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Hybrid social and news media protest events: from #MarchinMarch to #BusttheBudget in Australia*

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ABSTRACT
Public protest events are now both social media and news media events. They are deeply entangled, with news media actors – such as journalists or news organisations – directly participating in the protest by tweeting about the event using the protest hashtag; and social media actors sharing news items published online by professional news agencies. Protesters have always deployed tactics to engage the media and use news media agencies’ resources to amplify their reach, with the dual aim of mobilising new supporters and adding their voice to public, mediatised debate. When protest moves between a physical space and a virtual space, the interactions between protesters and media stop being asynchronous or post hoc and turn instantaneous. In this new media-protest ecosystem, traditional media are still relevant sources of information and legitimacy, yet this dynamic is increasingly underpinned by a hybrid interdependency between traditional news and social media sources. In this paper we focus on an anti-austerity government movement that arose in Australia in early 2014 and was mobilised as a series of social media driven, connective action protest events. We show that there is a complex symbiotic interdependency between the movement and the traditional media for recognition and amplification of initial protest events, but that over time as media interest wanes, the movements’ network becomes disconnected and momentum is lost. This suggests that the active role traditional media play in protest events is being underestimated in the current research agenda on connective action.

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Social media and news media now interdependently report on protest events. The end result is a dynamic, often hybrid information ecosystem where movement-based and social media-based actors are constantly aware of news media actions covering the protest, and news media actors of social media-based trends. Protesters have always seen the media as necessary for amplification of their grievances, and have used media attention to mobilise new supporters and to shape public debate. When protest moves between offline and online spaces, the interactions between protesters and media become instantaneous. Social media platforms encourage their users, by design, to monitor how favourably their

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posts have been received by their social networks. In real time users taking part in the protest can pick articles or photos that describe the same protest, and share them for goals that range from informing others to increasing the legitimacy of the protest. In this new media-protest ecosystem, traditional media are still relevant sources of information and legitimacy, clearly this dynamic is increasingly underpinned by a hybrid interdependency between traditional news and social media sources (see Chadwick, 2013).

**Background and timeline of March Australia and Bust the Budget events**

In this paper we explore this dynamic media–movement relationship via analysis of six linked protest events that occurred across Australia from March 2014 to March 2015. These protest events were initially readily characterised by academic commentators (Price, 2014; Vromen, 2014) as examples of Bennett and Segerberg’s (2013) connective action: event organisation happened via a digitally networked group of actors without a base in any major political organisation, and as a multi-issue event protesting against the conservative politics of the national government and a proposed austerity budget. For multi-issue, connective action protest events there are discursive opportunities in the dynamic relationships between social media reportage and the authority of traditional media (Della Porta & Diani, 2006). The framing of March in March by the leading broadsheet *Sydney Morning Herald* (SMH) demonstrated how the connective action features of the event were portrayed and misunderstood. In the early evening of Sunday 16 March 2014 the SMH website uploaded a story headlined ‘March in March: Tony Abbott, Gina Rinehart cop blasts in Sydney protest’, and accompanied by 13 photos. It was the first paragraph that was disparaging of those in attendance and their grievances, which drew substantial ire on social media:

> Socialists, it seems, are not made of sugar. Thunderstorms followed by drenching autumnal showers did not deter a loose collection of anti-Abbott government activists from gathering at central Sydney’s Belmore Park on Sunday to protest Prime Minister Tony Abbott’s stance on asylum-seekers, the environment, industrial relations, free trade and gay marriage. (Maley, 2014a)

This comment framed the protestors as an unrepresentative group, who were anti-government, without any claim to a broader set of legitimate grievances. Despite that the photo montage accompanying the story clearly showed a range of participants at the rally, including young families, students and older people, as well as range of causes on signs, many of which were linked to the environment. This is an example of the ongoing limitations of the traditional media frame of protest events that focuses primarily on conflict with political elites (see Gamson & Wolfsfeld, 1993; Scalmer, 2002). Personalised action frames inherent to connective action events are also complex. It was present in issue-driven protesters’ grievances made visible via individualised and handmade posters and memes; and via the traditional media *reframing* grievances as predominantly about individual leaders’ actions and political style.

However, on the Monday morning after this story was published online, a blogger Timothy Pembroke wrote an article critiquing the SMH’s online story, and the absence of any coverage of March in March in the newspaper’s print version. The most important element of his blog was the meme he developed with a superimposed image of the large
turnout at Sydney’s March in March on the top of the SMH front page (Pembroke, 2014a, 2014b) (Figures 1 and 2).

This post by a little known blogger received 100,000 shares by Friday morning, buttressed by retweets from celebrity activists such as Russell Brand and Billy Bragg, and a Facebook campaign. On Friday Pembroke was sent an email by Darren Goodsir the SMH’s editor in chief apologising for the lack of coverage of March in March, acknowledging that this was an error and needed to be rectified (Pembroke, 2014b). On Saturday 21 March the SMH published a follow-up story (Maley, 2014b) titled ‘Two sides to the

Figure 1. Pembroke’s re-imagined SMH front page.

Figure 2. Email between SMH editor and Pembroke.
story we didn’t run’ stating that SMH did not understand the magnitude of the protest events or how newsworthy they actually were. However, she maintained her original criticism that ‘it was unfocused’ and united only by ‘raw hatred of the Prime Minister’. She also wrote:

It is strange that people who despise the MSM so much are so angry at being ignored by it. This week the paper received letters from people involved in the march asking why it wasn’t covered … I was abused on Twitter for my online story, and also for the fact that it didn’t run in the paper.

This example from the reportage of the first March in March connective action event underlines the importance of the concept of media hybridity (Chadwick, 2013), as traditional media use their own social media accounts to move in and out of citizen-led online spaces as part of their synchronous reporting style and need for interaction. It shows that while symbiotic interdependency between protesters and traditional media remains (Gamson & Wolfsfeld, 1993), it is heightened in the digital context, and interaction becomes more likely. While, as Cammaerts (2012) asserts, protesters have more self-awareness of this relationship they are still constrained by the inherent power asymmetry in seeking traditional media attention to enlarge scope for their protest event.

The mobilisation was initially propelled by Facebook pages and a twitter hashtag of #MarchinMarch. Yet this case also demonstrates the limitations of sustained connective action events over time without organisation, and also how easily new ideas and narratives can be re-appropriated by well-resourced political organisations. At its essence what became known as the March Australia movement is an example of a failed connective action movement that we need to better understand. We argue here that the ongoing central role the traditional media plays in publicising and amplifying the reach of Australian protest events and movements is an important element in understanding this mobilisation failure. We present novel data using Twitter event analysis to undertake this case study.

Ostensibly, all six protest events we included in our data collection brought together participants with a shared sense of grievance against the conservative national government. March in March was organised by three individuals who were not professional organisers, nor did they have any links to any major political organisations or parties (Farrell, 2014). With the national government as the target for the protest, the movement was propelled in May 2014 by the announcement of the government’s first budget, largely described as an austerity budget (Scott, 2014). Australian public opinion was largely against the budget as well: Tadros and Woodhead (2014) compiled data from three reputable polls and found that support for the Liberal/National Coalition parties was at its lowest in over five years; and that 70% of those polled believed they would be worse off as a result of the budget.

Table 1 lists the six events, estimated turnout and Twitter attention. It shows the rapid decline in estimated turnout, Twitter attention and Facebook event sign-ups over the year of anti-government mobilisations. The Bust the Budget and March 4 Our Rights events were organised by the Australian union movement, the rest by city and state-specific sections of the March Australia connective action coalition. It is worth noting the sharing of discursive constructions in the naming of these events. While the March Australia events are consistent in their use of ‘March’ in the month of the event, the two union-led events
overtly attempt to co-opt the discursive construction of the prior connective action events. For example, #BusttheBudget was one of the main taglines and hashtags used during the May 2014 protest that occurred on the weekend after the budget release; it subsequently became the name of the union-led protest events in July. Some March Australia organisers, notably in Melbourne, also encouraged participation in the July Bust the Budget event, even though they were already planning for their own next event in August.

The last column was sourced from Facebook event pages and traces the sign-ups to the six Sydney-based events. There are two main points to take from this data. The first is the matched decline in Facebook sign-ups with estimated national turnout to the events over time. This does not indicate actual turnout, but it does signal the level of attention and engagement by the Facebook-based audience. It also shows that the four March Australia events used Facebook for mobilisation and attention more successfully than the two union events.

We also examined the organisational affiliation and issue agenda of speakers invited to speak at the rallies in Sydney. March in March and March in May both promoted themselves as being beyond the ‘usual suspects’, and that no party representatives would be allowed, and they maintained this in Sydney until the small 2015 event when the Leader of the Australian Greens spoke. Using a simple binary classification whereby unions representatives are ‘economic’, and others are either from organisations based on identity, environment or new media, there were clear patterns: invited speakers at all six events included some union representatives, mostly from progressive public sector unions, representing teachers or nurses; there were new media journalists as speakers and celebrity musicians (e.g., Billy Bragg) at all of the March Australia events in Sydney; and environmental and identity issues – refugees, Aboriginal, feminist and Gay, Lesbian, Bisexual, Trans and Intersex (GLBTI), were also well represented at March events, but largely absent from the union-led events. Further, most of the organisations represented at March Australia rallies are protest movement actors, and several exist primarily as online-only organisations (e.g., Destroy the Joint and 350.org). They are largely volunteer-run, platform leadership and outsider advocacy-oriented organisations (with the notable exception of Greenpeace). They are generally not paid membership-based political organisations like unions. The authors attended all four of the 2014 protest events in Sydney. We made a few basic observations:

- The sizes of the first three events in 2014 were roughly similar, about 10,000 people each time. The fourth event in August 2014 was much smaller, at most 1500 people, despite being held in a central Sydney CBD (see Jackson & Chen, 2015).
The March Australia organised events and the Unions NSW events had a distinctly different appearance. The March Australia events were dominated by handmade signs, on a broad range of issues, including refugees, environment, same-sex marriage, health and education. The union events had very few handmade signs, many colourful union flags and professional signs, mainly on issues of workers’ rights, health and education.

The March Australia events all had high-profile musicians play at the rallies, and generally had younger participants than the Unions NSW event. There was a minor skirmish with police at the May 2015 event when a small group of young people sat in the middle of a busy road. The Unions NSW event had professional marshalls, no confrontation with the police and a more prominent march through the CBD of Sydney.

Despite these differences, we argue it is worthwhile studying these six events together as part of the one-year anti-austerity government movement in Australia. The distinct differences between the events are primarily based on organisation, but the sharing of both personal action frames and discursive construction by traditional media is an important point of our analysis.

We used the news media database Factiva to search for mentions of the six protest events in traditional media. Figure 3 demonstrates that the first event, March in March, generated the most attention due to its novelty, and the two union-organised events that featured less overt conflict received less coverage overall.

**Media–movement relationships**

There is an important, though not extensive, tradition of analysing the relationship between traditional media and social movements. Most existing research explores the

![Figure 3](image-url)  
*Figure 3. Articles on Australians newspapers with reference to ‘March Australia’ and ‘Bust the Budget’.*
different logics of action of the media and movements, as well as their interdependency for stories and reportage. Newer literature located in the contemporary digital era focuses on the emergence of movement-led independent media enabled by the digital context, and sidelines the ongoing reliance movements have on traditional media for publicising their cause.

Gamson and Wolfsfeld in a classic theoretical overview of media and movements point to the traditional asymmetric relationship between media and movements yet suggests that they exist in competitive symbiosis (1993, p. 116). Movements need the news media for three major purposes: mobilisation, validation (standing and attention to demonstrate the movement matters) and scope enlargement (broadening the scope of conflict and generating public sympathy). Movements can give media stories a newsworthy focus on drama, conflict action, colour and good photo opportunities. Often there is a publication premium if novelty, costume and violent confrontation are found in protest events (1993, pp. 117, 125). Overall, in arguing that ‘participants in symbolic contests read their success or failure by how well their preferred meanings and interpretations are doing in various media arenas’ (Gamson & Wolfsfeld, 1993, p. 119), this traditional interpretation emphasises that movements are reliant on obtaining media attention as a primary measure of successful mobilisation. Sean Scalmer’s (2002) research in the Australian context largely follows this traditional interpretation of movement–media relationships, but emphasises that this places movements in a constant double bind as they are likely to only receive media attention the more conflict there is within protest events, and this is then less likely to focus on the substantive grievances and issues of the movement itself (see also Cottle, 2008).

In contrast, a recent article by leading social movement scholar Donatella della Porta argues against the traditional view of power asymmetry between movements and the media as it ‘risks to underestimate the capacity for agency by social movement organisations as well as the active role of the audiences in making sense of media messages’ (Della Porta, 2011, p. 807). Thus, while she accepts the interdependency premise – that movements need media attention – she also highlights the increasing agency movements have in shaping the nature of the relationship, and also how they are enabled by the digital context that increasingly provides a discursive opportunity structure for movement claims. Others argue that the advent of a logic of social media-based news production has enabled audiences even more, and in effect is closing the information-based ‘media gap’ (Bimber, Flanagan, & Stohl, 2005, p. 375; also van Dijck & Poell, 2013). In catering to audience expectations there is also acknowledgment that social media has changed professional journalism by traditional media outlets. Research has found that there is increased use of Twitter by traditional journalists in the U.K., more than in Germany and Sweden (Gulyas, 2013); regular social media sharing of political opinions by political commentators, but not by traditional political reporters (Bruns, 2012; Dahlen Rogstad, 2014) and the tendency for younger political journalists to embrace social media (Hedman & Djerf-Pierre, 2013). While there is little research yet on the interaction between news journalists on social media and social movement actors, Gil de Zúñiga, Diehl, and Ardèvol-Abreu (2016) recently found that citizens who interact with journalists on Twitter are less likely to see media reportage as biased as they gain a positive understanding of how news reportage works.
Social movement scholars continue to point to the ongoing importance of theorising and analysing the media–movement relationship while also highlighting movement agency in this relationship. For example, Cammaerts (2012) suggests that 'the mediation opportunity structure also has an impact on the available and imaginable repertoire of contentious action, it can even become constitutive of protest' (p. 120). In other words, protest events are enabled by media opportunities and the media–movement encounter can constitute an event in itself, even without other forms of direct action or disruption occurring. Yet, he also acknowledges that there is reflexive self-awareness by movements that they still need the media, and need to learn how to name and manage their interactions via granting access and media statements (Cammaerts, 2012, p. 124). Relatedly, Mattoni and Treré (2014) argue that recent research has a 'one-medium bias' in that it looks at either mainstream media or alternative movement media and seldom looks at how they interact or present an episode of contention. They are also concerned by the tendency in social media data collection to focus on a single event and label it as a movement. Instead, they suggest we should return to analyses that recognise cycles of contention as movements developed over time (see also Tarrow, 2011). Thus, we can understand that recent literature has retreated from the symbiotic yet asymmetric power relationship highlighted by Gamson and his colleagues. Yet is this an entirely accurate understanding of contemporary media–movement relationships, or more a byproduct of research focusing nearly exclusively on successful movements and mobilisations?

In his recent book *The Hybrid Media System*, Chadwick (2013) focuses on the interdependent relationships between traditional and new media, suggesting that political actors are potentially enabled in the digital context as power in the hybrid media system is exercised by those who are successfully able to create, tap or steer information flows in ways that suit their goals and in ways that modify, enable or disable others’ agency, across and between a range of older and newer media settings. (2013, p. 207)

Thus, the movement that controls reporting on discursive messaging ends up with more capacity to influence social and political change. Correspondingly, Twitter and Facebook are used for mobilisation, event coordination and sustenance of a collective identity across disparately located protest events: thus social media platforms are complementary to and not a substitution for movement mobilisation (Gerbaudo, 2012, p. 13; see also Anduiza, Cristancho, & Sabucedo, 2014; Costanza-Chock, 2012). Bennett et al (2014) found that Twitter was the main platform performing ‘stitching’ work between disparate connective action movement members in their case study of Occupy Wall St in the U.S.A. Peer to peer connections via Twitter take on the role of the organisation, and ‘without the micro-level connections of dynamic integration, groups and networks will scatter or become significantly dependent on key bridging actors’ (2014, p. 253). However, others have found that Twitter plays a complex role as space for political communication (McGregor, Mourão, & Molyneux, 2016), political discussion and information sharing, and was less likely to be an organising or mobilising space (Theocharis, Lowe, Deth, & García-Albacete, 2015). We are especially interested in how Twitter on the day of protest events performs both an informational and a social, connective role when there is no formal organisation propelling the movement, and also what role media actors play within this Twitter ‘stitching’ network.
Thus while the digital context matters significantly for contemporary protest events and social movements, there is still resonance for Gamson’s symbiotic interdependence, despite a less clear-cut acknowledgement of the maintenance of asymmetrical media–movement power relationships over time. We examine whether the traditional asymmetric relationship between media and movements existing in competitive symbiosis has been entirely superseded by contemporary connective action-driven relationships where movements have agency, shape the discursive opportunity structure and are successful getting their messages across, no matter what media forms they use.

**Methodology**

For this paper we analysed data collected through the Twitter API from six Australian protest events organised against the conservative national government, and budget and austerity proposals in particular. The Twitter data contained details on tweets and users obtained through three distinct channels. First, tweets published during the events were captured live via the Twitter Streaming API with the query ‘statuses/filter’. Second, the complete list of ‘friends’ followed by the users active during the events was obtained after the events ended from the Twitter REST API with the query ‘GET friends/ids’. Third, to identify accounts pertaining to news organisations, journalists, politicians and parties, unions or social movement, we requested the members of selected public lists via the Twitter REST API with the query ‘GET lists/memberships’.

Tweets were requested through the Streaming API based on terms they contained. Terms to track tweets related to the events were defined before the events through an inspection of Twitter traffic and Facebook pages linked to the organisation and promotion of the events. The hashtag #BustTheBudget was used as a search term throughout the six events along with hashtags linked to the March Australia umbrella movement – #MarchAustralia, #MarchInMarch, #MarchInMay, #MarchInAugust and #March4 – and #AusUnions. The data set contains 202,237 tweets published by 26,819 unique users in the six 48-hour windows centred on the rallies. The data set on friends followed by users’ active publishing tweets during the events contains 25,187,971 Twitter accounts.

The public lists of Twitter users that we used were collected in February 2015 and were originally compiled by: Latika Bourke (@latikambourke, 110,000 followers), the Sydney Morning Herald (@smh, 637,000 followers), Ping Lo (@pinglo, 3000 followers), Australian Journos (@aujournos, 2000 followers), David Shoebridge (@ShoebridgeMLC, 7500 followers), James Massola (@jamesmassola, 25,000 followers), Carrington Clarke (@carrington|AU, 2000 followers), News.com.au (@newscomauHQ, 445,000 followers), Kevin Perry (@kevinperry, 27,000 followers), GhostWhoVotes (@GhostWhoVotes, 22,000 followers), Greg Barila (@GregBarila, 7000 followers), Greenpeace Australia Pacific (@GreenpeaceAustP, 40,000 followers), Lara McPherson (@laramcpherson, 3000 followers) and Eric Gyors (@captaineagle, 1000 followers). The influence of Latika Bourke’s Twitter account within the Australian politics context has been identified in other analysis (see Bruns & Burgess, 2011; Grant, Moon, & Grant, 2010). We added 689 Australian journalists she listed to our list; we also included lists compiled by other journalists, two news media organisations, one non-governmental organisation (@GreenpeaceAustP) and four accounts (@pinglo, @aujournos, @GhostWhoVotes and @laramcpherson) who are all high-profile, non-professional observers of Australian
The choice to adopt user-generated lists compiled by a diverse set of users was motivated by the need to include accounts with a relevance within the community of Australian Twitter users and, more importantly, that were recognised by the same community as relevant to our four categories of interest (news, politics, social movements and unions).

The compiled lists include 2543 news accounts – including 1453 journalists (14–18% of the Australian journalistic workforce as estimated by Hanusch, 2013), 694 accounts connected to Australian parties or politicians, 135 to unions and 339 to social movement organisations. The use of Twitter public lists represents an innovative way to approach the problem of labelling a large number of Twitter users when no central directory is available, as in the case of Australian journalists. Public lists, especially when compiled by news organisations, were also found ‘comprehensive’ and representative in a recent study on Australian journalists on Twitter (Hanusch & Bruns, 2016).

The public lists were then combined and used to identify users active in the protest events:

- 227 Twitter accounts of news organisations or journalists,
- 127 Australian parties or politicians,
- 82 unions and
- 36 social movement organisations

Among friends of the active users there were 2529 news organisations or journalists, 691 Australian parties or politicians, 135 unions and 339 social movement organisations.

Any inference drawn from the networks we constructed must be considered in light of the limited scope of the data itself. First, we do not observe attention or reactions of non-active users. Second, we observe and precisely measure the Twitter activity of active users, but when a user reshares information (and most of the traffic is in fact composed by retweets) we do not know the direct source of the information. Third, the friendship network we use in the analysis is based on information collected after the event concluded. Fourth, the observed friendship network is limited to the first-degree friends of all active users. It is possible, although not necessarily probable, that the network relevance of news account might diminish when friends of a higher degree (i.e., friends of friends) are included in the network. Still it is reasonable to assume that the probability of being exposed to any tweet (our unit of information) is inversely proportional to the number of degrees that separate donor and recipient, and consequentially the unobserved second-degree friend is probably less relevant in information flows than the first-degree observed friend.

**News media acting socially and network hybridity**

To understand the role played by the news media in a protest event such as the six rallies organised against the Australian government, we draw a series of networks out of Twitter data and analyse the ‘network relevance’ of news media accounts. As the interest of this paper is in exploring both the informational and social behaviours of different groups of users active online during the events, we focus on the network of ‘friends’. We use the term since it corresponds to Twitter’s own terminology – where a directed linked is
drawn from user A to user B if A ‘follows’ B and on the network of retweets, where a directed link from user A to user B is drawn for each tweet originally published by B and successively shared (‘retweeted’) by A.

News media providers have consolidated their authority due to professional and expensive technologies (from press to satellite TV) that increased reach and quality of their broadcasting capacity. The Internet has brought the same communicative technologies to everyone connected to it, but has not diminished the importance of news media’s authority and prestige. Although Twitter – and in general all social networking services – levels the technological playing field by providing to all users the same capacity to reach out to other users, Twitter users experience significant differences in term of status. One consequence is a profound reshuffle of rules and a hybridisation of social and information networks as any node of a network now has the potential to broadcast and reach any other node, once a monopoly of a few (Chadwick, 2013). Increasingly, news media providers need to leverage on and be an active part of social networks to distribute and popularise their stories.

As the proportion of interactions mediated by the Internet increases, social networks have become an important medium for news distribution particularly during ongoing, live events such as protests. During these ‘event-based’ political actions (Bimber, 2003) news media providers still play a role as authoritative sources, but also engage users by adopting interactive social networking practices. Our Twitter data of users participating in six Australia protest events and the traces of their interactions help to better understand the hybrid nature of a network of actors who synchronously make and distribute news, as both protagonists and tellers of an evolving story.3

Hybridisation of news accounts: information provision and acting socially

One-way hybridisation of roles is observed in examining mutual friendship relations among news media and regular users who are active in tweeting about events. In terms of the number of users befriended, news media accounts (i.e., news agencies or journalists) appear to be very social players in the network, having a higher number of mutual friendship connections. For Twitter users active during the protest events the median number of mutual friends also actively tweeting during the events is 26, the median number for the 227 users identified as news accounts is 78. News accounts tweeting about the events are clearly not replicating a broadcasting and asymmetric model of news breaking but instead cultivating ‘personal’ and community ties to be perceived as part of the social network (on journalists’ Twitter use see Kim, Kim, Lee, Oh, & Lee, 2015). Mutual Twitter friendships do not necessarily correspond to offline social bonding, which are usually cemented by some sort of recurrent interaction. For practical reasons when reciprocated Twitter friendships are in the thousands, most of the virtual ties are silent with the only interaction taking place when the tie is created.

Figure 4 shows the mutual friendship relations among friends of an actual news media account (a), and a regular user (b) of size close to the median value for each category. Communities are drawn based on a popular community detection algorithm (Newman & Girvan, 2004). The ‘neighbourhood’ of the news media account (in this case a freelance journalist) and of the regular user appears structurally similar with one relatively large community grouping respectively 50% and 72% of the nodes and many peripheral
communities weakly linked with the rest of the network. This kind of structure, with at least one dense community of interconnected nodes, is intuitively a feature of social networks but also inefficient for an information transmission network that aims to reach the

Figure 4. Mutual relations among friends and communities of a news media account (a) and regular users (b).
largest possible audience with the least number of ties. Nevertheless, even in acting socially, the news media account does reach - proportionally to the number of nodes - more communities than the non-news account.

It is debatable whether a Twitter network based on friendship relations must be primarily regarded as a social network or as an informational network. The distinction is important and has been addressed by Twitter researchers (see Kwak, Lee, Park, & Moon, 2010) interested in understanding how Twitter is used. Twitter features make it radically different from Facebook, and it is much more flexible in being used as both an information-sharing network and a social networking platform. Relationships between Twitter users are unidirectional by design, but many relationships are reciprocated. Looking at the relations connecting users active during the protest events, it shows that between 70% and 90% of relations are reciprocated. Of course, it is not possible to understand the intended meaning of a connection without surveying the user who created it, but we can assume that ‘following’ an account must indicate some interest in another user. Whether the interest is merely informational (I want to receive updates from an account) or also social (I want to signal to the holder of the account my interest and suggest reciprocity) is unknown. What we can assume is that a mutual connection between two users indicates a reciprocal interest in each other, either social or informational. Networking is not a social requirement for news accounts but primarily a business necessity. News media accounts, either managed by journalists or news organisations, pursue a strategy to increase the number of followers across different communities for status and to amplify the reach of their stories. But they also seek, by means of reciprocity, to create a community of interested users around them, a community in which they aspire to play a leadership role (see Blanchard & Markus, 2004).

If news media accounts behave socially, non-news users tend to also cultivate informational ties. According to the Twitter data regular users are strongly connected to news accounts: of the 26,819 users in our data set 79% follow at least 1 news account, and 53% at least 10. Notably the attention by users to other type of accounts monitored in this study is markedly lower:

- 6% follow at least one union account,
- 15% an account linked to an Australian politician and
- 8% an account linked to social movements.

This result is not surprising since social networking services are also largely used as news sources and online political engagement has been shown to significantly correlate with attention to news.

**News media spreading information and cohering the network**

But how is information contained in tweets shared during the events? Publicly available Twitter data do not allow an exact estimation of the information flow but we can reasonably assume that friendship networks are relevant in conveying information – that is, tweets – to users. We found that across the six protest events between 72% and 82% of all tweets are retweets (cf. Poell, 2014, p. 722). The network of retweets, where users are connected if they retweet each other, is assumed to describe the network along which
information travels. By comparing the network of retweets to the network of friends, which we can think of as two levels of the same multidimensional network (or multinetwork), it is possible to understand whether friendship ties during an event are significant in estimating the flow of information. Specifically, we can measure the Pearson’s correlation coefficient between the in-degree of the retweet networks, with the in-degree of the friendship network, and then calculate the significance of the coefficient or the probability that whatever relationship we observe between the two variables is due to chance (see Kellstedt & Whitten, 2013). The coefficient can vary between −1 if we observe perfect and negative correlation and +1 is we observe perfect and positive correlation. The Pearson’s correlation coefficient among measures of network centrality is commonly used in the study of networks, either to compare different measures within the same network (Newman, 2003; Valente, Coronges, Lakon, & Costenbader, 2008) or to compare the same measure across different levels of within the same multinetwork (Barigozzi, Fagiolo, & Garlaschelli, 2010). In our case, a positive and significant coefficient indicates that users rely on friends for accessing information during the events, while a non-significant coefficient shows that users get tweets from sources other than followed friends (such as via the event’s hashtag). We found that the correlation was statistically significant during all six events but with varying strength. The strength of the Pearson correlation coefficient varies between almost .5 (strong) in the first and largest event in March 2014 and declined to about .16 (very weak) for the last event of March 2015, and is on average .32 (weak to moderate). In other words, if a Twitter account is followed by a high number of users, we expect to see it retweeted proportionally more than an account with less followers. That is, although during a protest event tweets can be accessed in multiple ways friends are an important source and the network composed by friendship ties is relevant in determining the reach of the online mobilisation. But we also observe that the friendship network played a more important role during the largest event in March 2014 possibly because of the more decentralised nature of that protest. Clearly, during protest events the reach of traditional news media matters for enlarging the audience for the movement’s grievances.

Our analysis of the friendship network connecting all users active in the six events shows that friendship ties are important for sharing information during the rallies. For each event, the network is composed of active users and all the Twitter users they follow. By design ties on Twitter are directed – a tie has an origin (the user who follows) and a destination (the user who is followed) – and information is constrained to travel following the direction of ties. Table 2 provides statistics on the networks formed during the six events. The figures for news media accounts indicate the number of news accounts present in each network, either because the account tweeted during the event or because it was followed by an active user. A network’s cluster is defined as a set of users that are all directly or indirectly connected. From every node it is possible to reach every other node in the cluster walking a sequence of ties from node to node. The number of clusters

| Table 2. Clusters and networks of active users, news accounts and their Twitter friends. |
|---------------------------------|------------|----------|----------|----------|----------|----------|
| Size                           | March 14  | May 14   | July 14  | August 14| March 15a| March 15b |
| News accounts                  | 2516       | 2464     | 2306     | 2396     | 2423     | 2391     |
| Clusters                       | 14         | 19       | 1        | 3        | 5        | 1        |
| Clusters removing news users   | 103,744    | 30,217   | 14,293   | 23,436   | 4096     | 9915     |
provides an indication of the overall cohesiveness of the community of users active during the event, and of the restriction that information might encounter in reaching users following chains of friends. Finally, the table indicates how many clusters would result if all the news media accounts were removed.

In any network removing only a few nodes can have huge impacts in its overall connectivity. In order to assess the importance of the news media account within the networks we conducted simulations where instead of news media accounts we remove the same number of randomly selected nodes. If news accounts are not more important than any other node in the network, the distribution of the number of clusters resulting from the simulations should be close to the actual number of clusters produced by removing the news accounts. Figure 5 illustrates the results of the simulations. With only one exception (July 2014, the union-organised protest event), the number of resulting clusters that we can expect from removing random nodes is markedly below the number of clusters we observe after removing the news media account (the vertical dashed line).

The importance of news media accounts is also confirmed when traditional statistics of network centrality are measured, as they show a higher than average network relevance within the friendship network. The mean betweenness score for news media accounts is between 2 and 12 times the overall mean value; and the PageRank score between 2 and 10 times the mean. Figure 6 shows the ratio of news media accounts to regular accounts for betweenness and PageRank scores in the six events.

The analysis conducted with Twitter data indicates that news media accounts are structurally relevant in the network of users active during the events. This is supported by traditional measures of network centrality in the friendship network, but also by simulating the effect of removing all news media accounts. News media accounts are among the most followed accounts by users active during the events but the overall relevance of news media

Figure 5. Number of clusters resulting from randomly removing news accounts.
is not only determined by attracting an exceptional number of followers. Thousands of news media accounts deployed their networks of friends, which are more extended but less dense, and offer to the mobilisation effort a service of brokerage by creating bridges between weakly connected communities (Burt, 2005; Granovetter, 1973).

**Changing media–movement relationships in the social media age?**

Our analysis confirms that the news media contributed to the reach of the online mobilisation that accompanied six anti-government protest events in Australia. News actors on Twitter demonstrate the capacity to ‘stitch’ together unrelated and dispersed communities of users during these events. Conversely, Twitter accounts of unions, Australian political actors and social movements, although present, play less relevant or stitching roles. News media accounts foster their network ties and reach out to other users. If structurally the friendship network of a news account is shown to resemble a social network, with communities of tightly connected users, it is also larger than the average, reaching more effectively beyond the horizon of communities of already interconnected nodes. It is precisely this low density that makes news actors’ networks valuable and more effective in spreading information during a rapidly unfolding event. If traditionally the media played the role of gatekeepers to news sources, in the age of news abundancy and instant communication via social media networks, the added value of news actors can be brokerage and bridging between communities. Clearly, a few news accounts play an important function as the most followed by Twitter users; but it is the work by thousands of less central, individual news actors that provides valuable infrastructure for social movement mobilisation.

However, we also found that the networking relevance of news media accounts varies, and was lower during events organised by Australian unions (July 2014 and the 4 March 2015) than during events organised by connective action coalitions (March, May, August 2014 and 22 March 2015) as depicted in Figure 5. Connective action networks need news media to connect dispersed and weakly connected communities of social media users.
because news actors have diffuse access to their personal networks. News accounts are the necessary bridges to expand the reach beyond the immediate connections of the mobilising organisations, and to create a ‘network of networks’ (Dutton, 2009). The ongoing battle fought by activists for the attention of news media is strategically justified because even technologically empowered citizens have reach only as far as their existing personal networks. Our introductory example of the SMH’s reporting of the first March in March protest complements the ‘big data’ network analysis as it zooms in on an example of media–movement interaction that shows two factors. The first is that the symbiotic interdependence between movement actors and the media remains important, as the movement needed to expand scope and recognition of its grievances through media attention. Yet it also shows that the asymmetric power imbalance need not always favour the media as traditional media needs to now be perceived as more interactive, and also responsive to their audience. Overall, understanding the changing landscape of media hybridity is important to see how news media accounts act when they use social tactics to expand their online networks, but ultimately they also remain professional players: their relevance as news providers depends on their effectiveness in delivering interesting news to those who have not received it yet. Thus as the news media lost interest in the movement against the Australian conservative government over the one-year mobilisation, the reach of the movement itself was diminished.

Notes

1. In Twitter parlance, friends are Twitter users followed by a given account. Contrary to Facebook, on Twitter friendship is not symmetrical.
2. The Twitter API returns, along with the actual text of the tweet (or status), information describing the tweet (e.g., timestamp, number of replies and geographic coordinates) and the user publishing it (e.g., number of followers, number of friends and location).
3. According to a survey conducted in the U.S.A. in 2015, 63% of Twitter and Facebook users received news via the service (Pew Research Center, 2015).
4. The ‘densities’ of friendship networks are assessed measuring their clustering coefficients (Newman, 2010, p. 199) which are observed to be relatively higher in social networks (Watts & Strogatz, 1998).

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