

Analysing scholarly contributions to public debate with social media issue mapping: a case study of the Australia Day controversy

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Abstract

It is increasingly important for academic researchers to demonstrate the impact of their work, not only on their respective fields, but also on culture and society more broadly. This article outlines and demonstrates a new approach for investigating the impact of scholarly contributions to public debates using digital methods and data drawn from a range of digital media platforms. The multi-platform issue mapping approach is applied to an analysis of the social media conversation surrounding the January 2018 Australia Day controversy, with a specific focus on the role of ‘amplifier platforms’ like The Conversation in bringing scholarly perspectives to a general audience. The article identifies a number of key scholarly contributions to the debate, and analyses how they were shared and discussed across the diverse issue network that emerged on Twitter during this controversy. While the dataset was limited in scale and focused on a single case study, our findings suggest that articles with a strong positionality are taken up by like-minded, interest-based subcultures and communities, while those that demonstrate authority and/or provide an overview of the issues at hand may be able to reach across these different groups. Finally, the article discusses the future potential of this approach for the analysis of scholarly impact on matters of public concern.

Keywords

social media, digital methods, Twitter, issue mapping, Australia Day, impact

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Introduction

This article explores the contribution of amplifier platforms to the impact of scholarly voices on public debates. It focuses specifically on the use of the multiplatform issue mapping approach and method (Marres & Moats, 2015; Burgess et al., 2015; Burgess & Matamoros-Fernández, 2016). This method is designed to enable the observation and analysis of public engagement with controversies - that is, topics of shared concern marked by uncertainty or contestation - through social media data analysis, across media channels and platforms. The article focuses on the public controversy focused on Australia Day (26th January) 2018. While officially Australia's national day, this date commemorates the commencement of British colonial occupation of the Australian mainland, and its legitimacy is increasingly contested. In 2018 these debates were particularly acute and involved multiple cultural and political elements, making it a good candidate for controversy analysis.

In analysing the role that scholarly contributions played in the controversy, we focus in particular on articles published in *The Conversation*, as a key amplifier platform for scholarly contributions to public debate; and we centre our primary social media data collection around Twitter, as both a primary site of discussion and a conduit for the circulation of media objects from other channels and platforms.

Our investigation of the role of scholarly contributions to public debates is both relevant and relevant to current developments in academia. Researchers are increasingly asked to demonstrate their impact beyond scholarly outlets as the national agendas and funding regimes in a growing number of countries (including the UK, Canada, Australia and others) calls for the demonstration of social and societal impact of scholarly research. These shifting expectations of engagement and impact, as well as developments in the digital media environment, have placed increased focus on the ways in which the work of scholars is measured. One response has been the introduction of 'altmetrics' (Priem et al. 2010; Thelwall et al., 2013; Piwowar 2013) - measures of scholarly impact and attention that go beyond citation and bibliographic data to include social media analytics, for

example. Both altmetrics and scholarly uses of social media are of interest to universities and funding bodies, and have been the subject of a significant body of research (Biswas & Kircherr, 2015; Cerrato, 2018; Priem, Piwowar & Hemminger, 2011; Mas-Bleda, Thelwall, Kousha, et al., 2014). However, it is important to note that social media attention (much of it coming from scholars' peers rather than the broader public) does not necessarily equate to social impact - indeed, according to one study "the majority of tweets to scientific papers are more likely to reflect scholarly communication rather than societal impact" (Haustein, Costas, & Larivière, 2015).

In this paper, we are less interested in impact understood using simple measures of attention, and more interested in the sociocultural and political impact that scholarly contributions - including especially explicit attempts to communicate with the public in less formal ways - might have on the tenor, direction, and content of public debates in areas related to academic research. Such scholarly contributions, if they attract significant levels of engagement, can work to promote the role of the expert in public discourse, "which, in times of growing doubt about academic authority, is incredibly important" (Fecher, 2017). To achieve such engagement, scholars need to either engage with journalists or write for a lay audience themselves. In the latter case, media outlets specifically designed to broker communication between scholars or scientists and the general public (which we call 'amplifier platforms') become key objects of interest. But there is far less research on how scholarly contributions outside of formal academic publication (two which most altmetrics models remain restricted) are discussed and shared on social media (Allgaier, 2016); and so new, experimental methods are needed.

For the purposes of this paper, the term 'scholarly contributions' refers to media items authored by or substantially citing the work of academics, normally working within universities. 'Amplifier platforms' are those digital media sites specifically designed to translate and publicly disseminate these scholarly contributions to a general audience – sites like *The Conversation*, Medium.com, and Wikipedia. Media items published on these amplifier platforms are shared and

discussed elsewhere - in mainstream news outlets, and on popular social media platforms (Hargittai et al., 2018; Lörcher & Taddicken 2017).

The widespread use of social media sharing affordances by amplifier platforms means that their articles now circulate among the issue publics that populate social media platforms. That is, scholarly contributions are not only encountered in specially dedicated websites, but also as part of chaotic social media streams, mixed together with everyday commentary, popular culture, memes, and news articles; and shared as part of the public's effort to make sense of or advocate for particular positions on the issues that arise from controversies. Therefore, understanding the role that they are playing in public conversation requires much more nuance than simply counting clicks, views, and shares—especially in the case of multi-vocal, sociocultural controversies such as the one surround Australia Day in 2018.

Materials and methods

The multiple, deeply held views on the issue of celebrating Australia Day on January 26, along with the participation of public intellectuals, media personalities, and ordinary citizens in this discussion, make it an ideal case study for the demonstration of how social media issue mapping can be used to observe, describe and evaluate the value of scholarly contributions to public debate. Additionally, the temporally discrete character of the controversy and its life as a mediated public issue enable focused data collection and analysis: most of the activity we wanted to track was concentrated in the period between November 2017 and January 2018.

The controversy around celebrating Australia Day on January 26 has been growing in recent years as more public support has been shown for Indigenous perspectives about the date, often referred to as Invasion Day. In response to the increased awareness that January 26 was often a painful commemoration of colonisation for many Indigenous people, the Australian Broadcasting Corporation (ABC)'s youth radio station Triple J chose to move the date of its annual music countdown of the most popular of the previous year's songs, The Hottest 100, from the 26th of January to the fourth Saturday in January. The Hottest 100 is a popular music vote that was created

in 1989 and has been played on Australia Day until the change in 2018. The poll attracts a large number of voters, with 2018 recording over 2.3 million individual voters (Triple J, 2018).

After conducting a survey of listeners (Triple J, 2017) that showed 60% supported moving the date away from Australia Day and nearly a quarter of respondents had no opinion, the countdown was moved to the fourth weekend in January, which in 2018 was January 27. The resulting announcement of the date change of the Hottest 100 received support from some listeners and backlash from others, as well as several responses from conservative politicians including then Communication Minister, Mitch Fifield who stated, “it’s a dumb idea and Triple J should change their minds” (Hunter, 2017). While commercial FM radio station created the “Ozzest 100” in response to Triple J’s move, none of these reactions gained much momentum and indeed the record-breaking number of votes in the countdown could be seen as support for the date change even after concerted social media campaigns to boycott the countdown on January 27 (Triple J, 2018; Carmody, 2018). While 26 January is always contentious, then, in 2018, as the Australia Day controversy connected with ongoing politicisation of the Hottest 100 (e.g. around gender politics), it provided a particularly rich opportunity for social media issue mapping, as well as for academics from the humanities and social sciences to participate in the public debate.

Our analysis draws on a number of interrelated data sources, beginning with Twitter. We focus on the period from 9 to 31 January 2018, thereby covering public debate in the lead-up to Australia Day on 26 January 2018, as well as the follow-on discussions in the days after the national holiday. As we show below, very little topical discussion took place on Twitter, and by proxy elsewhere in Australian public debate, before or after that timeframe, so that these three weeks constitute an appropriate period of analysis.

Our sources of Twitter data for this period are two-fold. First, we drew on data from the Australian Twitter News Index (ATNIX), a long-term project to track the circulation of links to Australian news sites on Twitter (Bruns, 2017). Second, we captured tweets containing a number of topical keywords and hashtags that we anticipated to be common in tweets discussing Australia Day

and related matters; for this, we used the *Twitter Capture and Analysis Toolkit (TCAT)* (Borra & Rieder, 2014).

We also drew on internal data from *The Conversation*, one of the major international platforms that serve to amplify the impact of scholarly contributions in public debate, for further evidence of engagement with the stories relating to Australia Day that it had published. *The Conversation* operates under a Creative Commons license and its articles are widely republished by other outlets. We draw on republication, sharing and readership data to assess both the overall levels of amplification received by particular scholarly contributions to *The Conversation*, and the distinctive dynamics of the Twitter conversation in which some of these contributions circulated.

The first dataset we draw on is the Australian Twitter News Index (ATNIX; cf. Bruns, 2017). ATNIX is a longitudinal dataset, gathered continuously since mid-2012, that captures all tweets containing links to a list of 35 major and minor Australian news websites. These 35 sites cover the majority of Australian news outlets, and ATNIX therefore provides a comprehensive assessment of what Australian news articles circulate on Twitter. ATNIX includes (Australia-based) *The Conversation* in its list of tracked sites; because of its domestic focus, however, ATNIX does not capture any articles from international news sources, such as *The Guardian* or the *New York Times*, that report on Australian domestic issues and that may therefore also circulate amongst Australian Twitter accounts.

For the period of 9-31 January 2018, ATNIX captured some 87,423 unique Australian news articles, which were shared on Twitter a total of 791,292 times. For each article, and at an aggregate level for each of the publications carrying these articles, we extracted from ATNIX the total number of times they were shared on Twitter during our target timeframe. This provides an indication of the extent to which they were shared as part of everyday news-sharing practices by Australian Twitter accounts (Bruns, 2018), coinciding with the time period of the Australia Day controversy.

In order to undertake further qualitative analysis, we filtered out those articles that had been shared less than 100 times, giving a sample of 1,257 distinct article URLs. We then further filtered

these 1,257 articles for relevance to the Australia Day controversy. An article was coded as relevant if it discussed Australia Day, Australia's colonisation, Survival Day, Invasion Day, constitutional recognition of Indigenous Australians, the date change of the Triple J Hottest 100, or the alternative music countdown launched by conservative politician Cory Bernardi. In total, 109 of the 1,257 most shared news articles were coded as being relevant to the Australia Day debate. These 109 articles were then closely read to determine whether or not they contained contributions from academics. In total, 16 highly shared articles, including seven *The Conversation* articles, were found to have scholarly input from academics.

The second of our datasets was created by tracking a set of relevant hashtags and keywords using *TCAT*. *TCAT* connects to Twitter's publicly available but functionally limited Streaming API, which provides a continuous feed of tweets and associated metadata that match certain user-selected keywords and/or hashtags. This feed is rate-limited: it provides only up to 1% of the total global throughput of tweets at any one point; however, in our case study we saw no evidence of such rate-limiting and therefore assume that (within the technical limits of the Streaming API; see Tromble et al., 2017) we captured all tweets matching the keywords and hashtags we selected.

As the Twitter Streaming API requires the selection of keywords and hashtags for tracking *a priori*, we used a broad basket of terms that we anticipated would be used in tweets relating to the Australia Day controversy and its subsidiary elements. We tracked the following keywords and hashtags:

- *Generic Australia Day terms:*
#australiaday, #ausday, ozday, australia day, #jan26, #january26
- *Terms relating to Indigenous dispossession and protest:*
#invasionday, #survivalday, #changethedeate
- *Terms in favour of maintaining the current date:*
#saveaustraliaday

- *Terms relating to the Hottest 100 date change controversy:*

#hottest100, #ozzest100, #original100, #ac100, ozzest, January 27, Jan 27

- *Other relevant terms:*

#PlayItLikeYouStoleIt (used by an Indigenous academic to promote the #Original100 on Indigenous Brisbane radio station 98.9fm Best Country), nakkiahlui (Indigenous writer and actor who was tweeting and @mentioned frequently in the debate), ‘Henry Reynolds’ (prominent scholar and author of an article on *The Conversation* about the Hottest 100 date change - see below)

As we have noted elsewhere (Burgess & Bruns, 2015), keyword- and hashtag-based data collection from Twitter is inherently incomplete and captures only a subset of all the tweets that are relevant to a given topic: most centrally, it fails to include any follow-on tweets that may continue to be relevant to the topic, but do not again contain the specific keywords being tracked. However, for our present purposes this limitation is acceptable: we are interested in the first place in establishing the dynamics and dominant themes of public debate, which even an incomplete dataset can provide.

We also acknowledge that these tracking terms will inevitably capture false positives - e.g. references to dates such as 26 and 27 January in contexts that are unrelated to the Australia Day discussion. In the content and network analysis that follows, however, these uses are usually easily identifiable as they produce obvious outliers: collections of tweets that do not include any links to Australian news articles, or network clusters that are clearly distinct and disconnected from the main components of the overall network.

Using these keywords and hashtags as tracking terms, we captured 795,212 tweets between 9 January and 28 February. Of these, 760,585 (96%) were posted between 9 and 31 January 2018, and we therefore chose to limit our analysis to this time period. The remaining 760,585 tweets were posted by 375,549 unique Twitter accounts - an average of 2.03 tweets per account (the median,

however, is 1, pointing to the significantly skewed, long-tail distribution of participation that is typical for discussions on social media platforms).

Below, we draw on this dataset to examine the network structure of the interactions between participating accounts, following the hypothesis that this structure will replicate thematic or ideological divisions amongst the accounts that discuss Australia Day 2018 and related topics on Twitter. Following the model outlined by Bruns & Moe (2014), at the micro-level, we examine the network of @mentions and retweets between accounts, showing direct interactions between them; while at the macro-level we draw on the use of hashtags by the accounts in our dataset as a proxy for the possible issue publics in which they participate.

Finally, building on Burgess & Matamoros Fernandez's (2016) established approach to identifying and analysing key 'media objects' that play a role in controversies, we also prepared a dataset of the most prominent news articles that circulate within this keyword and hashtag dataset, and examined the extent to which they represent or draw on scholarly contributions to the debate. Because the most widely shared news articles circulating on the *overall* Twitter network, which incorporates the *specific* debates we tracked via *TCAT*, are already known from the ATNIX dataset, here we focused especially on any articles with scholarly input that might have been published on the activist site *IndigenousX*, as well as any *The Conversation* URLs that were shared in the discussions tracked by *TCAT* but did not reach the threshold of at least 100 shares that we used as a filter for the ATNIX dataset.

In addition to the 16 news articles with scholarly input and 100 shares or more that we had identified in the ATNIX dataset, the *TCAT* dataset produced a further three *IndigenousX* articles, and 11 *Conversation* articles with fewer than 100 global shares. Further, of the 16 relevant news articles with 100 shares or more that we had already identified in the ATNIX data, 13 articles were also present in the *TCAT* dataset; this includes five articles from *The Conversation* and eight from the other Australian news sources tracked by ATNIX. This shows that of the scholarly contributions made available to the Australia Day debate via media publications, a considerable majority were in

fact drawn on in public discussions that occurred on Twitter. The TCAT and the ATNIX article lists were then combined and a final list of 30 distinct URLs was generated (see Table 1).

[Insert Table 1 here]

Results

We begin by examining the interactions between accounts participating in the *TCAT* dataset. We extracted all tweets containing @mentions and retweets, and from these generated a network map using the Force Atlas 2 algorithm (Jacomy et al., 2014) as implemented in *Gephi* (Bastian et al., 2009). As expected, this resulted in a central core of network interactions, with false positives largely sidelined. Fig. 1 shows the central core of this network, subdividing into a number of distinct but interconnected clusters.

We applied the Louvain modularity algorithm (Blondel et al., 2008), as implemented in *Gephi*, to this network in order to detect different clusters of interacting accounts (using a modularity setting of 0.5). We further manually examined the most prominent accounts (by indegree of mentions and retweets), and on the basis of the thematic patterns observed in their Twitter profile information attached descriptive labels to the various network clusters. Finally, we colour-coded the edges showing interactions between accounts in the map on a continuum from red through green to blue, with red indicating a predominance of retweets, blue a predominance of @mentions, and green a relatively balanced mix between the two interaction types.

[Insert Figure 1 here]

Figure 1 shows one central network of discussion about Australia Day (top centre) that subdivides into clusters comprised of news and political accounts (light blue) including Australian Prime Minister Malcolm Turnbull (@Turnbull_Malcolm) and broadsheet newspaper *Sydney Morning Herald* (@smh), and of Indigenous accounts (such as @IndigenousX) and their non-

Indigenous supporters (orange), respectively. Slightly to the left of this major cluster is a group of accounts affiliated with the Australian Conservatives micro-party (purple), including its party leader @corybernardi. This serves as a bridge to a cluster of increasingly far right accounts (grey), affiliated with groups such as the extremist United Patriots Front. The structural features of this part of the network therefore replicate overall divisions in Australian politics, from Indigenous activism across mainstream political divisions to white supremacist groups.

A number of other interaction clusters are more separate from this core part of the network. At the bottom centre, a small cluster represents interactions around the Australian of the Year awards (mauve), won in 2018 by maths teacher Eddie Woo (@misterwootube), while above it an Australian travel cluster around tourism account @australia (yellow-green) uses Australia Day to promote travel to the country. To the right of these clusters, a cluster around the Hottest 100 and its central account, @TripleJ (bright green), is clearly distinct from the rest of the network, but also shows substantial interactions with the political discussions. Two other notable clusters represent Arabic-language spam accounts (turquoise) and Indian accounts celebrating the Indian national holiday, Republic Day, that also falls on 26 January (dark blue).

Several distinctions in tweeting style are also evident. Interactions amongst the Indigenous and progressive clusters as well as amongst the far right tend to be more strongly built around retweets (red), indicating reciprocal promotion of posts through retweeting between participating accounts. Mainstream conservative accounts, on the other hand, are largely @mentioned rather than retweeted: they are being talked to, at, and about by other participants, rather than amplified through retweeting. This points to the considerable division about the future of Australia Day across the Australian political spectrum: while far-right nationalists are exhorting mainstream conservatism to preserve the existing national holiday, progressives and Indigenous activists are pushing conservatives to accept the need for change.

Such divisions are also seen in the interactions between the Triple J and Australian of the Year clusters with the network core. Interactions between the Triple J cluster and the Indigenous

and progressive parts of the network are dominated by retweets, which we interpret as expressions of mutual support in light of the Hottest 100's move away from 26 January; interactions with the more conservative components of the network, by contrast, are conducted mainly through (presumably less favourable) @mentions. Similar patterns apply for the Australian of the Year cluster, where the choice of a prominent Asian-Australian winner is endorsed by retweets from the progressive side but merely commented on through @mentions by far-right and white supremacist accounts.

We then examined the frequency which each of the articles containing scholarly contributions were shared within the major clusters of the interaction network, exploring the different level of engagement with scholarly contributions to the public debate and the different topical focus that can be observed in such engagement (see Table 2).

[Insert Table 2 here]

The results reveal a considerably divergent approach to the Australia Day issue, which we explain as resulting from the differing ideological perspectives that are predominant in the different interaction clusters, and document variations in the clusters' engagement with scholarly contributions of any form, which may point to different overall attitudes towards expert scholarly voices.

The politics (POL), Indigenous (IND), far right (FR), and conservative (CON) clusters each engage most strongly with articles that support their perspective on the debate; some articles that forcefully express a distinct perspective are shared almost exclusively by one or another of the clusters, but not across multiple diverging ideologies. A number of contributions do appear prominently in several of the clusters, however; thus, although they may be read differently by each

group, these contributions do manage to carve out a presence in the public debate across ideological positions.

The politics cluster shared the most articles that included scholarly content (305 shares), while the Indigenous cluster shared about the half that number (144 times). The other clusters - Far Right (FR), Australian of the Year (AOY), TripleJ (JJJ) and Conservatives (CON) - shared far less scholarly content. The top five articles circulating in the politics cluster are all directly about the debate about celebrating Australia Day on January 26 rationalising a need for a change of date. They include Professor Tom Calma's article on *The Conversation*, two from state-based newspapers (Mills & Efron writing for *The Age* and Phoebe Wearne writing for *The West Australian*) and two from the ABC (written by Michael Belgrave and Brennan & Atkin).

The top five articles shared among the Indigenous cluster differed slightly from the general politics cluster, both included Calma's *The Conversation* article, "A modern and united Australia must shift its national day from January 26", Bridget Brennan and Michael Atkins's "Australia Day dividing Australians and excluding Indigenous people, says Professor Chris Sarra" on the *ABC*, and Wearne's "Former Australian of the Year Fiona Stanley urges Australia Day date change to boost health" from *The West Australian*. However, the Indigenous cluster also shared two articles from *The Conversation*, Frank Bongiorno's "Why Australia Day survives, despite revealing a nation's rifts and wounds" and another on the colonial wars and evidence that the "British enacted genocidal policies and practices" against Indigenous Australians in Kristyn Harman's "Explainer: the evidence for the Tasmanian genocide".

In contrast to the overlap of commonly shared articles between these two clusters, the Far Right cluster shared two distinct articles that were not as prominent in the two larger clusters. The first is an article from *The Australian* by Geoffrey Blainey entitled "Australia Day doubters misread our past", which takes the position that Australia was not invaded, and therefore January 26 should not be contested. The second-most-shared article is from Australian tabloid, *The Herald-Sun* and interestingly covers the same topic as the most-shared article in the politics cluster, the Invasion

Day rallies held in Melbourne. However while Mills & Efron's *The Age* article in the politics cluster foregrounds the swelling popular support for a change of date, its Melbourne competitor notes the "heavy police presence" in the "protest" (Langmaid & Hore).

Most articles were shared across three or more clusters, and the one article to be shared in five clusters (only not appearing in the Australian of the Year cluster) was historian Frank Bongiorno's "Why Australia Day survives, despite revealing a nation's rifts and wounds". This article outlines the current debates about Australia Day along with giving a very brief history of celebratory activities, however its main claim is that Australia survives because it is a seasonal holiday, and the day:

...marks the boundary between the summer break – even for those who have long since returned to work – and the rest of the year.

For students, it announces the return to the world of uniforms, teachers, classes and books. For most of us, the normal balance (or imbalance) of work and leisure asserts its authority, even as we still swelter in blistering heat.

Australia Day is, among other things, a seasonal festival, like May Day is to the northern spring.

There were six other articles that were shared across four clusters. Three of them (Calma; Brennan & Aitken"; and Wearne) took the position that the date should change. One (Belgrave) was a comparison with New Zealand's Waitangi Day, one (Mills & Efron) focused on the protest rallies, and one (Hook) outlined the legal position of artists who had been involuntarily included on the Australian Conservative's Spotify playlist. The remaining articles were shared across a smaller number of clusters. Five articles (Galloway; Harris; O'Sullivan; Parry) were shared prominently in

the ATNIX data, indicating they were being shared as part of general news discussions, however were not shared by users in the specific Australia Day discussions among clusters.

Discussion and Conclusions

In this paper, we mapped the overall issue networks associated with the Australia Day debate, beginning with Twitter data, which also provided indicators of their presence across social media and mainstream media platforms. We identified news articles that contain scholarly contributions and that resonate the most across these issue networks. We identified and measured the sharing of scholarly contributions across different parts of (multi)issue networks and hence stakeholder communities, thereby enabling scholarly voices to participate in ‘hybrid forums’ (Callon, Lascoumes & Barthes, 2009) of diverse stakeholders.

The key insights we derived from the study were as follows:

First, of the scholarly contributions made available to the Australia Day debate via media publications, a considerable majority were drawn on in public discussions on Twitter; and articles containing scholarly contributions made up more than half of the articles shared on Twitter. Second, our cluster analysis suggests that while *The Conversation* is an important platform for informing public debate, for scholars to effectively input into broader public discourse they also need to use mainstream media sites, as articles from these sites are more frequently shared among conservative and far right Twitter users. Third, in better news for academics, most of the 30 key scholarly contributions in our dataset were shared across multiple network clusters, showing their potential to bridge divides and play a role in hybrid forums. It was particularly notable that the article that was shared widely among the most clusters took a magisterial, overarching view of the issues, rather than a narrow partisan one. This might indicate that scholars working in contentious areas need to perform their expert oversight of issues in order to underpin the authority of their positions on them.

So far, we have only been able to map the role of scholarly contributions across the issue networks associated with one particular controversy—one that is relatively localised to Australia,

with comparatively limited data and some predictably binary positions present in the associated debates. While we have laid down a substantial methodological foundation for this approach, we acknowledge that much more experimentation and comparative work is required, including extending beyond sociocultural to environmental and scientific controversies, and beyond the national geopolitical frame. As we move forward with applying the approach to such additional case studies, the expansion to additional platforms such as YouTube and Reddit—that is, a truly multi-platform approach to issue mapping, as suggested by our previous work (Burgess & Matamoros-Fernández, 2016)—may be fruitful for the study of the role of scholarly contributions to knowledge controversies in these disciplines.

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Table 1

| Author | Title | Article URL |
|-------------------|--|---|
| Belgrave, Michael | New Zealand's Waitangi Day is a very different national celebration to Australia Day | http://www.abc.net.au/news/2018-01-25/waitangi-day-very-different-to-australia-day/9357580 |
| Birch, Tony | Tony Birch: A change of date will do nothing to shake Australia from its colonial-settler triumphalism | https://indigenousx.com.au/tony-birch-a-change-of-date-will-do-nothing-to-shake-australia-from-its-colonial-settler-triumphalism |
| Blainey, Geoffrey | Australia Day doubters misread our past | https://www.theaustralian.com.au/opinion/australia-day-doubters-misread-our-past/news-story/a4ffd4e49074343a7c24fb1eb120e127 |
| Bongiorno, Frank | Why Australia Day survives, despite revealing a nation's rifts and wounds | https://theconversation.com/why-australia-day-survives-despite-revealing-a-nations-rifts-and-wounds-89768 |
| Bond, Chelsea | Chelsea Bond: The Audacity of Anger | https://indigenousx.com.au/chelsea-bond-the-audacity-of-anger |

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| Bond, Chelsea | The day I don't feel Australian? That would be Australia Day | https://theconversation.com/the-day-i-dont-feel-australian-that-would-be-australia-day-36352 |
| Brennan, Bridget & Atkin, Michael | Australia Day dividing Australians and excluding Indigenous people, says Professor Chris Sarra | http://www.abc.net.au/news/2018-01-17/indigenous-advisor-calls-for-australia-day-date-change/9334474 |
| Calma, Tom | A modern and united Australia must shift its national day from January 26 | https://theconversation.com/a-modern-and-united-australia-must-shift-its-national-day-from-january-26-90385 |
| Chang, Charis | What life was like for Aboriginal people during colonisation | https://www.news.com.au/national/politics/what-life-was-like-for-aboriginal-people-during-colonisation/news-story/0f3abec359c78d216d9315664eda132c |
| Clements, Nicholas | Tasmania's Black War: a tragic case of lest we remember? | https://theconversation.com/tasmanias-black-war-a-tragic-case-of-lest-we-remember-25663 |
| Darian-Smith, Kate | Australia Day, Invasion Day, Survival Day: a long history of celebration and contestation | https://theconversation.com/australia-day-invasion-day-survival-day-a-long-history-of- |

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| | | celebration-and-contestation-70278 |
| Dean, Tim | How to have a better conversation about Australia Day | https://theconversation.com/how-to-have-a-better-conversation-about-australia-day-90457 |
| Dillon, Anthony | Changing Australia Day is pointless – and there is much to celebrate | https://theconversation.com/changing-australia-day-is-pointless-and-there-is-much-to-celebrate-71010 |
| Galloway, Kate | FactCheck: can native title ‘only exist if Australia was settled, not invaded’? | https://theconversation.com/factcheck-can-native-title-only-exist-if-australia-was-settled-not-invaded-90540 |
| Harman, Kristyn | Explainer: the evidence for the Tasmanian genocide | https://theconversation.com/explainer-the-evidence-for-the-tasmanian-genocide-86828 |
| Harris, Bede | Nine things you should know about a potential Australian republic | https://theconversation.com/nine-things-you-should-know-about-a-potential-australian-republic-89759 |
| Hook, Sarah | Moral rights, artistic integrity and Cory Bernardi’s Australia Day playlist | https://theconversation.com/moral-rights-artistic-integrity-and- |

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| | | cory-bernardis-australia-day-playlist-90524 |
| Hutchinson, Samantha | Aboriginal activist called a 'hypocritical hater' | https://www.theaustralian.com.au/news/nation/aboriginal-activist-called-a-hypocritical-hater/news-story/94bb8ed85489bdbddc67a8a4e0b4a2d5 |
| Jones, Benjamin T. | A model for an Australian republic that can unite republicans and win a referendum | https://theconversation.com/a-model-for-an-australian-republic-that-can-unite-republicans-and-win-a-referendum-89919 |
| Langmaid, Aaron & Hore, Monique | Australia Day 2018: Thousands turn out for protest in Melbourne CBD | http://www.heraldsun.com.au/news/victoria/australia-day-2018-heavy-police-presence-around-melbourne-rallies/news-story/3cd02836c7e636edd2219b86bab3bb3d |
| Lenten, Liam & McKenzie, Jordi | What makes a classic song? The economics of the Hottest 100 | https://theconversation.com/what-makes-a-classic-song-the-economics-of-the-hottest-100-90445 |
| Mills, Tammy & | The difference a day makes: Activists say | http://www.theage.com.au/vict |

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| Efron, Gene | 'invasion day' rally too big to be ignored | ria/the-difference-a-day-makes-activists-say-invasion-day-rally-too-big-to-be-ignored-20180126-p4yyxn.html |
| O'Sullivan, Dominic | Indigenous recognition in our Constitution matters – and will need greater political will to achieve | https://theconversation.com/indigenous-recognition-in-our-constitution-matters-and-will-need-greater-political-will-to-achieve-90296 |
| O'Sullivan, Dominic | Why guaranteed Indigenous seats in parliament could ease inequality | https://theconversation.com/why-guaranteed-indigenous-seats-in-parliament-could-ease-inequality-74359 |
| Parry, Keith D. | 'Australian' enough to be a hero | https://theconversation.com/australian-enough-to-be-a-hero-71631 |
| Reynolds, Henry | Henry Reynolds: Triple J did the right thing, we need a new Australia Day | https://theconversation.com/henry-reynolds-triple-j-did-the-right-thing-we-need-a-new-australia-day-88249 |
| Thorpe, Nakari | #IStandWithTarneen: People stand in solidarity with young Aboriginal activist under fire for controversial comments | https://www.sbs.com.au/nitv/nitv-news/article/2018/01/30/istandwithtarneen-people-stand- |

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| | | solidarity-young-aboriginal-activist-under-fire |
| Walter, Maggie | First reconciliation, then a republic – starting with changing the date of Australia Day | https://theconversation.com/first-reconciliation-then-a-republic-starting-with-changing-the-date-of-australia-day-89955 |
| Wearne, Phoebe | Former Australian of the Year Fiona Stanley urges Australia Day date change to boost health | https://thewest.com.au/news/wa/former-australian-of-the-year-fiona-stanley-urges-australia-day-date-change-to-boost-health-ng-b88715882z |
| Wright, Alexis | Alexis Wright: Hey Ancestor! | https://indigenoux.com.au/alex-is-wright-hey-ancestor/ |

Table 1: List of articles containing a scholarly contribution that were shared among Twitter users engaged in the discussion of Australia Day 2018 (TCAT dataset) or were shared among Twitter users more than 100 times (ATNIX dataset) between 9 and 31 January 2018.

Table 2

| Author | Short Title (see Table 1) | POL | IND | FR | CON | JJJ | AOY |
|-----------------|--|------------|------------|-----------|------------|------------|------------|
| Belgrave | New Zealand's Waitangi Day... | 44 | 7 | 3 | 0 | 1 | 0 |
| Birch | A change of date will do nothing... | 0 | 6 | 0 | 0 | 0 | 0 |
| Blainey | Australia Day doubters... | 0 | 1 | 19 | 1 | 0 | 0 |
| Bongiorno | Why Australia Day survives... | 22 | 12 | 2 | 1 | 1 | 0 |
| Bond | The Audacity of Anger | 0 | 4 | 0 | 0 | 0 | 0 |
| Bond | The day I don't feel Australian... | 2 | 7 | 0 | 0 | 0 | 0 |
| Brennan & Atkin | Australia Day dividing Australians... | 24 | 25 | 0 | 1 | 0 | 1 |
| Calma | A modern and united Australia... | 42 | 30 | 0 | 2 | 0 | 1 |
| Chang | What life was like for Aboriginal people.. | 1 | 6 | 0 | 0 | 1 | 0 |
| Clements | Tasmania's Black War... | 0 | 0 | 2 | 0 | 0 | 5 |

| | | | | | | | |
|-------------------|--|----|----|---|---|---|---|
| Darian-Smith | Australia Day, Invasion Day... | 1 | 4 | 0 | 0 | 0 | 1 |
| Dean | How to have a better conversation... | 12 | 1 | 0 | 0 | 0 | 0 |
| Dillon | Changing Australia Day is pointless... | 0 | 1 | 0 | 0 | 0 | 0 |
| Galloway | Fact check: Can native title... | 0 | 0 | 0 | 0 | 0 | 0 |
| Harman | Evidence for the Tasmanian genocide... | 12 | 13 | 1 | 0 | 0 | 0 |
| Harris | Nine things you should know... | 0 | 0 | 0 | 0 | 0 | 0 |
| Hook | Cory Bernardi's Australia Day playlist | 11 | 1 | 3 | 0 | 1 | 0 |
| Hutchinson | Aboriginal activist called a... | 0 | 0 | 1 | 0 | 0 | 0 |
| Jones | A model for an Australian republic... | 1 | 1 | 0 | 0 | 0 | 0 |
| Langmaid | Australia Day 2018... | 2 | 2 | 9 | 0 | 0 | 0 |
| Lenten & McKenzie | What makes a classic song?... | 0 | 1 | 0 | 0 | 4 | 0 |

| | | | | | | | |
|---------------|--|----|---|---|---|---|---|
| Mills & Efron | The difference a day makes... | 67 | 5 | 2 | 0 | 0 | 1 |
| O'Sullivan | Indigenous recognition... | 0 | 0 | 0 | 0 | 0 | 0 |
| O'Sullivan | Why guaranteed Indigenous seats... | 1 | 0 | 0 | 0 | 0 | 0 |
| Parry | 'Australian' enough to be a hero | 0 | 0 | 0 | 0 | 0 | 0 |
| Reynolds | Triple J did the right thing... | 2 | 1 | 0 | 0 | 0 | 0 |
| Thorpe | #IStandWithTarneen: People stand... | 0 | 0 | 0 | 0 | 0 | 0 |
| Walter | First reconciliation, then a republic... | 22 | 6 | 0 | 0 | 0 | 1 |
| Wearne | Former Australian of the Year... | 37 | 8 | 0 | 1 | 1 | 0 |
| Wright | Hey Ancestor! | 2 | 2 | 0 | 0 | 0 | 0 |

Table 2: Frequency of article shares on Twitter in each cluster in our dataset

List of Figures

Figure 1: network map of account interactions within the TCAT keyword and hashtag dataset. Force Atlas 2, LinLog mode, scaling factor 0.02. Filtered to accounts with a degree of 2 or more (i.e. posting or receiving at least two retweets or @mentions). Manual labelling of clusters according to patterns in profile information. Node size by indegree, node colour indicates cluster membership. Red edges = retweets, blue edges = @mentions.