

Submission to the Joint Standing Committee on Electoral Matters Inquiry into and report on all aspects of the conduct of the 2016 Federal Election and matters related thereto. The Parliament of Australia.

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The New Normal

The digital has revolutionised democracy. Information and Communication Technologies (ICTs), through the Turing revolution, have created the present era of 'infosphere.' In this epoch, not only is the economy informationalised, but a society which exists within this 'infosphere' can be 'vitally threatened informationally.' (Floridi, 2016) Digital-dependent 'western' democratic societies dealing with Cyber-Enabled Information/Influence Warfare and Manipulation (IIWAM), operating in an era of post-Westphalia (*polis*-State) internet 'Stack' sovereignty (Bratton, 2015), confront the 'greatest asymmetrical disadvantage.' (Lin & Kerr, 2018) IIWAM operations exploit 'high connectivity, low latency, high degrees of anonymity, insensitivity to distance and national borders, democratized access to publishing capabilities, and inexpensive production and consumption of information content.' (Lin & Kerr, 2018) The institutional rules of cyber space – where nation states are forced to 'cooperate to compete' (Lindsay, 2017) while avoiding outright cyber conflict - compounds the motivation of adversaries to undermine societies with espionage-based disinformation, that circulates within the new sociotechnical, social media dependent form of democracy and politics embedded in ICTs.

Social media has change the nature of politics and the public sphere. Margetts et. al. identify a new dynamic of politics in the internet era they call 'chaotic pluralism.' (Margetts, 2016) It is a politics formed by 'shifting flows of attention and activity', which scale up to mobilizations rapidly, which is a 'turbulent politics, which is unstable, unpredictable, and often unsustainable.' (Margetts, 2016, pp. 196-197) Colleagues, led by Philip N. Howard at the Oxford Internet Institute, have recently completed a second global inventory of the influence operations globally and the capacity of governments to 'manipulate public opinion over social media.' (Philip N Howard, 2018) These activities included bots, disinformation campaigns and the distribution of fake news. (Philip N. Howard, Woolley, & Calo, 2018; S. B. P. N. Howard, 2017) An assessment based upon this contextual global activity would suggest that Australian voters and political discourse are likely to have already been targeted – possibly by organised 'troops' from foreign government sponsored outlets. Measurement of the extent of such targeting is work currently being undertaken in collaboration with my research colleague, Dr Michael Jensen, at the University of Canberra.

'Back to the Future'

Manipulation of ICT based politics within our informationalised society is now integral to Australian and global political culture. Addressing the spread of deliberately false news online during elections will be an ongoing challenge. Measures to improve the media literacy of Australian voters would be welcome. But research shows that training may actually increase problematic behaviours as people training creates norms for stereotyping and often triggers a defensive, shame-based response in participants. (Doyin Atewologun, 2018; Duguid & Thomas-Hunt, 2015). However it is the concept of culture that may prove a robust and resilient way to confront these now normalised issues. My broad guidance is based upon understanding of military experience with social media in recent conflict, and my research findings of the way in which civil-military culture of Anzac Day has been actively, and

completely, integrated into Australian digital society. Both these areas are the subject of my doctoral research and international collaborations.

Research shows that 'computational propaganda' techniques rely upon key characteristics of online culture and politics: 'social endorsements' (real or fabricated) and 'social information' (defined as 'real time feedback' from peers) both generate a highly visual form of information that in turn feeds further participation. (Hale, John, Margetts, & Yasseri, 2018; Philip N Howard, 2018; Margetts, 2016) Consequently, I argue the best form of 'inoculation' against the pernicious effects of social media manipulation is a clear, coherent and resilient sense of consciousness within the body politic of how a social fabric is maintained. This may take the form of values and/or culture.

My own research explores how the Australian civic culture of Anzac has been translated into the era of the internet. In particular, I have researched how the founding form of Australian political culture - the First World War - and its commemoration - has been integrated into an online world since 2010.

The era of the digital First World War has begun. The internet has created a new space for participation in commemorative First World War activities, and new ways to tell First World War narratives. The data they have generated promises to reveal more about the intimate, social and civil dynamics of contemporary commemorative cultures, while new forms reframe the understanding of war for the future.(Sear, 2016a)

The centenary of the First World War has coincided with both the maturity and ubiquity of information communication technologies and social networking services.(Tom Sear, 2017) This conjunction provided opportunities for government, archival and cultural institutions, media corporations, business, and publics to combine contemporary digital platforms with older forms of understanding and sharing the First World War.(Sear, 2016b) The digital preservation and access of archives, circulation of visual culture in public history arenas with the digitisation of historical commemorative rituals online have led to new ways of experiencing the history of the First World War and its commemoration.(Sear, 2016c)

A key takeaway from this research is that Anzac has proved remarkably adaptable to online cultures, in fact consolidating further the values of the form in temporal and digital civic participation and expression within Australian culture. This implies that in countering the new threat more broadly might mean, paradoxically, considering some time-honoured responses. Recent conflict experience bears this out. Military organisations have learnt and adapted digital media responses from the ISIS terrorist social media threat environment. ISIS caught the world's military flatfooted as it successfully used new social media in the information domain to dominate in asymmetric conflict.(Schneider, 2015) However, as social scientist Paul Lieber has observed, the concept of an 'ideologically based social movement with military intent is as old as civilization itself.'(Lieber & Reiley, 2016, p. 50) Not conscious of this perspective, initial military responses to ISIS social media in nations in conflict emphasised counter information campaigns to those of the adversaries. However, the persuasive effect of these proved elusive. Instead, best practice has seen a return to models which are 'derived from social science theory, qualitative (focus group) and quantitative (survey) instruments featuring validated and proven constructs intended to gauge underlying attitudes and opinion drivers to eventual behaviours.'

Next steps critical to overall success against this online force will be coordinating a whole of government influence which provides a 'broader synchronised ...communication effort.' (Lieber & Reiley, 2016, pp. 50-52) Such a cohesive approach might require an integrated form of knowledge unfamiliar to a sector addicted to consistent 'updates.' Thomas Rid, Professor in Security Studies at

King's College London, recently addressed the US Select Committee on Intelligence regarding Russian active measures and influence campaigns. He expressed his opinion that understanding cyber operations in the 21st century is impossible without first understanding intelligence operations in the 20th century. Rid said: 'This is a field that's not understanding its own history. It goes without saying that if you want to understand the present or the future, you have to understand the past.' (T Sear, 2017) It may seem that the methods being used are utterly new, but they are strongly influenced by techniques that state based security adversaries honed in a previous era of conflict.

The reality of an 'End of History', which seemed so imminent in the 1980s, has proved exaggerated. Whether it is *Back to the Future's* Marty McFly or the *Hilltop Hoods*, a temporal and cultural return to the past, particularly the haunting 'shadow of the cold war', casts its grey pall over the present. However cultural pasts may also contain a key to resilience and resistance for our civil society as it evolves in a new digital environment. (Hilltop Hoods, 2016; Zemeckis, 1985)

How can culture be engaged in information security and offense? Trying to solve this problem from a purely technological perspective will only get us half way. We are dealing with dynamic and rapidly changing systems but which are connected into existing cultural practices. So, experts and practitioners from the humanities have to also activate in the responding to these threats and challenges.

- Bratton, B. H. (2015). *The Stack: On Software and Sovereignty*. Cambridge: The MIT Press.
- Doyin Atewologun, T. C. a. F. T. (2018). Unconscious bias training: An assessment of the evidence for effectiveness. from <https://www.equalityhumanrights.com/sites/default/files/research-report-113-unconscious-bias-training-an-assessment-of-the-evidence-for-effectiveness-pdf.pdf>
- Duguid, M. M., & Thomas-Hunt, M. C. (2015). Condoning Stereotyping? How Awareness of Stereotyping Prevalence Impacts Expression of Stereotypes. *Journal of Applied Psychology*, 100(2), 343-359. doi: 10.1037/a0037908
- Floridi, L. (2016). *The 4th revolution: How the infosphere is reshaping human reality*. Oxford: Oxford University Press.
- Hale, S. A., John, P., Margetts, H., & Yasseri, T. (2018). How digital design shapes political participation: A natural experiment with social information. *PLoS One*, 13(4). doi: 10.1371/journal.pone.0196068
- Hilltop Hoods. (2016). 1955 feat. Montaigne & Tom Thum. Retrieved 8 August 2018, from <https://www.youtube.com/watch?v=MD8fUkymrM>
- Howard, P. N. (2018). *Foreign Influence on Social Media Platforms: Perspectives from ThirdParty Social Media Experts*: Senate Select Committee on Intelligence, Open Hearing, August 1, 2018.
- Howard, P. N., Woolley, S., & Calo, R. (2018). Algorithms, bots, and political communication in the US 2016 election: The challenge of automated political communication for election law and administration. *Journal of Information Technology & Politics*, 15(2), 81-93. doi: 10.1080/19331681.2018.1448735
- Howard, S. B. P. N. (2017). *Troops, Trolls and Troublemakers: A Global Inventory of Organized Social Media Manipulation*. Oxford, UK:: Project on Computational Propaganda. .
- Lieber, P. S., & Reiley, P. J. (2016). Countering ISIS's Social Media Influence. *Special Operations Journal*, 2(1), 47-57. doi: 10.1080/23296151.2016.1165580
- Lin, H., & Kerr, J. (2018). On Cyber-Enabled Information/Influence Warfare and Manipulation *Oxford Handbook of Cybersecurity, Forthcoming*.
- Lindsay, J. R. (2017). Restrained by design: the political economy of cybersecurity. *Digital Policy, Regulation and Governance*, 19(6), 493-514. doi: 10.1108/DPRG-05-2017-0023

- Margetts, H. (2016). *Political Turbulence: How social media shape collective action*. Princeton, New Jersey: Princeton University Press.
- Schneider, N. K. (2015). *ISIS and Social Media: The Combatant Commander's Guide to Countering ISIS's Social Media Campaign*. Fort Bragg, NC: The Center for Counterterrorism Studies.
- Sear, T. (2016a). Dawn Servers: Anzac Day 2015 and hyper-connective commemoration. In B. West (Ed.), *War Memory and Commemoration* (pp. 67 - 88): Routledge.
- Sear, T. (2016b). This Remembrance Day, digital commemoration makes it impossible to forget. Retrieved 18 June, 2018, from <https://theconversation.com/this-remembrance-day-digital-commemoration-makes-it-impossible-to-forget-65560>
- Sear, T. (2016c). Uncanny Valleys and Anzac Avatars: Scaling a Postdigital Gallipoli. In R. Frances & B. Scates (Eds.), *Beyond Gallipoli: New Perspectives on Anzac* (pp. 55-82). Clayton, Victoria: Monash University Publishing.
- Sear, T. (2017). Cyber attacks ten years on: from disruption to disinformation. Retrieved 8 August, 2018, from <https://theconversation.com/cyber-attacks-ten-years-on-from-disruption-to-disinformation-75773>
- Sear, T. (2017). Why China will be watching how we commemorate Anzac Day. Retrieved June 11, 2018, from <https://theconversation.com/why-china-will-be-watching-how-we-commemorate-anzac-day-75856>
- Zemeckis, R. (1985). Back to the Future. Retrieved August, 2018, from https://www.imdb.com/title/tt0088763/?ref=ttpl_pl_tt