strength: as the clear frontrunner in the campaign, the LNP and its leading candidate could afford to employ a relatively passive social media strategy, while the ALP government needed to try a considerably more aggressive approach to changing voters' views. Potential for embarrassment of the conservative challenger did arise briefly during the campaign, however, when – in addition to @Campbell_Newman – the candidate did create his 'own' account, @CD_Track (the account name apparently standing for 'Can Do' – Newman's self-appointed nickname – 'On Track'). Initiated on 5 March, and used sporadically over the following days, Newman announced

its termination on 8 March, tweeting ‘I am going to use the other account as it has all the followers. I will use it myself from now on’ (Newman 2012), thus also implying that the official @Campbell_Newman account had at least until then been run mainly by campaign staff. While Newman denies in the same tweet that campaign pressure led to his termination of @CD_Track, we might speculate that the LNP campaign team would not have looked favourably on a potential dilution of its campaign messages across two Newman-related accounts. (On the *Twitter* website, the @CD_Track account remains accessible, but dormant, at the time of writing.)

Twitter activities by the leading politicians’ accounts are relatively steady throughout the campaign period. Figure 2 shows the cumulative number of original tweets, @replies, and retweets by both the @TheQldPremier and @Campbell_Newman accounts. For both, the rate of tweeting clearly increases as the election proper is called on 19 February, and daily activity is relatively steady throughout the campaign, through to 24 March. Notably, the @Campbell_Newman account only begins to tweet substantially once the election is called, however; this points to the use of social media simply as an additional campaign tool, compared to Bligh’s pre-existing use of *Twitter* as a significant means of communication, dating back at least as far as the 2011 Queensland floods (cf. Bruns *et al.* 2012). Further, both accounts virtually flatline immediately after the election, failing even to engage substantively with the messages of congratulation or commiseration, which are publicly tweeted at them. The @TheQldPremier account finally re-emerges

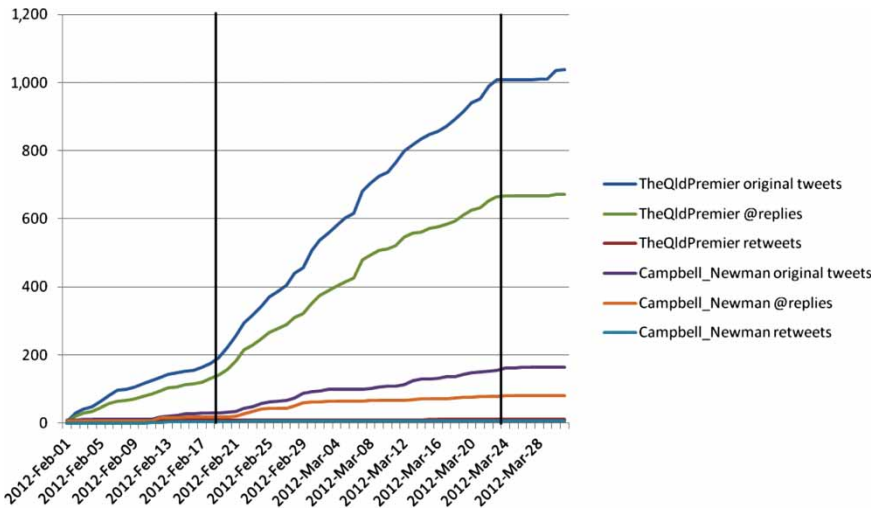


FIGURE 2 Cumulative account activity by @TheQldPremier and @Campbell_Newman over the course of the campaign.

several days after the election, following the renaming of Bligh's personal account to @annabligh, the consequent availability of the @TheQldPremier Twitter handle, and its re-registration by the LNP campaign team (Burgess 2012). Subsequently, the @Campbell_Newman account ceased its activities: at the time of writing, its last tweet dated to 26 March 2012. (This process may well constitute the first recorded handing over – if indirectly – of an Australian Premier's Twitter username following a change of government.)

The divergence in Twitter activity between the two parties and their respective leaders, which this analysis has shown, does not necessarily manifest in a matching divergence in responses by the general Twitter audience, however. In addition to the accounts' own activities, we also tracked the volume of @mentions received by either account. The corresponding cumulative volume of @mentions across the election period, shown in Figure 3, does not point to a significant divergence between the two leaders' accounts, especially over the course of the campaign proper.

During the 'phony' campaign which precedes the official start of the election campaign on 19 February, Bligh pulls ahead – most likely by virtue of her more established Twitter presence at the time. By the time, the election itself is called, on the other hand, @Campbell_Newman has become better known, and mentions of the account track mentions of @TheQldPremier closely; between 19 February and 24 March, Bligh receives fewer than 1,000 more mentions than Newman. It is only after the election, as the full results become known, that Bligh's account is again mentioned substantially more than Newman – with

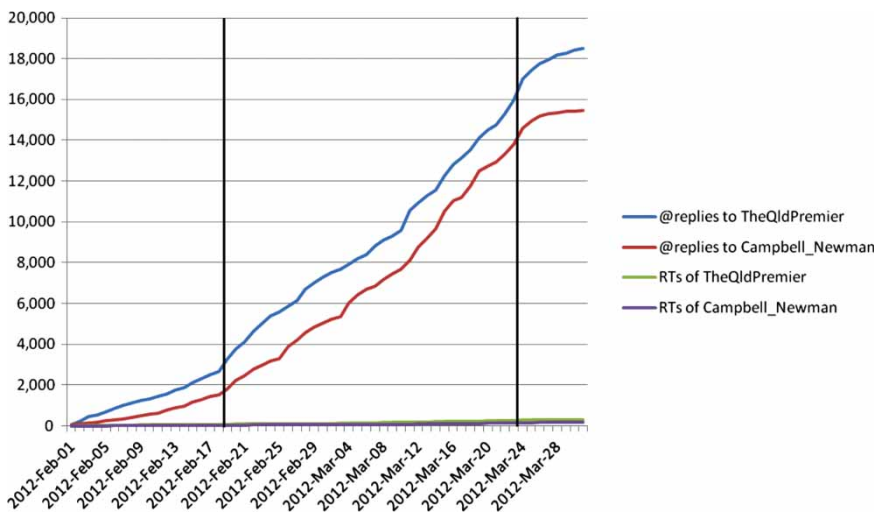


FIGURE 3 Cumulative @mentions of @TheQldPremier and @Campbell_Newman over the course of the campaign.

many @mentions sent to express both sorrow and relief at the change of government.

This clearly indicates that at least in the present case, the volume of *Twitter* activity by the leading accounts themselves is a poor predictor for their popularity as recipients of @mentions. While – as we have shown above – Bligh does considerably more work to actively engage with *Twitter* users through her @replies, the interactions generated through this conversational approach do not manifest in a substantial advantage for her as a recipient of @mentions; rather, regardless of their own endeavours, both leaders are frequently @mentioned on *Twitter* throughout the campaign period. This points to the widespread use of @mentions of relevant accounts in political discussions on *Twitter* not with the principal intention of getting in touch and striking up a conversation with these politicians; instead, account handles are used simply as a convenient short-cut for referring to the leaders which is appropriate to the platform of conversation.

This interpretation of user activities around the leaders' accounts is also borne out by the comparatively low rates of retweeting which are experienced by both. The retweeting of messages originating from the leaders' accounts implies that conscious attention is being paid to their *Twitter* activities, but this appears to be the case only for a small minority of the total number of users who @mention the accounts; by contrast, many of the users who do @mention the leaders may not even actively follow these accounts, but simply tweet about them rather than seeking to engage with them.

Such observations must again be understood against the specific context of the 2012 Queensland state election, however: a tighter electoral contest may well see markedly different activity patterns and a more significant engagement with the tweets posted by leading political accounts, as partisan supporters of either side seek to promote their leader's statements and activities. During the 2012 election, LNP supporters largely did not need, and ALP supporters may have lacked the enthusiasm, to help promote their respective leaders on *Twitter*.

This part of our analysis clearly points to different *Twitter* campaigning strategies for the two leaders. Bligh had already been an active *Twitter* user through much of her Premiership, and (with her staff) further stepped up activities once the campaign officially commenced; this can be read as a clear attempt to use all available media channels to avert electoral defeat. By contrast, Newman and his team – already well ahead in the opinion polls – did not need to expend substantial energy on social media campaigning, and engaged only minimally; indeed, they used the @Campbell_Newman account almost precisely from the official election announcement on 19 February to election day on 24 March, ceasing activities as soon as the election was won. Neither strategy, however, affected how ordinary *Twitter* users tweeted *about* the candidates, however.

Networks of interaction

These observations also raise further questions about the overall patterns of *Twitter* users' interactions with the political accounts we tracked during the 2012 Queensland state elections. In their seminal analysis of interlinkage patterns amongst US political blogs during the 2004 presidential election campaign, Adamic and Glance (2005) discovered substantial network divisions along partisan lines, with progressive blogs linking to other progressive blogs and conservative blogs linking to fellow conservative blogs, but not frequently connecting across the ideological divide. This has been seen as an indication of 'echo chamber' structures in the US political blogosphere, where supporters of either side are exposed only to their own side's views, but may never encounter the arguments of their opponents in their original form.

Even though political divisions between the two major party organizations in Australia have been pronounced in recent years, however, our analysis and visualization of the patterns of @mentions of political *Twitter* accounts by everyday *Twitter* users during the Queensland election does not produce similar results. In Figure 4, we show the core network of @mentions of the political accounts we tracked during the election, visualized using the Force Atlas 2 algorithm provided by the open-source network visualization software *Gephi* (Gephi.org 2012) which places close to one another those accounts which are frequently connected with each other. Nodes in the graph represent individual users, and are coloured – for the political accounts along party lines: red for Labor, blue for the LNP, green for the Australian Greens, and brown for KAP; grey nodes – the majority – represent the everyday *Twitter* users who mention these accounts. To simplify the graph, we limited it to nodes which sent or received at least 10 @mentions during the election period.

Connections between accounts – representing @mentions – are coloured according to the party affiliation of the recipient political account. What results from this visualization is a clear indication of the relative interest in candidates of different political colours; that interest is centred mainly on Labor and LNP politicians, with minor clusters of interest around Greens and KAP candidates. Most notably, however, there is virtually no substantial separation between the two major parties: while both do have a range of followers who mention only 'their' side of politics, the graph overwhelmingly shows a thorough mixture of blue and red, indicating that *Twitter* users are generally as likely to @mention LNP candidates as they are to @mention ALP representatives. Indeed, the two major nodes for the two parties, representing @TheQldPremier and @Campbell_Newman, are located at the centre of the graph and in close proximity to one another, indicating that they were both @mentioned frequently by the same *Twitter* users, sometimes even in the same tweet.

This divergence of our results from the patterns established by Adamic and Glance (2005) and similar studies is not necessarily surprising, given the different

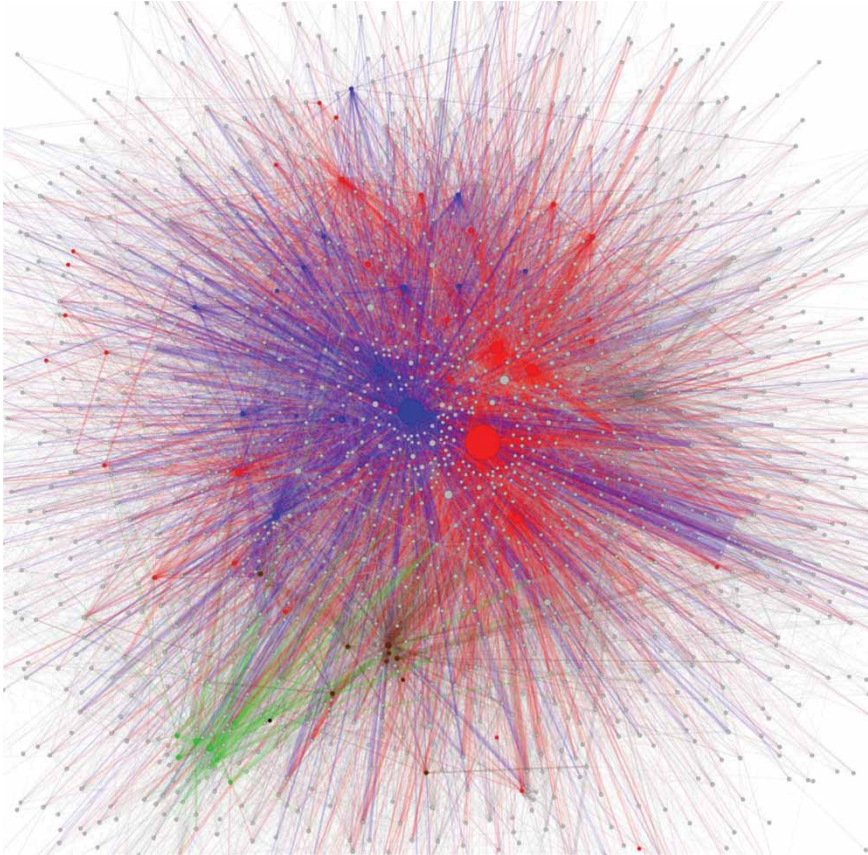


FIGURE 4 Network of accounts @mentioning the political candidates during the election period, coloured by party affiliation of the @mentioned accounts.

communicative affordances of blogs and *Twitter*. Hyperlinks in political blogs can reference additional information (when embedded in blog posts) or signal ideological affiliation (when included in blogrolls) (Highfield 2011). They are rarely used simply to reference other blog authors or commenters, nor is it common practice to include links to the websites or other Web presences of all public figures mentioned in a post. Hyperlinks in blogs, therefore, constitute a more rarefied commodity which is activated only where, especially relevant – to the extent that blog research and common blogging etiquette consider them to be part of a gift economy of mutual linking (Schmidt 2007; Francoli & Ward 2008). This can lead logically to a more partisan use of hyperlinks to support only political fellow travellers.

By contrast, @mentioning on *Twitter* is a substantially more everyday practice which includes political friends and enemies alike; indeed, some @mentions

may well stem from messages which retweet or @mention political opponents only in order to criticize their statements or general views. Such critical @mentioning of political opponents may even be undertaken deliberately in order to evoke an (angry) response which may then be further exploited for political gain. Beyond such intentionally combative activities, too, @mentions of their accounts simply provide a convenient shortcut for referring to public figures in any domain, and are used on *Twitter* as a matter of course. This explains the lack of overwhelming partisanship in how @mentions were mobilized by the general *Twitter* public in the present case, then: few users, for example, would have referred to @TheQldPremier by her *Twitter* username, but then avoided doing the same for @Campbell_Newman in order to deprive him of *Twitter* exposure, it seems.

However, if the network of *Twitter* interactions through @mentioning is narrowed to display interactions only between the candidate and party accounts themselves a different pattern emerges. Figure 5 shows the political *Twitter* accounts which we tracked during the Queensland election, coloured by party affiliation, and indicates the strength of interaction between the accounts through the size of the lines connecting them; connections are coloured here according to the originating account. First, it is immediately obvious again that the Greens and KAP accounts form their own clusters which are connected to the rest of the network only through a small number of interactions with political opponents (usually at a local level, where opposing candidates in the same electorate @mention one another). Mainly, candidates of both parties group around their party leaders or prominent local candidates, supporting each other through mutual @mentions and retweets. To the extent that such activity is orchestrated by each party's campaign headquarters, it also represents a dedicated multi-account political promotion strategy, of course.

There is also strong interaction between the accounts affiliated with each of the two major parties; most centrally, in each case, between the respective general party accounts and the party leaders. Minor candidates also @mention the party and leadership accounts with some degree of frequency. But a considerable amount of @mentioning also takes place across party lines between the two party organizations – and here, especially directed by Labor candidates at their LNP opponents. Of the party leadership teams, Labor's Deputy Premier @AndrewFraserMP is the most prominent combatant: he frequently @mentions his opposite number @TimNichollsMP as well as @Campbell_Newman, while – in spite of her otherwise frequent @replies to other *Twitter* accounts – Premier Anna Bligh remains relatively subdued in her interactions with the other side. This is likely to point to a deliberate campaign strategy which positions Fraser as leading the attack while Bligh remains in a more presidential role above the fray.

Newman's direct opponent in the Brisbane city electorate of Ashgrove, @katejonesmp, also appears as a prominent account in this analysis,

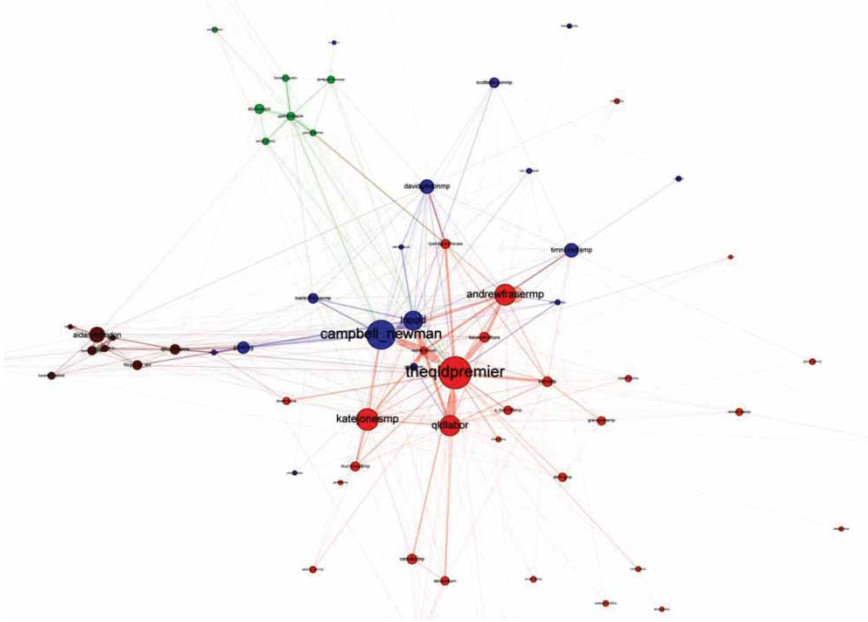


FIGURE 5 Network of @mention interactions between the political candidates during the election period, coloured by party affiliation of the @mentioned accounts.

@mentioning @Campbell_Newman with some frequency; she played a pivotal role in Labor's election strategy as a strong performance by her would have raised doubts about Newman's ability to enter parliament in order to take up the Premiership in the first place. However, her @mentions towards Newman remain comparatively muted, as the development of a perception of her as too aggressive in style would have hindered rather than helped her public image. Finally, local Surfers Paradise candidate @matt4surfersalp appears to have taken on a similar attacking role, possibly on his own initiative: his is the ALP-affiliated account which most frequently mentions @LNPQLD and @Campbell_Newman, alongside @TheQldPremier.

In keeping with their electoral positioning ahead of the election, LNP accounts largely refrain from responding in kind; again, this 'small target' strategy also serves to minimize any possible *Twitter* missteps which could be exploited by their Labor opponents. Some of @TimNichollsMP's few tweets do @mention Andrew Fraser, and the accounts of shadow minister @JPLangbroek and local candidate @ScottDriscollAu do engage with @QLDLabor as well as @AndrewFraserMP and @TheQldPremier, respectively, but generally fail to make a substantial impact on the political discussion on *Twitter*.

Hashtagged activity

The activities of *Twitter* users around the key political accounts in the 2012 Queensland state election must also be understood against the background of general activities in the #qldvotes hashtag. As it is impossible to reliably identify and analyse every last tweet which comments, however peripherally, on the Queensland election, the stream of tweets which have deliberately been marked with the #qldvotes hashtag must stand in as a reasonable approximation of overall tweeting activity; however, the self-selecting nature of this sample must be noted and understood in this context. Constituted of tweets whose authors consciously chose to contribute them to a continuing public discussion of the election, #qldvotes represents a temporary, *ad hoc* public (Bruns & Burgess 2012) – but does not contain the less visible, at least notionally private messages intended by *Twitter* users only for their networks of followers. #qldvotes may also be seen as a deliberate performance of public election discussion, therefore.

This also accords with Larsson and Moe's observation that election-related tweeting 'appears to be largely dependent on other mediated events' (2012, p. 13) – a pattern which Bruns and Burgess (2011a) found in their study of the use of *Twitter* in the 2010 Australian federal election, too. Public discussion of political events through shared hashtags will be most inclusive and effective if it discusses shared texts (newspaper reports, TV programmes, major campaign events) that are accessible to all participants; spikes in *Twitter* activity around events such as televised leaders' debates, policy announcements, or election day coverage are a common occurrence, therefore.

This is evident in our #qldvotes data as well (Figure 6). Unsurprisingly, the major spike in *Twitter* activity (at close to 10,000 hashtagged tweets that day) occurs on election day, 24 March 2012. Substantial activity begins only with the official commencement of the campaign on 19 February, with a series of minor spikes evident, especially during the second half of the election period.

After a quiet first third of the campaigning period, 4 March sees a first minor spike as the LNP celebrates its official campaign launch. A further period of heightened activity on 10 March is triggered by an opinion poll which sees Labor's Kate Jones ahead of Campbell Newman in the Ashgrove electorate, raising the possibility that the LNP might win the election, but that its declared candidate for Premier could fail to enter parliament; Labor's own official campaign launch follows on 11 March. 15 March sees a combination of major events, from a visit of former Liberal Party Prime Minister John Howard to the Ashgrove electorate in support of Newman through the escalation of a Labor campaign alleging inappropriate business dealings by Newman and his wife to a televised 'People's Forum' with the leaders. A final leaders' debate in the evening of 19 March accounts for the spike on that day.

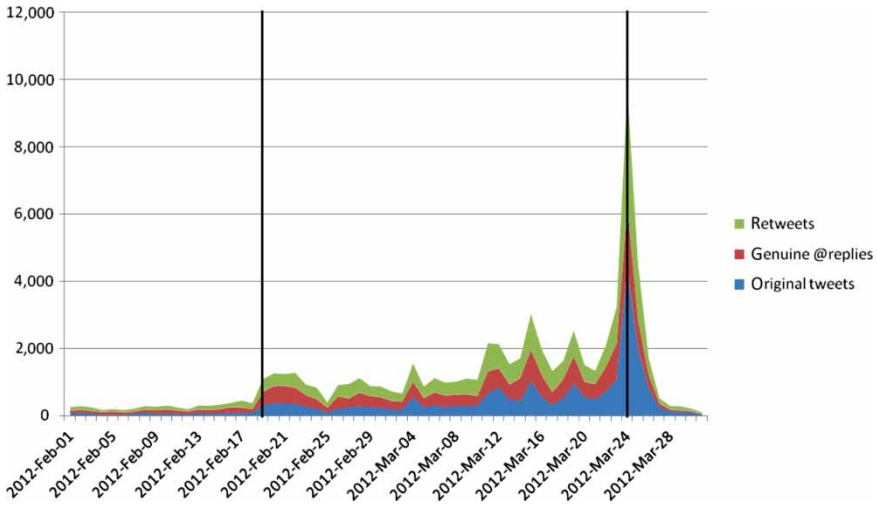


FIGURE 6 #qldvotes activity during February and March 2012.

To determine whether such user activity in the #qldvotes hashtag points to the presence of engaged *Twitter*-based followers of the campaign, or merely to a barrage of random tweets which do not engage with one another, it is also useful to explore the patterns of interaction between #qldvotes contributors. In doing so, we follow Tedjamulia *et al.* (2005) in distinguishing three groups of participants amongst the 8973 unique contributors to #qldvotes whom we observed over the course of February and March 2012: the least active 90 per cent of participants, the next 9 per cent of highly active users, and a final 1 per cent of most active contributors. For each of these groups, and for the overall hashtag data set, we may then calculate their activity patterns (see Bruns & Stieglitz 2012, for a detailed discussion of this approach).

This analysis points to the presence of a dominant core of #qldvotes participants: in combination, lead and highly active users account for more than three quarters of all #qldvotes tweets. While this points to a comparatively small base of dedicated contributors to the hashtag, it also points to the possibility of forms of close interaction – indeed, to the potential to generate a shared sense of community – which it would not be possible to develop amongst a much larger user-base (for example, in the context of a major national election attracting tens or hundreds of thousands of users to the hashtag). Further, Figure 7 shows the presence of a substantially larger percentage of @replies in the tweets of these leading user groups, as compared to those of the least active 90 per cent of contributors; this, too, supports the view that greater community interaction is taking place amongst these leading groups than with the least active group, whose activities consist predominantly of making original statements and retweeting the messages of others. (It is further notable that the percentage of

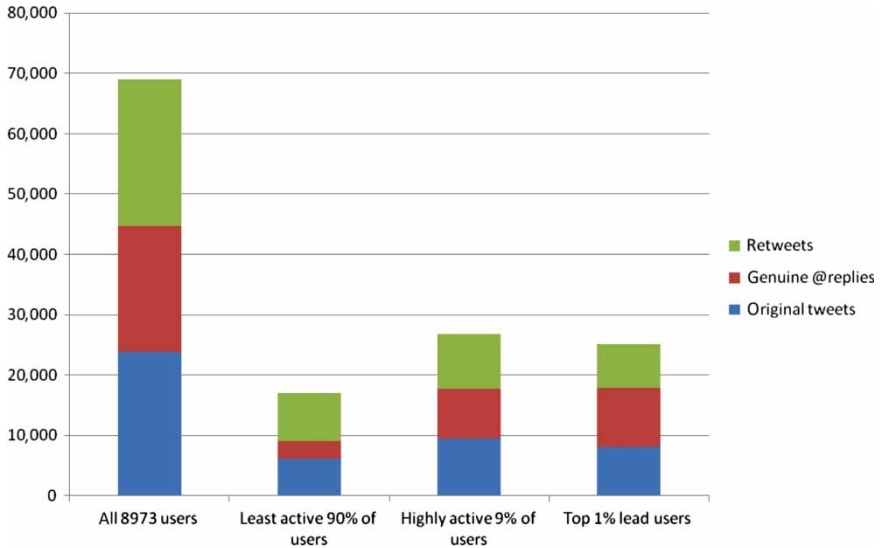


FIGURE 7 Contribution patterns to the #qldvotes hashtag, February/March 2012.

@replies for the top 1 per cent of lead users is greater yet again than that for the next 9 per cent of highly active users.)

Further outlook

The longer term impact of such temporary communion around a shared election hashtag has yet to be fully explored. It is unlikely that all of the leading #qldvotes participants will make the transition to the continuing day-by-day discussion of Queensland politics in #qldpol, for example; a post-election decline in political interest and participation is documented well beyond the specific confines of *Twitter* (Kirchhoff *et al.* 2009; Macnamara 2011).

The same is true also for the *Twitter* activities of the political accounts we have studied in this article, of course – especially in the context of a decisive election delivering a change of government. In the LNP’s landslide victory, 48 seats changed their hands from one party to another; in particular, 44 seats changed from the ALP to either the LNP or KAP. Prior to the election, many of the sitting politicians on *Twitter* included their role in their user names, such as @katejonesmp or @TheQldPremier. Including ‘MP’ after their own name helps to authenticate the user as a politician, even if they have not sought an official verification of their account from *Twitter*.

However, the result of the election meant that many of these accounts were now no longer appropriately named, since the users in question had not been reelected or – like Anna Bligh – had lost their government functions. In addition

to the changes around the Bligh and Newman accounts noted previously, other accounts were rebranded in response to the election result; Kate Jones's account, for example, changed to @katejonesqld. Further, those successful and – especially – unsuccessful candidates who had only begun to use *Twitter* at the start of the campaign, possibly at the behest of their campaign headquarters, now also had to decide whether they wanted to continue their *Twitter* activities post-election. At the time of writing in late November 2012, @katejonesqld had posted one tweet since the election day in March, while @andrewfraserqld had remained generally active, for example. As noted above, @Campbell_Newman had ceased tweeting altogether, too, in favour of the newly acquired @TheQldPremier account, whose tweets now consist almost exclusively of media releases. These post-election changes have clear implications for research which tracks the tweets by, and mentions of, specific *Twitter* accounts beyond the election campaigns themselves; regular checks of the accounts tracked are required to ensure that the project is capturing the intended data. More generally, they also indicate for each candidate whether they understand *Twitter* predominantly as a campaigning tool, or have incorporated social media fully into their everyday political activities.

Conclusion

Overall, the findings of our study must be understood against the backdrop of an election which had always been predicted to result in a landslide win for the LNP opposition. This electoral starting-point appears to have resulted in the adoption of some highly divergent social media strategies by the two major parties: on the one hand, the highly active use of *Twitter* by the ALP, with a clear distribution of roles across its leading accounts, a campaign of strong personal activity by the Premier and an at times aggressive approach to engaging with LNP opponents by Treasurer Andrew Fraser and other candidates; on the other, the 'small target' strategy of the LNP, which did institute 'personal' accounts for some of its leaders but (as it seems from the @CD_Track episode) closely policed those accounts and otherwise positioned its generic @LNPQLD party account as the central, staid *Twitter* presence. Beyond this, the smaller parties developed their own social media strategies, and mainly used *Twitter* to generate interactions between their own accounts.

We have also documented that the respective levels of active *Twitter* usage by the various candidates are generally not reflected in their prominence and visibility in the total number of @mentions made of them by everyday *Twitter* users, however; rather, the *Twitter* handles of specific politicians appear simply to stand in as substitutes for their full names, and are used by supporters and opponents alike without such use conferring any notable approval or disapproval. At least in the specific context of the 2012 Queensland election, this raises

significant doubts about the ability of *Twitter* (and perhaps of overall social media) campaigning to affect electoral outcomes in any direct way; ordinary *Twitter* users appeared to be substantially more likely to use the politicians' *Twitter* handles to talk *about* them than strike up a conversation *with* them, even in spite of the considerable outreach efforts of Anna Bligh's @TheQldPremier account and those of a handful of other candidates. In the end, Bligh's highly active and Newman's largely passive accounts were @mentioned with similar frequency.

This also highlights the limited utility of any simplistic electoral sentiment schemes which merely measure the relative visibility through @mentions of political accounts without investigating in much greater depth the context in which such account names are mentioned. Even apart from the fact that *Twitter* demographics – in Australia or elsewhere – are rarely representative of the general population, any attempts to forecast election outcomes from the relative *Twitter* activity around the major candidates' accounts should be approached with great caution, therefore.

The same is true for studies which focus only on election-related hashtags, however. As our analysis of #qldvotes has shown, that hashtag was ultimately dominated by a small community of fewer than 1,000 *Twitter* users, whose interactions amongst one another may be of interest in their own right, but whose high levels of engagement with the election campaign designate them as 'political junkies' (Coleman 2003) and therefore far from representative of the wider electorate. There are few opportunities to overcome such sampling bias, short of tracking every conceivable keyword which may be used in conjunction with political discussion on *Twitter* – and on balance, a focus on the @mentions of politicians and other relevant accounts may provide a better and more diverse cross-section through election-related political discussion on that platform than is provided by a focus on hashtags alone, as it does not base itself on an already self-selected group of highly engaged political discussants in the way that a hashtag data set does.

What is necessary as a next step beyond the more limited analysis which we have been able to present in this article, then, is the comprehensive semantic analysis – including a focus on the key terms, concepts, and attitudes expressed in the tweets – of @mention data sets as we have analysed them here. In addition to tracking the relative prominence of the various political accounts, such an analysis might be able to identify the key themes and sentiments associated with such accounts, and explore how these may affect the electoral fortunes of the account holders.

Overall, our analysis here demonstrates the use of diverse *Twitter* campaigning strategies which match the divergent electoral fortunes of the various parties and candidates in the 2012 Queensland election; it also appears to show the relative inability of such strategic choices to affect the overall political debate on *Twitter* about the election, however. Further, similar analysis of comparable election campaigns must show whether these observations are unique to this

election, whose outcomes were rarely in doubt, and whether a closer electoral contest, for example, may generate considerably more active use of social media by all parties, not least also in order to directly engage with the opposition and its supporters.

References

- Adamic, L. A. & Glance, N. (2005) 'The political blogosphere and the 2004 U.S. election: divided they blog', [Online] paper presented at 2nd Annual Workshop on the Weblogging Ecosystem: Aggregation, Analysis and Dynamics, Chiba, Japan, 10 May 2005. Available at: <http://www.blogpulse.com/papers/2005/AdamicGlanceBlogWWW.pdf> (12 May 2010).
- Broersma, M. & Graham, T. (2012) 'Social media as beat: tweets as a news source during the 2010 British and Dutch elections', *Journalism Practice*, vol. 6, no. 3, pp. 403–419, doi:10.1080/17512786.2012.663626.
- Bruns, A. (2012) 'How long is a tweet? Mapping dynamic conversation networks on Twitter using Gawk and Gephi', *Information, Communication & Society*, vol. 15, no. 9, pp. 1323–1351, doi:10.1080/1369118X.2011.635214.
- Bruns, A. & Burgess, J. (2011a) '#ausvotes: how Twitter covered the 2010 Australian federal election', *Communication, Politics & Culture*, vol. 44, no. 2, pp. 37–56.
- Bruns, A. & Burgess, J. (2011b) 'Gawk scripts for Twitter processing', *Mapping Online Publics*, [Online] Available at: <http://mappingonlinepublics.net/resources/> (14 March 2013).
- Bruns, A. & Burgess, J. (2012) 'Notes towards the scientific study of public communication on Twitter', [Online] keynote presented at the Conference on Science and the Internet, Düsseldorf, 4 August 2012, Available at: <http://snurb.info/files/2012/Notes%20towards%20the%20Scientific%20Study%20of%20Public%20Communication%20on%20Twitter.pdf> (14 March 2013).
- Bruns, A. & Stieglitz, S. (2012) 'Quantitative approaches to comparing communication patterns on Twitter', *Journal of Technology in Human Services*, vol. 30, nos 3–4, pp. 160–185, doi:10.1080/15228835.2012.744249.
- Bruns, A., Burgess, J., Crawford, K. & Shaw, F. (2012) '#qldfloods and @QPSMedia: crisis communication on Twitter in the 2011 South East Queensland floods', [Online], Brisbane, Available at: <http://cci.edu.au/floodsreport.pdf> (14 March 2013).
- Burgess, J. (2012) 'Who's @TheQldPremier?', *Creativity/Machine*, [Online] 26 March, Available at: <http://creativitymachine.net/2012/03/26/whos-theqldpremier/> (14 March 2013).
- Burgess, J. & Bruns, A. (2012) '(Not) the Twitter election: the dynamics of the #ausvotes conversation in relation to the Australian media ecology', *Journalism Practice*, vol. 6, no. 3, pp. 384–402, doi:10.1080/17512786.2012.663610.
- Coleman, S. (2003) 'A tale of two houses: the House of Commons, the Big Brother house and the people at home', *Parliamentary Affairs*, vol. 56, no. 4, pp. 733–758.

- Flew, T. (2008) 'Not yet the Internet election: online media, political commentary and the 2007 Australian federal election', *Media International Australia Incorporating Culture and Policy*, vol. 126, pp. 5–13.
- Francoli, M. & Ward, S. (2008) '21st century soapboxes? MPs and their blogs', *Information Policy: The International Journal of Government & Democracy in the Information Age*, vol. 13, pp. 21–39.
- Gephi.org (2012) 'Gephi, an open source graph visualization and manipulation software', [Online] Available at: <http://gephi.org/> (29 November 2012).
- Gibson, R., Lusoli, W. & Ward, S. (2008) 'The Australian public and politics online: reinforcing or reinventing representation?' *Australian Journal of Political Science*, vol. 43, no. 1, pp. 111–131.
- Grant, W. J., Moon, B. & Busby Grant, J. (2010) 'Digital dialogue? Australian politicians' use of the social network tool Twitter', *Australian Journal of Political Science*, vol. 45, no. 4, pp. 579–604, doi:10.1080/10361146.2010.517176.
- Highfield, T. (2011) *Mapping Intermedia News Flows: Topical Discussions in the Australian and French Political Blogospheres*, [Online] Doctoral dissertation, Queensland University of Technology, Brisbane. Available at: <http://eprints.qut.edu.au/48115/> (14 March 2013).
- Highfield, T. & Bruns, A. (2012) 'Confrontation and cooptation: a brief history of Australian political blogs', *Media International Australia*, vol. 143, pp. 89–98.
- Jericho, G. (2012) *The Rise of the Fifth Estate: Social Media and Blogging in Australian Politics*, Scribe, Melbourne.
- Kirchhoff, L., Nicolai, T., Bruns, A. & Highfield, T. (2009) 'Monitoring the Australian blogosphere through the 2007 Australian Federal Election', in *Communication, Creativity and Global Citizenship: Refereed Proceedings of the Australian and New Zealand Communications Association Annual Conference*, [Online] Brisbane, 8–10 July, ed. T. Flew, pp. 982–1005. Available at: <http://www.proceedings.anzca09.org> (12 May 2010).
- Larsson, A. O. & Moe, H. (2012) 'Studying political microblogging: Twitter users in the 2010 Swedish election campaign', *New Media & Society*, vol. 14, no. 5, pp. 729–747, doi:10.1177/1461444811422894.
- Larsson, A. O. & Moe, H. (forthcoming) 'Twitter in politics and elections: insights from Scandinavia', in *Twitter and Society*, eds K. Weller, A. Bruns, J. Burgess, M. Mahrt & C. Puschmann, Peter Lang, New York.
- Macnamara, J. (2011) 'Pre and post-election 2010 online: what happened to the conversation?' *Communication, Politics & Culture*, vol. 44, no. 2, pp. 18–36.
- Maireder, A. (forthcoming) 'Political discourses on Twitter: networking topics, objects and people', in *Twitter and Society*, eds K. Weller, A. Bruns, J. Burgess, M. Mahrt & C. Puschmann, Peter Lang, New York.
- Maireder, A., Ausserhofer, J. & Kittenberger, A. (2012) 'Mapping the Austrian political Twittersphere: how politicians, journalists and political strategists (inter)act on Twitter', *Proceedings of CeDem12 Conference for E-Democracy and Open Government*, [Online] eds P. Parycek & N. Edelmann, Danube University,

- Krems, Austria, pp. 151–164 Available at: <http://phaidra.univie.ac.at/o:154914> (14 March 2013).
- Newman, C. (2012) ‘Tweet’, Available at: https://twitter.com/CD_Track/status/177702564224176129 (14 March 2013).
- Schmidt, J. (2007) ‘Blogging practices: an analytical framework’, *Journal of Computer-Mediated Communication*, vol. 12, no. 4, pp. 1409–1427.
- Tedjamulia, S. J. J., Dean, D. L., Olsen, D. R. & Albrecht, C. C. (2005) ‘Motivating content contributions to online communities: toward a more comprehensive theory’, in *Proceedings of the 38th Annual Hawaii International Conference on System Science*, Hawai’i, 3–6 January 2005. Washington, DC: IEEE, 193b.

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