Home > Volume 21, Number 2 - 1 February 2016 > **Wallis**

#digitalactivism: New media and politic

by Jake Wallis and Lisa M. Given

Abstract

This paper reports on the findings of a study that explores the ways in which civil society organizations use new media to engage in campaigns of political action. Focusing on campaigning by the environmental movement in Tasmania around the protection of native forest, the study investigates how stakeholders on this issue utilize the functionality of digital media to mobilize public engagement and, ultimately, influence the formulation of policy. Analysis of the study's network data suggests that central

positioning within social movement online network structures arises from strategic linking practices. These strategic communications practices enhance not only movement cohesion but also the visibility of those actors best placed to influence public debate and the formulation of policy.

Contents

Introduction

Across a range of high profile and widely reported international contexts, — umbrella waving pro-democracy rallies in Hong Kong (https://www.flickr.com/photos/cyalex/16213268125/), marches on the streets of Mexico City (https://www.flickr.com/photos/jpazkual/7363953310/), pot-banging demonstrations in Quebec (https://www.flickr.com/photos/blumsy/14538075042/), mass public congregation in the city squares of Cairo (https://www.flickr.com/photos/mosaaberising/6387458237/) and Madrid (https://www.flickr.com/photos/esewallace/5969966900/) — traditional forms of democratic protest have been underpinned by, and intertwined with, the structures of communications networks and the affordances of new media (see Figure 1). Edwards, *et al.* [1] describe this emerging form of protest as digital activism; "an organized public effort, making collective claim(s) on a target authority(s), in which civic initiators or supporters use digital media".
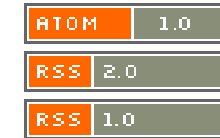
Information Studies

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Figure 1: A protestor displays the Occupy movement's social media hashtag (#o
at demonstration against the North Atlantic Treaty Organization in Chic
Photograph attribution: Michael Kappel at https://www.flickr.com/photos/m-i-k-e
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Public engagement using social media has become an important strategy

for social movements aiming to mobilize broader public interest in political issues. The prominence of new media in the dynamics of protest movements has led observers (such as Shirky, 2011) to suggest that these technologies have become vital tools for the healthy functioning of civil society and a democratic public sphere which holds power to account (See Figure 2).

Figure 2: Graffiti on the shutters of a shop in Tahrir Square, Cairo, Egypt, followi Internet shutdown in 2011.

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Re-invigorating the public sphere or encouraging political "slactivism"?

In Australia in early 2014, thousands took to the streets to 'March in March' (https://www.flickr.com/photos/21860344@N07/13188105773/), registering their disaffection with the (conservative) Liberal Party of Australia-led government on a range of issues (from the detention of refugees to marriage equality for gay and lesbian couples, from climate change to education). What was interesting about this protest was its grassroots, social media driven mobilization, with an absence of organization, or even involvement, by formal political groups (Price, 2014).

Massive audiences are available for flows of political content across social networking environments. Facebook alone had 1.39 billion monthly active users at 31 December 2014 (Facebook, 2015). In their study of political activist networks across the U.S., Colombia and Guatemala, Harlow and Harp [2] found social media environments to be "important for organizing, mobilizing, informing, and promoting debate, in other words, serving as a mode of alternative media and a counter public sphere where collective identities can form". Social media can be used to organize and highlight campaigning around social issues, but can they help affect real political change?

For some, the ease with which social media users can engage with political campaigns is derided as "clicktivism" (White, 2010) or "slacktivism" (Morozov, 2009). White and Morozov suggest that the click of a mouse to 'like' a political cause on social media is a form of political engagement of such limited effort as to barely warrant significance in terms of producing real political change.

Yet, new media consistently act as a significant mechanism for the organization, mobilization and amplification of public protest. Findings from a number of international studies (Gerodimos, 2011, 2008; Vromen, 2011; Xenos, *et al.*, 2014) suggest that online forms of political participation are increasingly important in the expression of political identity.

Studies undertaken in Australia (Vromen, 2011), the United Kingdom (U.K.) (Gerodimos, 2011, 2008) and the United States (U.S.) (Xenos, *et al.*, 2014) demonstrate that for young people, the expression of political views and perspectives via social media forms a significant element of their political identity. For Bennett and Segerberg (2012, 2011) this is an emerging mode of political engagement in networked democracies. They suggest that collective forms of political engagement (such as March in March for instance) are framed by the twin logics of personalization and networked collectivity. Furthermore, Mercea's (2012) study of environmental protest in Romania and the U.K., found that political engagement across social media does translate into off-line political involvement. For Gladwell (2010), it is the sustainability of involvement that is in question.

Is there a middle ground to be found between Shirky's (2011) strengthened public sphere and Morozov's (2009) low engagement political slactivism arguments? How can we explore the dynamic impact of new media on social movement action? How does the appropriation of new media by social movements actually influence political change? In this paper we report on an approach that we have used to explore these "How …?" questions, in a study that focuses on a specific environmental conflict around the protection of native forest in Tasmania, Australia.

Research context

Tasmania is an island separated from the Australian mainland by the Bass Strait. The island is itself a state of the Commonwealth of Australia, with its own regional government and parliament. Environmental issues are a frequent political battleground on an island where spectacular native forest ecosystems support both the local tourism and forestry industries (see

). Forestry, agriculture and fishing together make a combined contribution of around 10 percent to Tasmania's economic output (Australia. Department of Treasury and Finance. Economic Policy Branch, 2013). The forestry industry operates in constant tension with regional and national environmental movements.

Figure 3: The Tasmanian forestry industry and protected native forest co-exist
Photograph attribution: Ta Ann Truths at (https://www.flickr.com/photos/taann,

For example, a long running protest has focused around the plan to build a pulp mill in Tasmania's Tamar Valley. The Australian Government's planning approval for the pulp mill (Australia. Department of the Environment, 2011) has a lengthy history of political opposition from a range of political, environmental and community groups (https://www.flickr.com/photos/jen_forward/4123593035). The project was originally planned by the Tasmanian forestry company Gunns Limited and has, on a number of occasions, been refused approval by the government as a result of environmental concerns. Gunns Limited has now gone into receivership, but the pulp mill proposal still has political capital, given Tasmania's limited economic growth. The creation of a pulp mill operation has been projected as having the potential to bring more than AUS$6.7 billion into the Tasmanian economy [3]; yet significant concerns relating to the impact of the mill on the natural environment in the region have been loudly voiced by range of stakeholders such as the Australian Greens (political party) and the Wilderness Society (a prominent environmental lobby group).

Despite the involvement of stakeholders from the environmental movement and the forestry industry in the negotiation of the Tasmanian Forests Agreement in 2011, the pulp mill proposal re-emerged as a significant political issue in the March 2014 Tasmanian state elections. The Tasmanian wilderness has been listed since 1982 by the United Nations Educational Scientific and Cultural Organization (UNESCO) as a site of world heritage significance. Signaling a prioritization of economic development over environmental protection, the Australian federal government issued an unprecedented proposal to UNESCO in January 2014, requesting that 74,000 hectares of World Heritage List forest be delisted and thus available for logging.

This environmental conflict offered a microcosm within which to explore how increasingly pervasive networked technologies may impact on the nature and dynamics of political protest.

Methodology

The Internet is changing how we 'do' research. For Anderson (2008) the ready availability of 'big data', and the advances in computing power for storing and sifting through them negate the need for interpretation.

Anderson [4] suggests:

> The new availability of huge amounts of data, along with the statistical tools to crunch these numbers, offers a whole new way of understanding the world. Correlation supersedes causation, and science can advance even without coherent models, unified theories, or really any mechanistic explanation at all.

For boyd and Crawford (2012) however, data lose their meaning without context. They [5] note; "Data are not generic. There is value to analyzing data abstractions, yet retaining context remains critical". In relation to research around social media data, Highfield and Leaver (2015) advocate a mix of quantitative and qualitative approaches as a way of generating interpretive contextual depth. Others (Caiani and Wagemann, 2009; Park and Thelwall, 2003) agree that mixed methods approaches to Internet research are essential for making meaningful interpretation of how we engage in social interactions online.

In this study we employ a mix of research methods and incorporate digital data into our analysis. Drawing on the specificity of the local environmental conflict described above, we acknowledge the significance of context in shaping our interpretation of data. To provide an overarching interpretive framework for the study we have drawn on the contructivist grounded theory research of Kathy Charmaz (2010, 2008). Charmaz [6] advocates an attitude of "creativity" around research design, as a way of providing scope for methods to emerge during the study as researchers become familiar with the data.

Essential elements of grounded theory methodology are: the minimizing of preconceived ideas around both research problem and data; a simultaneous process of data collection and analysis, with each informing the other; the importance of openness to different understandings of the data; and, a focus in data analysis on the construction of theory [7]. An iterative process of data collection and analysis enables the researchers to develop conceptual categories and analytic themes.

Research design

In this study we have combined multiple research methods in order to generate a rich, layered research narrative around how the environmental groups campaigning on forest protection use new media to influence public opinion on the issue and mobilize political engagement. We make use of phases of: network analysis and data visualization; quantitative and qualitative content analysis; and, the analysis of public policy formulation.

Network analysis has evolved from the study of social networks that establish and maintain communities. Sociologist Barry Wellman (for instance in Marin and Wellman, 2011; Wellman, 1988; Wellman, *et al.*, 2003) has pioneered the extension of this approach into the sphere of online relational patterns and structures. We use network analysis as a means of mapping the relational structures between groups actively engaged online in campaigning around the protection of native forest in Tasmania. Visualization — the graphical representation of the network analysis data set — can be helpful to assist in analysis, as an aid in the identification of patterns within the data and as a basis for further exploration.

Our approach to network analysis draws on the hyperlink as a relational metaphor. For Shumate and Dewitt, analysis of interconnected patterns of hyperlinking helps us to understand the social structures underlying the Web. They [8] suggest:

Hyperlink networks have meaning and are

fundamental elements of community creation. Foundational to the understanding that hyperlinks represent communities is their intentionality. These links do not happen automatically or at random. The decision to link one organization with another is a strategic communicative choice.

The hyperlink in this relational sense can convey symbolic meaning; affiliation, deference, even hostility. In their exploration of climate change debate online, Rogers and Marres [9] note the significance of meaningful reciprocation: "Greenpeace does not link to Shell but Shell links to Greenpeace". In political communication, hyperlinks may signify a poor view or negative relationship. Ackland and Gibson [10] note that whilst the environmental movement uses hyperlinked interconnection to collectively reinforce identity, for political parties hyperlinks can act as "rejection devices" representative of a negative symbolic relationship. Context, as we have already acknowledged, is everything.

For this study we used Issue Crawler (https://www.issuecrawler.net/) software to locate and visualize an online network of organizations interconnecting around Tasmanian forest protection and the Tamar Valley pulp mill protest. This Web crawling software runs on servers at the University of Amsterdam and its use is shared by an international community of new media researchers. The crawl is initiated by supplying the software with a set of Web site addresses (Uniform Resource Locators or URLs). From these starting points the software maps Web sites to which they have hyperlinks in common and completes iterations of this task, incorporating the newly discovered Web sites. The software navigates and records these common linkages until there are no further commonalities to be discovered.

We provided the Issue Crawler with three URLs as starting points: those of the Web sites of the Tasmanian Greens (a political party); the Wilderness Society (an environmental lobby group); and, Gunns Limited (a Tasmanian forestry company). Each of these sites featured prominently in a series of Google searches that were undertaken to explore the online landscape around the issue on which the study is focused, *i.e.*, the proposal to build a forestry pulp mill in Tasmania's Tamar Valley. Whilst Gunns Limited was

the forestry company behind the plans for the pulp mill, both the Tasmanian Greens and the Wilderness Society were active in the campaign against the proposal. Each represented stakeholders across civil society: the Tasmanian Greens as an elected political party directly involved in the formulation of public policy and legislation; the Wilderness Society as a national environmental lobby group striving to influence policy on the issue; with, Gunns Limited as a significant company in Tasmania's forestry industry and a major employer on the island. Each is reflective of the stakeholder interests involved in attempting to influence the development of public policy around Tasmania's forestry industry.

Content analysis provides a way of exploring the content and meaning in online political communication. In this study, given that each node on our network constituted an organizational Web site, we used the network analysis data as a sample for a phase of quantitative and qualitative content analysis. Building on previous content analyses (Burt and Taylor, 2008; Gerodimos, 2011, 2008) of the democratic affordances of civil society Web sites, we coded the organizational Web sites on the study's network sample for their use of Web design and social media to facilitate democratic engagement.

The lobbying and protest campaigns around the protection of Tasmanian native forest in general and the proposed Tamar Valley pulp mill in particular ongoing since 2006, coincide with a significant increase in the use of the Internet for political communication in Australia (for a specifically Australian study of this increase in online politics, see Australian Centre for Public Communication, 2008). Referring back to the questions we discuss in our introduction — can online political activism affect change? We have used the analysis of policy formulation on forestry and forest protection as a way of engaging with questions of influence and impact. Our efforts in this regards were due to a fortunate coincidence; in 2011, after years of dispute, stakeholders from the environmental movement, the forestry industry, the Tasmanian (state) Government and Australian (federal) Government negotiated the Tasmanian Forests Agreement (Australia. Department of the Environment, 2013).

Findings and discussion

The Issue Crawler located a network of 50 Web sites (see Figure 4). We categorized (see Table 1) the organizations represented on the network in order to identify the nature of stakeholder engagement. More than half of the nodes on the network (26 nodes) comprised a range of environmental activist and lobby groups. The reciprocal hyperlink patterns between the Web sites of Australian Greens federal and state parties and those of their elected representatives constituted a cluster of 13 nodes.

Figure 4: Network of forest protection stakeholder Web sites

Central positioning within the network is dominated by two prominent environmental lobby groups; Australian Conservation Foundation (http://www.acfonline.org.au/) and the Wilderness Society (https://www.wilderness.org.au/). This central positioning relates to the significance of hyperlinks to them from others on the network; with both receiving more links to their Web sites than to any other network node.

Table 1: Organization types represented on the study's network.	
Organization type	**Number of network nodes**
Activist group	6
Campaign group	8
Commercial	6
Community group	1
Government	3
Lobby group	11
Media	1
Non-governmental organization	1
Political party	13

A significant factor in the context of digital activism is that relational linkages within these environments are often based on homophily (the association of like with like). The cluster of Web sites of the Australian Greens provides an example from this study's network data. The capacity to create links of political affiliation across web sites and social media is a

significant strategy in emerging forms of political organization due to the potential to mobilize the public, through engagement via their trusted individual personal networks. By means of content analysis of the network nodes (each a Web site) we explored how Web design and social media were being used to facilitate political engagement. We used both quantitative and qualitative content analysis, combining and extending the coding schemes of Burt and Taylor (2008) and Gerodimos (2008).

These networks of linked relationships become powerful channels to these massive international audiences, enabling civil society actors, such as the environmental groups represented in this study, to extend their limited access to mainstream broadcast media with the communicative possibilities afforded by social media. Twenty-eight organizations (from the environmental movement to the Australian Greens) on the study's network use new media content within their sites. Facebook, Twitter and YouTube are the primary social media channels that these groups employ to engage with networked publics and disseminate sharable new media campaign content.

The Wilderness Society, at the centre of the network, has graphical links to its social media channels displayed as a consistent design feature across its Web site (see Figure 5). The use of social networking sites such as Facebook and Twitter enables environmental groups like The Wilderness Society to engage with networked publics and potential audiences. In order to do so the digital campaign content that these groups create must be easily sharable across social media. The AddThis social content sharing plug-in is embedded within the design of the Wilderness Society Web site (see Figure 5), enabling sharing of the organization's content across more than 300 social media platforms within a couple of mouse clicks.

The visual nature of digital media allows organizations like the Wilderness Society to use emotive imagery of Tasmania's native forest (see Figure 5) to help shape public perception of issues relating to forest protection. In this way, sharable new media content frames the narrative of forest protection in terms sympathetic to the campaign objectives of the Wilderness Society. The site incorporates embedded functionality that offers visitors the opportunity to enact a relational connection with the organization via social media platforms such as Facebook and Twitter. This

creates latent, loose organizational structures that can be activated during more intense and focused periods of campaigning.

Figure 5: Social media channels incorporated into the design of the Wilderness
Note: Screen capture image used with permission of the Wilderness

Another notable feature of socio-technical functionality within the data was the use of new media to facilitate co-present, embodied forms of political engagement. The Cairns and Far North Environment Centre (CAFNEC), an environmental organization from North Queensland, is pulled into the study's network of affiliation by hyperlinks from the Wilderness Society and the Australian Greens. CAFNEC (see Figure 6) embeds a Google Calender widget within its Web site in order to encourage those engaging with the organization online to extend that participation through various off-line events.

Figure 6: CAFNEC's use of new media to encourage transfer of online engage participation.

Note: Screen capture image used with permission of Cairns and Far North Env

Here we draw attention to calls (Jurgenson, 2011; Rogers, 2009) for those undertaking research involving the Internet to avoid a digital dualism — a distinction between what happens online and what happens in 'real life' — in their analysis. The data from this study supports a position that acknowledges the intertwining of the digital and the material. Content analysis of the CAFNEC Web site indicates that forms of online and off-line engagement can be seen as a spectrum of participation, each reciprocating the other.

The combined analysis of both campaign network and development of policy produced significant findings around the relationship between central network positioning and the capacity to influence policy formulation. Two nodes dominate central network positioning (see Figure 7); those representing the Web sites of Australian Conservation Foundation and the Wilderness society. These two organizational Web sites have the highest number of hyperlinks from other network nodes, resulting in their central positioning.
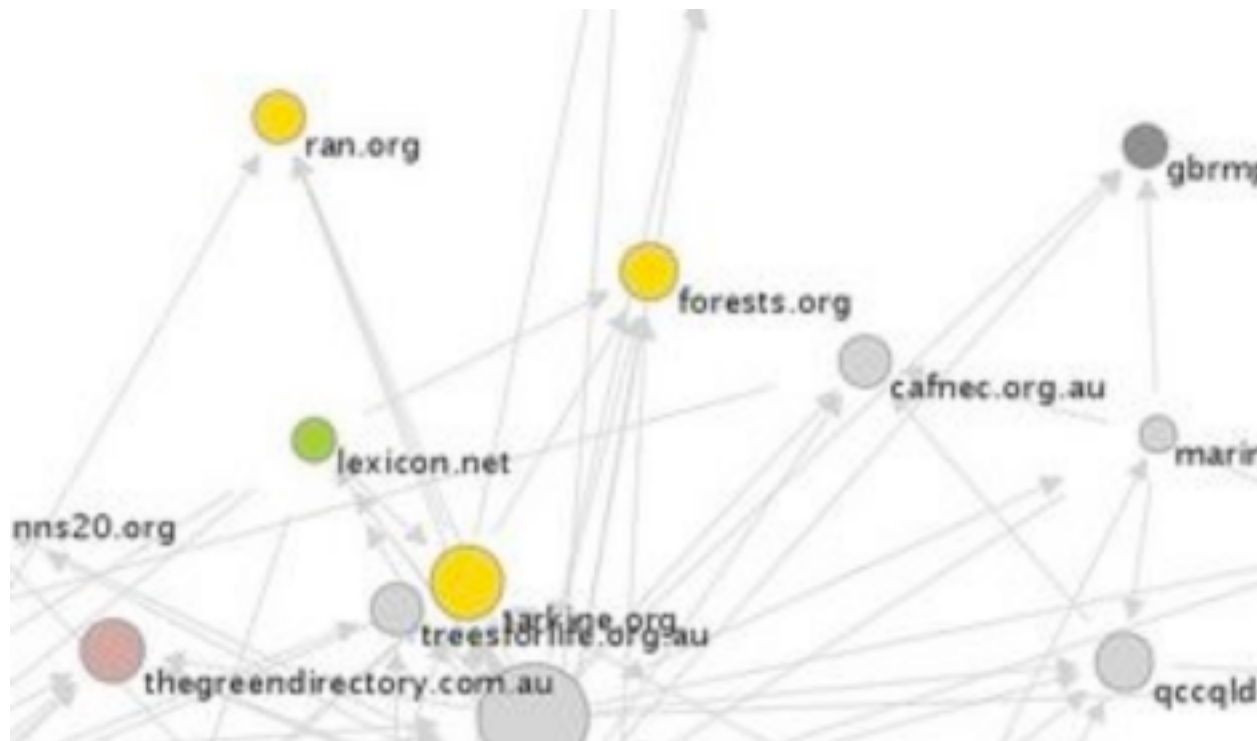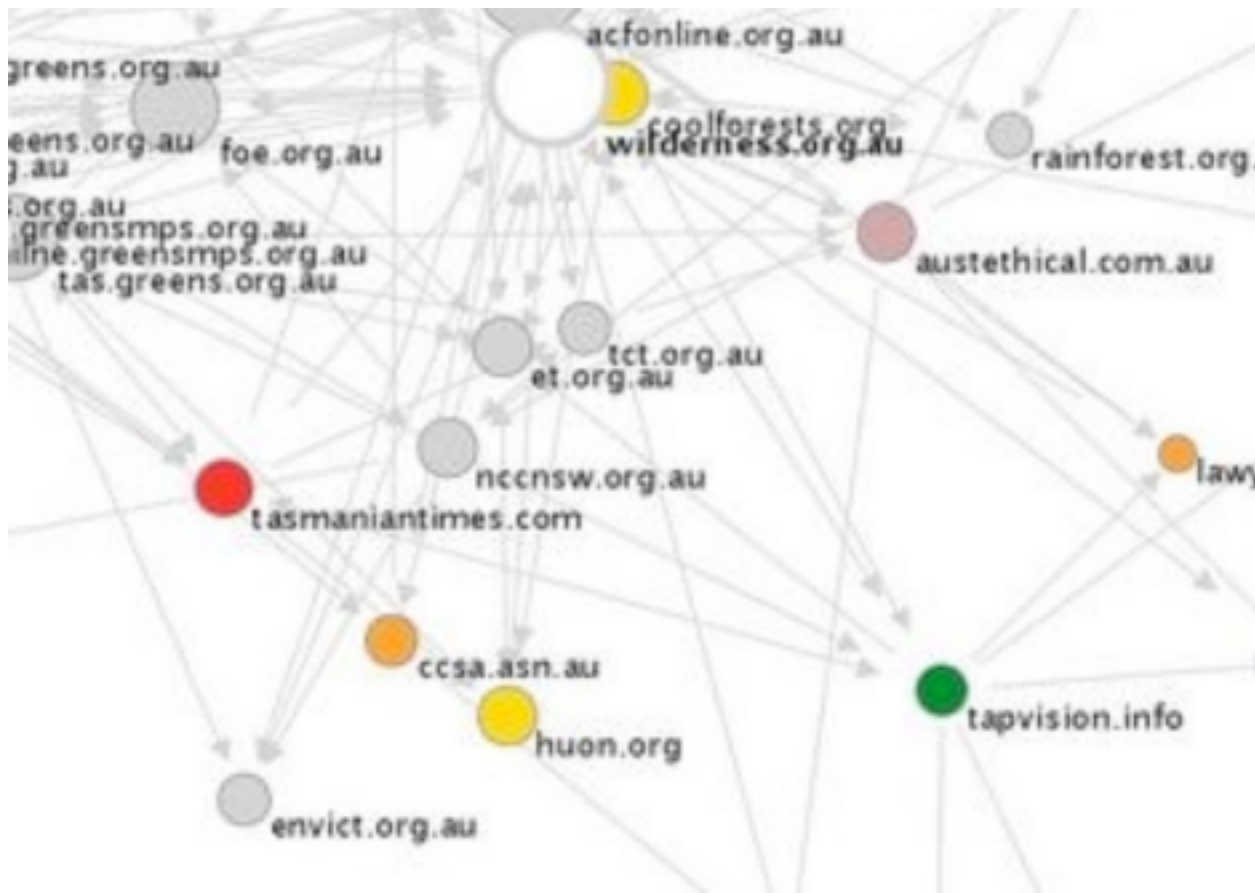
Figure 7: Central network positioning of Australian Conservation Foundation an
Society.

Pilny and Shumate [11] suggest that for online social movement actors the
hyperlink is "a public acknowledgement of another and symbol of
representational communication". By assigning hyperlinks the network, as
a collective, takes shape. These patterns position particular organizations
within the network, enabling their identification with (and within) the
broader network. Hyperlinking to symbolize alignment is a practice in self-
identification with, and the formation of, collectivity. Ackland and O'Neil
(2011) go beyond this to suggest that the giving and receiving of
hyperlinks are resources in a hyperlink economy, an organizing system

within self-identifying networks. As sites with more in-links are generally higher ranked in the indexing processes of search engines, Ackland and O'Neil [12] describe as "index authority" the status that is created through the in-links that a site receives. Pilny and Shumate [13] discuss the same concept as "hyperlink capital".

If we think of the Web as a network of social relations then who we link to, and who links to us, becomes significant. The numbers of links to a site from others form a significant component of the ranking algorithm of the dominant search engine, Google (Brin and Page, 1998; Segev, 2010). The visibility of numeric analytics (hits, friends, retweets, views, likes, etc.) across social media environments assists in creating an aura of authority, significance and standing within online communities.

The analysis of policy developments helped us to explore the kind of capital that Australian Conservation Foundation and the Wilderness Society had to influence legislation around forestry and the protection of native forest in Tasmania.

In 2011, representatives from government, the forestry industry and the environmental movement negotiated the Tasmanian Forests Agreement (Australia. Department of the Environment, 2013), bringing some resolution to the long-running conflict around the balance between forestry and the protection of native forest on the island (see Figure 8).

Figure 8: The Tasmanian Forests Agreement.
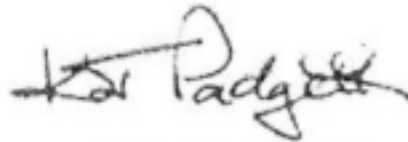Note: Screen capture image used with permission of the Tasmanian Go

Figure 9 illustrates the positioning of the Australian Conservation Foundation and the Wilderness Society within the process of policy formulation, as representatives of the environmental movement within the negotiating process and as signatories to the agreement.

Don Henry, Chief Executive
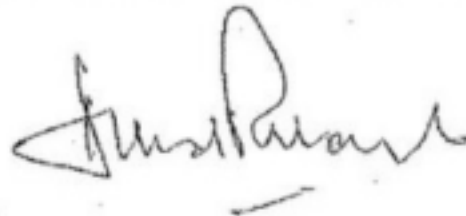**Australian Conservation Foundation**

Ed Vincent, Chief Executive O
Tasmanian Forest Contractors A

Ken Padgett, Director
Australian Forest Contractors Association

Terry Edwards, Chief Execu
Forest Industries Association of

David Pollard, Chief Executive Officer
Australian Forest Products Association

Fred Ralph, Chairman
Tasmanian Sawmillers Assoc

Michael O'Connor, National Secretary
Construction, Forestry, Mining and Energy Union

Lyndon Schneiders, National D
The Wilderness Society I

Figure 9: Australian Conservation Foundation and the Wilderness Society as Tasmanian Forests Agreement.
Note: Image used with permission of the Tasmanian Governme

These data suggest that online positioning within networks of political action is indicative of the capacity to influence policy. The study demonstrates that network data are helpful in understanding organizational features of online social movement collectives. Such data can also provide indications as to the capacity of specific actors to drive forward agendas of political action within the spheres of institutionalized political power. We avoid a simplistic analysis of this relationship however, noting that central positioning in online networks and the capacity to influence policy may themselves both be related to economic resources (Gonzalez-Bailon, 2009).

Yet the relational structures afforded by the Web and social media are of particular importance for civil society. Diani (2000) and Ackland and O'Neil (2011) suggest that patterns of hyperlinking reflect the exchange of both symbolic and practical resources in the context of networked social movements. Actors within social movement collectives are conscious of the resources upon which different organizations within the movement can draw (Diani, 1992). Analysis of online social movement networks suggests that those organizations most central within the network receive the most publicity and are the most visible to the media (Ackland and O'Neil, 2011; Gonzalez-Bailon, 2009; Pilny and Shumate, 2011).

Conclusion

The data from our study suggest that central network positioning in online social movement structures has a relationship with the capacity to influence the formulation of public policy. This positioning is dependent

upon the symbolic capital associated with the intentional designation of hyperlinks. Furthermore this finding suggests that for civil society organizations an awareness of social media analytics and search engine algorithms is necessary for an effective and influential communications strategy.

Furthermore, our study highlights several prominent aspects of how civil society groups use the affordances of new media in political campaigning: for collectivity and connectivity; to campaign and create a narrative; and, to catalyze mobilization and influence policy.

The study's findings suggest that hyperlink practices amongst the environmental groups campaigning on Tasmanian forest protection are strategic and political; reinforcing collectivity and channeling symbolic capital. Environmental groups use the relational properties of social media to create latent social movement structures, enhancing the potential for public engagement through connectivity. This is significant given that the personal networks of supporters can be deployed as campaign channels across social media. New media can be used to create a powerful narrative that shapes how issues are presented to, and perceived by the public. The online to off-line transfer of participation offers novel opportunities for digital activism and political mobilization.

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Acknowledgements

Notes

1. Edwards, *et al.*, 2013, p. 4.

2. Harlow and Harp, 2011, p. 208.

3. Allen Consulting Group, 2006, p. 2.

4. Anderson, 2008, paragraph 19.

5. boyd and Crawford, 2012, p. 671.

6. Charmaz, 2010, p. 168.

7. Charmaz, 2010, p. 155.

8. Shumate and Dewitt, 2008, p. 407.

9. Rogers and Marres, 2000, pp. 156–157.

10. Ackland and Gibson, 2013, p. 233.

11. Pilny and Shumate, 2011, p. 263.

12. Ackland and O'Neil, 2011, p. 178.

13. Pilny and Shumate, 2011, p. 264.

References

R. Ackland and R. Gibson, 2013. "Hyperlinks and networked communication: A comparative study of political parties online," *International Journal of Social Research Methodology*, volume 16 number 3, pp.231–244.
doi: http://dx.doi.org/10.1080/13645579.2013.774179, accessed 17

January 2016.

R. Ackland and M. O'Neil, 2011. "Online collective identity: The case of the environmental movement," *Social Networks*, volume 33, number 3, pp. 177–190.
doi: http://dx.doi.org/10.1016/j.socnet.2011.03.001, accessed 17 January 2016.

Allen Consulting Group, 2006. *Bell Bay Pulp Mill Economic Impact Assessment Report* (May). Melbourne: ACIL Allen Consulting.

C. Anderson, 2008. "The end of theory: The data deluge makes the scientific method obsolete," *Wired* (23 June), at http://www.wired.com/2008/06/pb-theory/, accessed 26 February 2015.

Australia. Department of the Environment, 2013. "Tasmanian Forests Intergovernmental Agreement," at http://www.environment.gov.au/land/forests/intergovernmental-agreement, accessed 26 February 2015.

Australia. Department of the Environment, 2011. "Gunns Bell Bay Pulp Mill," at http://www.environment.gov.au/node/18568, accessed 26 February 2015.

Australia. Department of Treasury and Finance. Economic Policy Branch, 2013. "Structural change in the Tasmanian economy" (April), at http://www.treasury.tas.gov.au/domino/dtf/dtf.nsf/LookupFiles/Structural-Change-in-the-Tasmanian-Economy-Info-Paper.pdf/$file/Structural-Change-in-the-Tasmanian-Economy-Info-Paper.pdf, accessed 26 February 2015.

Australian Centre for Public Communication, 2008. "E-electioneering: Use of new media in the 2007 Australian federal election," at http://democracy.nationalforum.com.au/articles329.html, accessed 26 February 2015.

W.L. Bennett and A. Segerberg, 2012. "The logic of connective action: Digital media and the personalization of contentious politics," *Information, Communication & Society*, volume 15, number 5, pp. 739–768.
doi: http://dx.doi.org/10.1080/1369118x.2012.670661, accessed 17

January 2016.

W.L. Bennett and A. Segerberg, 2011. "Digital media and the personalization of collective action: Social technology and the organization of protests against the global economic crisis," *Information, Communication & Society*, volume 14, number 6, pp. 770–799.
doi: http://dx.doi.org/10.1080/1369118x.2011.579141, accessed 17 January 2016.

d. boyd and K. Crawford, 2012. "Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon," *Information, Communication & Society*, volume 15, number 5, pp. 662–679.
doi: http://dx.doi.org/10.1080/1369118x.2012.678878, accessed 17 January 2016.

S. Brin and L. Page, 1998. "The anatomy of a large-scale hypertextual Web search engine," *Computer Networks and ISDN Systems*, volume 30, numbers 1–7, pp. 107–117.
doi: http://dx.doi.org/10.1016/S0169-7552(98)00110-X, accessed 17 January 2016.

E. Burt and J. Taylor, 2008. "How well do voluntary organizations perform on the Web as democratic actors? Towards an evaluative framework," *Information, Communication & Society*, volume 11, number 8, pp.1,047–1,067.
doi: http://dx.doi.org/10.1080/13691180802109055, accessed 17 January 2016.

M. Caiani and C. Wagemann, 2009. "Online networks of the Italian and German extreme right: An explorative study with social network analysis," *Information, Communication & Society*, volume 12, number 1, pp.66–109.
doi: http://dx.doi.org/10.1080/13691180802158482, accessed 17 January 2016.

K. Charmaz, 2010. "Grounded theory as an emergent method," In: S.N. Hesse-Biber and P. Leavy (editors). *Handbook of emergent methods*. New York: Guilford Press, pp. 155–172.

K. Charmaz, 2008. "Constructionism and the grounded theory method," In: J.A. Holstein and J.F. Gubrium (editors). Handbook of constructivist research. New York: Guilford Press, pp. 397–412.

M. Diani, 2000. "Social movement networks virtual and real," *Information, Communication & Society*, volume 3, number 3, pp. 386–401.
doi: http://dx.doi.org/10.1080/13691180051033333, accessed 17 January 2016.

M. Diani, 1992. "The concept of social movement," *Sociological Review*, volume 40, number 1, pp. 1–25.
doi: http://dx.doi.org/10.1111/j.1467-954X.1992.tb02943.x, accessed 17 January 2016.

F. Edwards, P.N. Howard, and M. Joyce, 2013. "Digital activism and non-violent conflict" (20 November), Seattle: University of Washington, Digital Activism Research Project, at http://digital-activism.org/2013/11/report-on-digital-activism-and-non-violent-conflict/, accessed 27 February 2015.

Facebook, 2015. "Company info," at http://newsroom.fb.com/company-info/, accessed 26 February 2015.

R. Gerodimos, 2011. "Online youth civic attitudes and the limits of civic consumerism: The emerging challenge to the Internet's democratic potential," *Information, Communication & Society*, volume 15, number 2, pp. 217–245.
doi: http://dx.doi.org/10.1080/1369118x.2011.572983, accessed 17 January 2016.

R. Gerodimos, 2008. "Mobilising young citizens in the UK: A content analysis of youth and issue Websites," *Information, Communication & Society*, volume 11, number 7, pp. 964–988.
doi: http://dx.doi.org/10.1080/13691180802109014, accessed 17 January 2016.

M. Gladwell, 2010. "Small change: Why the revolution will not be tweeted," *New Yorker* (4 October), from http://www.newyorker.com/magazine/2010/10/04/small-change-3, accessed 27 February 2015.

S. Gonzalez-Bailon, 2009. "Opening the black box of link formation: Social factors underlying the structure of the Web," *Social Networks*, volume 31, number 4, pp. 271–280.
doi: http://dx.doi.org/10.1016/j.socnet.2009.07.003, accessed 17 January 2016.

S. Harlow and D. Harp, 2011. "Collective action on the Web: A cross-cultural study of social networking sites and online and offline activism in the United States and Latin America," *Information, Communication & Society*, volume 15, number 2, pp. 196–216.
doi: http://dx.doi.org/10.1080/1369118x.2011.591411, accessed 17 January 2016.

T. Highfield and T. Leaver, 2015. "A methodology for mapping Instagram hashtags," *First Monday*, volume 20, number 1, at http://firstmonday.org/article/view/5563/4195, accessed 27 February 2015.
doi: http://dx.doi.org/10.5210/fm.v20i1.5563, accessed 17 January 2016.

N. Jurgenson, 2011. "Digital dualism versus augmented reality," *Cyborgology* (24 February), at http://thesocietypages.org/cyborgology/2011/02/24/digital-dualism-versus-augmented-reality/, accessed 27 February 2015.

A. Marin and B. Wellman, 2011. "Social network analysis: An introduction," In: J. Scott and P.J. Carrington (editors). *Sage handbook of social network analysis*. Thousand Oaks, Calif.: Sage, pp. 11–25.

D. Mercea, 2012. "Digital prefigurative participation: The entwinement of online communication and offline participation in protest events," *New Media & Society*, volume 14, number 1, pp. 153–169.
doi: http://dx.doi.org/10.1177/1461444811429103, accessed 17 January 2016.

E. Morozov, 2009. "From slacktivism to activism," *Foreign Policy* (5 September), at http://foreignpolicy.com/2009/09/05/from-slacktivism-to-activism/, accessed 27 February 2015.

H.W. Park and M. Thelwall, 2003. "Hyperlink analyses of the World Wide

Web: A review," *Journal of Computer-mediated Communication*, volume 8, number 4.
doi: http://dx.doi.org/10.1111/j.1083-6101.2003.tb00223.x, accessed 17 January 2016.

A. Pilny and M. Shumate, 2011. "Hyperlinks as extensions of offline instrumental collective action," *Information, Communication & Society*, volume 15, number 2, pp. 260–286.
doi: http://dx.doi.org/10.1080/1369118x.2011.606328, accessed 17 January 2016.

J. Price, 2014. "March in March grows from genuine grassroots," *The Age* (4 February), at http://www.theage.com.au/comment/march-in-march-grows-from-genuine-grassroots-20140203-31xgy.html, accessed 27 February 2015.

R. Rogers, 2009. *The end of the virtual: Digital methods*. Amsterdam: Amsterdam University Press.

R. Rogers and N. Marres, 2000. "Landscaping climate change: A mapping technique for understanding science and technology debates on the World Wide Web," *Public Understanding of Science*, volume 9, number 2, pp. 141–163.
doi: http://dx.doi.org/10.1088/0963-6625/9/2/304, accessed 17 January 2016.

E. Segev, 2010. *Google and the digital divide: The bias of online knowledge*. Oxford: Chandos.

C. Shirky, 2011. "The political power of social media: Technology, the public sphere, and political change," *Foreign Affairs*, volume 90, number 1, at http://www.foreignaffairs.com/articles/67038/clay-shirky/the-political-power-of-social-media, accessed 27 February 2015.

M. Shumate and L. Dewitt, 2008. "The north/south divide in NGO hyperlink networks," *Journal of Computer-Mediated Communication*, volume 13, number 2, pp. 405–428.
doi: http://dx.doi.org/10.1111/j.1083-6101.2008.00402.x, accessed 17 January 2016.

A. Vromen, 2011. "Constructing Australian youth online: Empowered but dutiful citizens?" *Information, Communication & Society*, volume 14, number 7, pp. 959–980.
doi: http://dx.doi.org/10.1080/1369118x.2010.549236, accessed 17 January 2016.

B. Wellman, 1988. "Structural analysis: from method and metaphor to theory and substance," In: B. Wellman and S.D. Berkowitz (editors). *Social structures: A network approach*. Cambridge: Cambridge University Press, pp. 19–61.

B. Wellman, A. Quan-Haase, J. Boase, W. Chen, K. Hampton, I. Diaz, and K. Miyata, 2003. "The social affordances of the Internet for networked individualism," *Journal of Computer-Mediated Communication*, volume 8, number 3.
doi: http://dx.doi.org/10.1111/j.1083-6101.2003.tb00216.x, accessed 17 January 2016.

M. White, 2010. "Clicktivism is ruining leftist activism," *Guardian* (12 August), at
http://www.theguardian.com/commentisfree/2010/aug/12/clicktivism-ruining-leftist-activism, accessed 27 February 2015.

M. Xenos, A. Vromen, and B.D. Loader, 2014. "The great equalizer? Patterns of social media use and youth political engagement in three advanced democracies," *Information, Communication & Society*, volume 17, number 2, pp. 151–167.
doi: http://dx.doi.org/10.1080/1369118x.2013.871318, accessed 17 January 2016.

Editorial history

#digitalactivism: New media and political protest
by Jake Wallis and Lisa M. Given.
First Monday, Volume 21, Number 2 - 1 February 2016
http://journals.uic.edu/ojs/index.php/fm/article/view/5879/5197
doi: http://dx.doi.org/10.5210/fm.v21i2.5879

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