

#auspol: The Hashtag as Community, Event, and Material Object for Engaging with Australian Politics

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Introduction

Critical, loud, highly discursive and polarised, the **#auspol** hashtag represents a space, an event and a network for politically involved individuals to engage in and with Australian politics and perform political participation and communication. As a long-standing institution in the Australian Twittersphere (see, e.g., Bruns & Burgess, 2011; Bruns & Stieglitz, 2012, 2013), the **#auspol** hashtag provides a potent case study through which to explore the material, relational and discursive dimensions of a hashtag public. This chapter engages with the use of this particular hashtag, both empirically and theoretically. In particular, we work through a number of models that can be used to characterise the **#auspol** hashtag: it is, at different times and even at once, a discursive community of users; a mechanism for tracking and engaging in specific political events; and an object of discussion and controversy in its own right.

We use our long-term study of the **#auspol** community as a case study for considering how hashtags can mediate public engagement with politics. In this way we conceptualise the hashtag as an everyday material object that contributes to the unfolding of social and political reality. Tools such as hashtags are objects that are embedded in and materialise out of shared interests, issues and events. At the same time as they emerge out of such shared experiences, hashtags are also involved in shaping them. In this way the hashtag is an object, event and relational encounter that can transform political participation.

This perspective draws on recent work in the area of material participation (Marres, 2012; Michael, 2012) and science and technology studies (STS) (Fuller, 2011; Woolgar & Lezaun, 2013), as well as on more established conceptualisations of the role of nonhumans, objects and events as relational concepts that are intimately entwined in processes of shaping publics (Deleuze, 2003; Foucault, 1972; Latour, 1999, 2005; Whitehead, 1929, 1933). This is not to argue that Twitter, its hashtags, or other material objects and events heighten or dampen, promote or prevent public engagement. Rather, they play an active role in the unfolding of political realities and thus need to be acknowledged and understood as more than mere communicative markers.

Bruns and Moe (2014) provide a useful framework for thinking about the various structural layers of communication on Twitter. They show that hashtags coordinate exchanges around specific topics, issues, or events at the ‘macro level’ of communication. Hashtags complement quasi-private @reply conversations (at the micro level) and flows of information across follower-followee networks (at the meso level) by enabling the gathering and interactions of much broader, more visible and dynamic publics comprised of users who need not follow or even be aware of each other prior to their participation in the hashtag; such publics often come together and disperse ad hoc (see also Bruns & Burgess, 2011; Chapter 1, this volume). Notably, not all hashtags operate this way: Some hashtags (like **#win**, **#fail**, or **#facepalm**) are mainly used as paratextual markers akin to emoticons or punctuation marks. However, an important subset of all hashtags, including **#auspol**, are used to mark out a specific discursive territory and facilitate the coming together of participants with shared thematic interests. Even such thematic hashtags, however, vary in their uses, depending especially on the inherent dynamics of the theme they are designed to address.

Studying the dynamics of a long-standing thematic hashtag community such as **#auspol** provides important insights into the hybridity of the hashtag as both topical marker

and discursive technology. In this chapter we explore the role of the **#auspol** hashtag as a discursive marker of the relationships of participants to other community members, as a mechanism for tracking and discussing unfolding political events, and as an object that marks a particular form of communicative exchange within the wider context of public debate. We thus ‘flatten out’ (Latour, 2005) the concept of the thematic hashtag, accounting for it as more than a simple communicative tool while avoiding any claims that it is itself determinant of political reality. Hashtags are thus neither fully material nor fully symbolic, but rather exercise an important agency in the construction of power relations, events and knowledge. They are tied up with other objects, subjects, contexts, events, relations, discourses and truths that extend well beyond the specific context of Twitter as a platform, or even the Internet more generally. To apply a basic Latourian line of argument, hashtags are actants in a network that ‘do things’. They are one point that allows us to trace more extensive connections within an (infinite) network of actors.

The #auspol Hashtag

While its precise origins are by now difficult to retrace (Twitter’s Application Programming Interface does not provide the functionality to identify the first tweets to long-standing hashtags), **#auspol** clearly is one of the oldest and best-established hashtags in the Australian Twittersphere. Its comparative volume and popularity reflect both the overall demographics of the Australian Twitter user base—which remain skewed to a subset of the population that is especially politically active—and the fact that Australian politics has experienced an unusually turbulent period since the 2007 federal election, with three changes to the Prime Ministership between 2010 and 2013 alone. A preliminary map of follower/followee relationships in the overall Australian Twittersphere which we developed in 2012 (Bruns, Burgess, & Highfield, 2014; Bruns, Burgess, Kirchhoff, & Nicolai, 2012) shows a significant

portion of the network to be structured by a shared interest in news and politics (Figure 1a), with participants in the **#auspol** hashtag predominantly recruited from the same areas of the overall network (Figure 1b).

[Note for compositor: Please insert Figures 1a and 1b as a single and scaled to match sizes side-by-side composite image around here. – NR]

Captions: Figure 1. a) Overall map of follower/followee relationships in the Australian Twittersphere, as of 2012;

*b) Overall map (light grey), with most active participants in **#auspol** highlighted (dark grey)*

Further quantitative analysis of **#auspol** activities, following the methodologies outlined by Bruns and Stieglitz (2012, 2013), documents the very substantial overall volume of tweets, and reveals a number of key distinguishing features. Such activities are necessarily influenced by day-to-day political events. In our analysis, we focus first on a (comparatively) stable period in Australian politics during 2011, which saw neither a challenge to or change of leadership, nor a federal election campaign. For this period, we draw on data gathered from the start of February 2011 to the start of December 2011, thus avoiding the comparatively slower summer holiday months of December and January.

During this time, we captured over 850,000 **#auspol** tweets, posted by some 26,000 unique accounts—an average of some 85,000 tweets per month, or 2,800 tweets per day. More important even than this very significant volume of activity is the distribution of participation across the **#auspol** contributor base: of the overall 850,000 tweets, over 550,000 (more than 64%) were contributed by the most active 1% of the overall user base—that is, by some 265 unique accounts in total (Figure 2). Combined with a second group of still highly active users, the top 10% of **#auspol** contributors account for more than 91% of the total volume of **#auspol**. On average, the 265 members of the leading group each posted more than 2,000 **#auspol** tweets during the 10-month period examined here, in other words—but in

reality the distribution is even more concentrated around a very small group of lead users: seven leading participants each posted more than 10,000 **#auspol** tweets during the 10 months examined here.

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Captions:

Figure 2. Participation patterns in **#auspol**, early February to early December 2011

Figure 3. Participation patterns in **#auspol**, June 2013

#auspol as Community: Hashtags as Relational Markers

It is also notable from Figure 2 that a relative majority of tweets to **#auspol** are genuine @replies, rather than retweets or original tweets (i.e., tweets which do not specifically address any other user). This is especially pronounced for the lead group, for whom 49% of all tweets posted are genuine @replies. Although not all such @replies will be directed to other members of the lead group, or to other **#auspol** participants (they may also @mention politicians' or journalists' Twitter accounts, for example), this nonetheless points to a very strong conversational element in **#auspol** engagement.

This existence of a highly active, interactive and concentrated group of lead users at the heart of **#auspol** points strongly to a conceptualisation of **#auspol** as a tightly knit community of participants who—in spite of their possible political differences—share a common commitment to discussing Australian politics. From this perspective, the persistent use of a hashtag like **#auspol** in one's tweets signifies participation—as a Twitter user in a particular community of debaters, and more generally as a contributor to public deliberation around Australian politics. Viewed this way, then, the hashtag is a relational marker. Adding a hashtag to a tweet signals the desire for the message to be seen by a particular public

cohort, and thereby calls for interaction. Hence, the hashtag may be described as a ‘technology of engagement’ (Marres, 2012, p. x): a tangible, material tool for people to relate to themselves and to others.

Applying a Foucaultian understanding of ‘technology’ to Marres’s terminology, the hashtag can be conceptualised as a ‘technique of the self’ (Foucault, 1988): a practice of relating to self and others in order to develop ethical guidelines for governing one’s life. Contributing to a hashtag discussion on Australian politics—or any other discursive topic—is a mundane way of engaging with the political context and one’s own reactions to and understandings of it, as well as those of others who experience the same occurrences, in order to make sense of and navigate through it. By using the **#auspol** hashtag, Twitter users come to understand and participate in the everyday realities they are enrolled in, and thus establish their roles within them in mundane and perhaps unconscious ways. Furthermore, the use of a hashtag also flags the desire to participate and perform in a community, shaping further ways of relating to and forming oneself.

Yet the very concentrated structure of the **#auspol** lead user group, combined with the network structure shown in Figure 1, also complicates the conversational and relational nature of its use. Figure 1b shows the most active contributors to **#auspol** to be located in a tight network cluster on the sidelines of the overall ‘news and politics’ network within the Australian Twittersphere (at the centre left of the graph)—to the extent that these lead users are conversing amongst one another, then, there is very little actual need for the functionality which a hashtag like **#auspol** provides: they are already using @replies to directly address each other, and could otherwise rely on their existing mutual follower/followee relationships which ensure that all tweets posted by its members are visible to this lead group. We suggest that using **#auspol** in this particular discursive space has a strong performative aspect: the lead group’s **#auspol** conversations are performed, somewhat in the style of a podium debate,

to an imagined audience of other **#auspol** users who follow, but only occasionally actively engage in the discussion (cf. Pearson, 2009, on performance on SNSs).

Employing a thematic hashtag like **#auspol** is therefore also a way of navigating power relations. Although newly created hashtags and their pools of contributors (and indeed, any new space for online participation) may start out comparatively unformed and unstructured, it is virtually inevitable that continued engagement by contributors who differ in their levels of activity, expertise and commitment leads to a stratification of the user base and to the formation of what may be described as community structures—indeed, to the transformation of a user base into a community in the full sense of that term (cf. Katz et al., 2004; Rheingold, 1993). This structured community—which clearly exists in the case of **#auspol**—consists in the first place of a network of power relationships between individual contributors, which are established and maintained through continued participation. New participants must read and understand this network of relationships in order to take part in the community. Viewed in this way, the thematic hashtag must be seen as a relational marker, enrolled in and constitutive of activities that are characterised by engagements with self and others, and by the navigation of power relations.

#auspol during **#spill**: Hashtags and/as Events

Thematic hashtags rarely exist in isolation from a wider discursive context: they emerge out of, are part of, and can shape events in the wider online and offline world. Most fundamentally, without its embedding in the wider Australian sociopolitical context the **#auspol** hashtag could not exist and be sustained. The dynamics of hashtag conversations and communities are influenced by day-to-day issues and events—in our example, the unfolding story of Australian politics at the federal level.

Although the **#auspol** hashtag is usually dominated—by way of sheer volume—by a

small number of participants whose activities serve to drown out most other voices, at times of heightened political attention these lead users may themselves be overwhelmed by a temporary influx of new participants who are drawn to **#auspol** by the drama of unfolding events without bothering to understand and negotiate existing power relations within this discursive space. To illustrate this momentary reversal of community structures within the hashtag space, we draw on an especially incisive moment in recent Australian political history: the 2013 Australian Labor Party (ALP) leadership change.

In 2007, ALP leader Kevin Rudd had won a decisive election victory over conservative Prime Minister John Howard; with opinion polls softening, however, Rudd's party took the extraordinary step of replacing him with his deputy Julia Gillard in mid-2010, only months before the next federal election in November 2010—an event known in Australian political parlance as a 'leadership spill'. Gillard won the subsequent election, narrowly, and with the support of two independent members of parliament formed government, but continued to be affected by poor opinion polls and sustained opposition attacks on her character. In turn, her predecessor Kevin Rudd challenged Gillard to regain the ALP leadership as well as the Prime Ministership—once, unsuccessfully, in February 2012, and again, successfully, on 26 June 2013. (Rudd lost the subsequent federal election to conservative opposition leader Tony Abbott in September 2013.)

Each spill caused considerable activity in the Australian Twittersphere. While a substantial component of such activity takes place in a dedicated **#spill** hashtag first used during the 2010 leadership challenge, **#auspol**—as the nominally standard hashtag for everyday political discussion in Australia—is also significantly affected by the event. For the purposes of the following discussion, we examine **#auspol** activities during June 2013 (Figure 3).

It is immediately evident that there is a substantial shift in the dynamics of **#auspol** on

26 June, continuing to a lesser extent on subsequent days. While the average volume of posts (shown in Figure 3 as a dashed line) hovers just above 11,000 tweets per day during the first 25 days of the month, it shoots to more than 92,000 tweets on the day of the spill, and gradually returns to the baseline level by 29 June. Conversely, the average volume of tweets contributed by the most active 1% of users (calculated over the entire month) sits at 60% during these first weeks of the month, and thus remains at a level comparable to the 64% we saw during 2011—yet their contribution to the total **#auspol** volume drops to only 18% on 26 June, and recovers only gradually to just over 50% over the remainder of the month. Notably, 26 June also records the monthly minimum for the percentage of tweets of the total **#auspol** volume which are genuine @replies.

In combination, these observations speak of a considerable if temporary power shift within the **#auspol** community: far from its usual domination by a handful of highly active leading users, participation during the heady days of the spill and its aftermath is substantially more broadly based. This shift, then, marks **#auspol**'s temporary transition from community to event: where usually its main function is to sustain the maintenance of power relationships between its more or less active participants, it now predominantly serves to support the continuing tracking and evaluation of an unfolding political crisis as driven by a much larger, much more fluid ad hoc gathering of participants. In other words, what can occur under such circumstances is a shift from the static to the dynamic, and from the spatial to the temporal. As such, it holds the potential to disrupt and reshape the existing status quo of power relations within **#auspol**: the community power structures which re-ossify once the immediate crisis is over may well differ from those which have existed before, if Twitter activities around the spill event have provided new participants with a platform to prove themselves, or if existing lead users have failed to keep pace with unfolding events. Indeed, disruptive events such as the leadership spill and its coverage on Twitter could even

challenge the implicit primacy of **#auspol** for Australian political discussion on Twitter, if they generate new, widely known hashtags that manage to survive beyond the immediate event itself.

But thematic hashtags such as **#auspol** are never entirely removed from events in the wider world, even when there is no major political crisis unfolding. Deleuze (1990, p. 8), with reference to Whitehead, proposes that the event ‘is always that which has just happened and that which is about to happen, but never that which is happening’ (cf. Latour, 1999). Even when **#auspol** functions mainly as a mechanism to sustain a community of participants, the currency of that community is its discussion of continuing political events in Australia, and the units of that currency—the individual contributions made by community members—are microscopic events in their own right. Hence, to understand the hashtag both as accompanying events and as itself comprising events requires us to acknowledge the interconnectedness of online and offline occurrences. What changes in the shifts between hashtag-as-community and hashtag-as-event is the valuation of that currency, and its pegging to outside occurrences—as a result, the hashtag is revealed as a highly malleable discursive object which is embedded in a wider network of interrelationships.

Vox Twitteratorum: Hashtags as Objects

An important strand of research has emphasised the role of object ecologies and material culture in the shaping of daily practices, interactions and networks (cf. Appadurai, 1986; Dant, 2005, 2008; Knorr Cetina, 2001; Latour, 2005; Rambukkana, Introduction, this volume), and considered what constitutes an ‘object’ in a digital context (cf. Leonardi, 2010; Leonardi, Nardi, & Kallinikos, 2012; Marres, 2012). Leonardi (2010) discusses how digital artifacts (in spite of their intangibility) provide certain affordances and constraints that limit and direct how we use them, much as material objects like wood, glass, metal, etc. come with

certain possibilities and limitations to how they can be used. Hence, while a topical hashtag such as **#auspol** is used as a communicative marker that signals someone's desire to contribute to a conversation around a particular topic, it also has a material tangibility in itself as a distinctive contributor to an assemblage of human and nonhuman agents that constitute the conversation. The hashtag can thus be considered a 'participatory object' (Marres, 2012, p. 9), both in terms of its ability to engage Twitter users in discussion (as can be seen from the long-standing and ongoing interaction via the **#auspol** hashtag), and as a participant in this political discussion itself.

Our analysis of the use of the **#auspol** hashtag during the June 2013 Australian Labor Party leadership spill (Sauter & Bruns, 2013a) showed that the hashtag was employed in messages that expressed support of or discontent with political parties and politicians. Importantly, the conversation would not exist without an external context—in our case, the leadership spill—yet at the same time the materiality of the hashtag itself makes it possible for the conversation to be framed and made visible to a particular ad hoc public. Just as we think about the users, the computers, tablets, phones, or other electronic devices they use to compose their tweets, and the politicians and sociopolitical circumstances they tweet about, as having a material tangibility, we have to recognise the **#auspol** hashtag as also contributing an element to the way in which the discussion unfolds and is perceived and shaped. Hence, even though it is an electronically constituted actant without any physical materiality in a literal sense, its presence in the discussion of the topic affects the discussion, making it a fully realised actor well beyond the confines of Twitter itself.

This is perhaps most obvious in the context of unfolding events: during each of the various attempted and actual Labor leadership spills since 2010, for example, the increased volume of **#auspol** activity and the coming into existence of **#spill** and related event-specific hashtags was seen by everyday users, political journalists and commentators, and even

politicians themselves, as an indicator that a new leadership challenge ‘is on’. This public attention to **#spill** and related hashtags may be a playful, mischievous, or calculating appropriation of Twitter activity patterns which widely overstates the actual influence of Twitter on Australian political processes. However, the very fact that such (mis)appropriation of Twitter hashtags is even possible demonstrates the materiality of the thematic hashtag as an object in contemporary Australian politics. The materiality of the **#spill** hashtags on Twitter and elsewhere gives commentators licence to explore the possibility of a new spill.

But outside of such specific, rarefied events, too, the very material presence of **#auspol** as a thematic hashtag creates the mechanism through which an aggregate ‘vox Twitteratorum’ (in analogy to the similarly aggregate vox populi) can be incorporated into public debate. The creation of such a disembodied ‘voice of the Twitterati’ and its operationalisation in the depiction of political discourse becomes evident, for example, from studies of how Twitter is increasingly cited as a source of views and comments by political journalists as they cover current political issues and debates (cf. Sauter & Bruns, 2013b; Wallsten, forthcoming). Because of its participant structure, **#auspol**, and Twitter, is highly unlikely to be representative of Australian public opinion—but some political journalism now positions it as such.

As Leonardi (2010) puts it, then, ‘artifacts without matter, matter’. Hashtags such as **#auspol** and **#spill** made everyday political debate on Twitter, the communities conducting such debates, and the ad hoc discussion of the various leadership spills and other events visible to a wider public as well as to us as researchers, imbuing such debates with further meaning and context. (In return, our various published analyses of **#spill**, **#auspol** and other relevant hashtags have also contributed to increasing their visibility and prominence—researchers and their publications are themselves also actors and actants in the network, of course.) Therefore, a thematic hashtag is a ‘participatory object’ in a concrete sociopolitical

context. As an object with a palpable materiality, it is able to convene a conversation and facilitate its visibility, and in doing so it also shapes what people talk about, and how they do so.

Conclusion: Hashtags in Context

Finally, what must not be forgotten in this context is the interplay between thematic hashtags as discursive technologies as such, and the more fundamental technological systems upon which they are founded: Twitter's underlying software base, and the algorithms inscribed into it. Gillespie (2014) alerts us to the ways in which algorithms increasingly shape what we know or think is worth knowing, and how we are known. With reference to Langlois, he asserts that algorithms are 'a key logic governing the flows of information on which we depend, with the power to "enable and assign meaningfulness, managing how information is perceived by users"' (Langlois 2012, cited in Gillespie 2014, p. 167). Similarly, hashtags are implicated in algorithmic processes of categorising and visualising information, and determining access to such knowledge.

By adding the **#auspol** hashtag to a tweet, a user makes a decision to trigger an algorithm in the Twitter software base, which associates the tweet—and by extension, the user—with a particular topic and group of participants. In this way users add to a publicly visible body of data: they contribute to the negotiation of truth via public debate and thus participate in the construction of knowledge. Depending on context, this may be done consciously—as expressed most obviously in efforts to get a certain hashtag to 'trend' and thus to afford greater visibility to the event or issue associated with it—or inadvertently, when a hashtag is used merely as a routine way of referring to a specific issue or theme,

without the user necessarily seeking to engage explicitly with the community that may exist around the hashtag.

The thematic hashtag's agency should not be overestimated, however. It is one participant in the way communicative exchanges unfold; many other tangible and intangible, more or less powerful participants are similarly involved in such processes. We have to remain aware that what we are observing when we trace the use of a hashtag is a particular snapshot of a very specific group of participants. Furthermore, we cannot trace all of the elements that impacted on the activities we observe through the hashtag, such as the conversations that the contributors to a hashtag public such as **#auspol** have beyond the use of the hashtag itself, whether on Twitter or elsewhere, and how this affects the ways in which they present and relate to themselves and others and engage in the construction of knowledge. The thematic hashtag is thus only one discursive technology at the macro-level of Twitter communication; many more such technologies—from other, nonthematic hashtags to the various other means for communication at the meso- and micro-levels—exist alongside and in competition with it on Twitter alone. A number of other technologies which is greater still by an order of magnitude exists beyond the narrow confines of Twitter itself. Studying the particular affordances and implications of hashtagged discourse on Twitter thus also becomes an exercise in mapping one very specific discursive space. This exercise should be repeated for a great many other discursive spaces—on Twitter, and beyond—so that these spaces may be better positioned and understood in relation to each other.

Keywords

#auspol, hashtag publics, political engagement, events, leadership spill, materiality, STS

References

- Appadurai, A. (1986). Introduction: Commodities and the politics of value. In A. Appadurai (Ed.), *The social life of things: Commodities in cultural perspective* (pp. 3–63). Melbourne: Cambridge University Press.
- Bruns, A., & Burgess, J. (2011). *The use of Twitter hashtags in the formation of ad hoc publics*. Paper presented at the 6th European Consortium for Political Research General Conference, August 25–27, University of Iceland, Reykjavík.
- Bruns, A., Burgess, J., & Highfield, T. (2014). A ‘big data’ approach to mapping the Australian Twittersphere. In K. Bode & P. Arthur (Eds.), *Advancing digital humanities* (pp. 113-120). Basingstoke, UK: Palgrave Macmillan.
- Bruns, A., Burgess, J., Kirchhoff, L., & Nicolai, T. (2012). *Mapping the Australian Twittersphere*. Paper presented at Digital Humanities Australasia, March 30, Canberra.
- Bruns, A., & Moe, H. (2014). Structural layers of communication on Twitter. In K. Weller, A. Bruns, J. Burgess, M. Mahrt, & C. Puschmann (Eds.), *Twitter and society* (pp. 29–41). New York: Peter Lang.
- Bruns, A., & Stieglitz, S. (2012). Quantitative approaches to comparing communication patterns on Twitter. *Journal of Technology in Human Services*, 30(3–4), 160–185.
- Bruns, A., & Stieglitz, S. (2013). Towards more systematic Twitter analysis: Metrics for tweeting activities. *International Journal of Social Research Methodology*, 16(2), 91–108.
- Dant, T. (2005). *Materiality and society*. Buckingham, UK: Open University Press.
- Dant, T. (2008). The pragmatics of material interaction. *Journal of Consumer Culture*, 8(1), 11– 33.
- Deleuze, G. (1990). *The logic of sense* (M. Lester & C. Stivale, Trans., C. Boundas, Ed.). London: Athlone Press.

- Deleuze, G. (2003). *The fold: Leibniz and the baroque*. London & New York: Continuum.
- Foucault, M. (1972). *The archaeology of knowledge and the discourse on language*. London: Tavistock Publications.
- Foucault, M. (1988). Technologies of the self. In L. H. Martin, H. Gutman, & P. H. Hutton (Eds.), *Technologies of the self—A seminar with Michel Foucault* (pp. 16–49). London: Tavistock Publications.
- Fuller, S. (2011). *Humanity 2.0: What it means to be human past, present and future*. London: Palgrave Macmillan.
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. Boczkowski, & K. Foot (Eds.), *Media technologies: Essays on communication, materiality, and society* (pp. 167–194). Cambridge, MA: MIT Press.
- Katz, J. E., Rice, R. E., Acord, S., Dasgupta, K., & Kalpana, D. (2004). Personal mediated communication and the concept of community in theory and practice. *Communication Yearbook*, 28, 315–372.
- Knorr Cetina, K. (2001). Objectual practice. In T. R. Schatzki, K. Knorr Cetina, & E. von Savigny (Eds.), *The practice turn in contemporary theory* (pp. 175–188). London: Routledge.
- Latour, B. (1999). *Pandora's hope: Essays on reality of science studies*. Cambridge, MA & London: Harvard University Press.
- Latour, B. (2005). *Reassembling the social*. Oxford, UK: Oxford University Press.
- Leonardi, P. M. (2010). Digital materiality? How artifacts without matter, matter. *First Monday*, 15(6). Retrieved from <http://firstmonday.org/ojs/index.php/fm/article/view/3036/2567>
- Leonardi, P. M., Nardi, B. A., & Kallinikos, J. (Eds.). (2012). *Materiality and organizing*. Oxford, UK: Oxford University Press.

- Marres, N. (2012). *Material participation: Technology, the environment and everyday publics*. Houndmills, UK & New York: Palgrave Macmillan.
- Michael, M. (2012). De-signing the object of sociology: Toward an 'idiotic' methodology. *The Sociological Review*, 60, 166–183.
- Pearson, E. (2009). All the World Wide Web's a stage: The performance of identity in online social networks. *First Monday*, 14(3). Retrieved from <http://firstmonday.org/article/view/2162/2127>
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Reading, MA: Addison-Wesley.
- Sauter, T., & Bruns, A. (2013a). *Exploring emotions on #auspol: Polarity, and public performance in the Twitter debate on Australian politics*. Paper presented at the 14th Annual Conference of the Association of Internet Researchers, October 23–26, Denver.
- Sauter, T., & Bruns, A. (2013b). *Social media in the media: How Australian media perceive social media as political pools*. ARC Centre of Excellence for Creative Industries and Innovation. Retrieved from <http://cci.edu.au/socialmediainthemedial.pdf>
- Wallsten, K. (forthcoming). "New media" in the newsroom: Twitter as a news source during the 2012 campaign. *Newspaper Research Journal*.
- Whitehead, A. N. (1929). *Process and reality: An essay in cosmology*. New York: The Free Press.
- Whitehead, A. N. (1933). *Adventures of ideas*. Cambridge, UK: Cambridge University Press.
- Woolgar, S., & Lezaun, J. (2013). The wrong bin bag: A turn to ontology in science and technology studies? *Social Studies of Science*, 43(3), 321–340.