



Communication and Engagement with Diverse Digital Worlds

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Introduction

This paper analyses the issue of parliamentary communication and engagement in the digital age from an information technology perspective, with a particular focus on how the 'echo chamber' phenomenon discussed by Cass Sunstein¹ in 2001 has been amplified by newer technology into an even more intractable problem. The analysis begins with a brief examination of trust then moves on to outline how the individually delineated digital worlds constructed and inhabited by citizens represent a significant challenge for parliaments to address in establishing trust, and finally to how parliaments could respond to this challenge in their communication and engagement.

Trust

For communication to be effective, it must be trusted. From an institutional perspective, trust is a complicated concept to assess. In typical interpersonal relationships, whether personal or professional, people can assess others on the basis of trust-related characteristics like competence, honesty, reliability, benevolence and goodness². Interactions over time enable people to track the differences, if any, between commitments given and deeds performed, thereby testing and verifying an individual's trustworthiness. In contrast, the relationship between institutions (particularly public ones) and individual citizens does not allow for such simple verification.

To better enable citizens to assess the trustworthiness of parliaments, one may conclude that reducing the information asymmetry between parliaments and citizens may hold the key to establishing trust, but mere access to information is far from sufficient. There are at least three problems with a 'transparency' response:

1. Parliaments already release substantial amounts of information to the public through annual reports, web pages, transcripts of proceedings, committee reports and reports from scrutinising bodies such as auditors-general. Merely increasing the volume of information released by parliaments would not seem likely to increase the level of trust in them.
2. Despite some parliaments wielding significant power to extract information from the executive through mechanisms such as orders for papers and committee inquiries, the form the information takes is often opaque or inaccessible to citizens.
3. The fluid and fragmented nature of communication in the digital age is a significant barrier to establishing any relationship between parliament and citizens, let alone one of trust.

¹ Cass Sunstein, *Echo Chambers: Bush v. Gore, Impeachment and Beyond*. Princeton University Press, 2001.

² McKnight, D. Harrison and Chervany, Norman L., 'What is Trust? A Conceptual Analysis and an Interdisciplinary Model' (2000). *AMCIS 2000 Proceedings*. Paper 382. Much of the analysis of trust in this paper is informed by the typology of trust-related characteristics presented by these authors.

To attempt to formulate some strategies that parliaments could deploy in response to the above problems, we will first examine how channels of communication between parliaments and citizens would need to evolve to match the diverse, fragmented digital worlds inhabited by citizens in advanced democracies.

Digital worlds

Historically, the largest impediments to communication between people were due to time and space. Aside from physically visiting other places, prior to the invention of the telegram, the only means by which people could interact with those beyond their locality was through written correspondence. Of course, access to this method of communication was curtailed by the need for literacy by both parties as well as the means to purchase the necessary materials and services to produce and distribute correspondence, and to know in advance where to send it. Despite these limitations, writing represented a substantial increase in the power of humans to interact with others beyond their local regions and it also enabled the preservation of information in ways impossible for speech. From a spatiotemporal perspective, however, messages sent by mail took essentially the same amount of time as if the sender had travelled to the receiver and hand-delivered the letter.

Successive developments in communication technology have significantly reduced the time needed to send and receive information. A home phone, for example, effectively acted as a portal for people to reach beyond the range of things they could physically interact with and connect with others across vast distances. Similarly, the development of radio and television technology allowed those in control of these means of communication to disseminate accessible information to large numbers of people at incredible speed. There is a real sense in describing such technological developments as expanding the dimensions in which humans live (at least for those with access to these technologies, an issue to which we will return). The physicist Lee Smolin³ summarises the specific effect of the mobile phone revolution in the following way:

Now we live in a world in which technology has trumped the limitations inherent in living in low-dimensional space. Consider just the effect of cell phones. I can pick up mine and instantly be talking to almost anyone else, because 5 billion of the 7 billion people on the planet have a mobile. This technology has effectively dissolved space. From a cell-phone perspective, we live in a 2.5 billion-dimensional space, in which very nearly all our fellow humans are our nearest neighbours. (p. 174)

One of the significant advances brought about by mobile technology is that it almost entirely eliminates coordination problems between senders and receivers of information, who can be anywhere (as long as they are within range of a network) and still successfully communicate. Even if a receiver is outside of a network the information is still transmitted and lies dormant until the receiver returns to a network. Modern communications technology allows us to transcend the limitations placed upon our physical interactions by supplementing those with digital tools which create and maintain additional dimensions for potential interactions with others. A final quote from Smolin neatly describes our present world:

The space separating us has been dissolved by a network of connections that essentially brings everyone closer. In effect, we live together in a higher-dimensional space. We're fast becoming a world in which many people may choose to live almost exclusively in that higher-dimensional space. (p. 174)

When considering how institutions, particularly tradition-bound ones like parliaments, need to adapt to engage as broad a range of citizens as possible, a significant problem to address is the vast gap between the range of *potential* interactions citizens may engage in via communications technology and the *actual* range of interactions they undertake. Smolin is correct to state that we theoretically can connect to any one of the five billion or so mobile phone users, but for numerous valid reasons we only ever realise a vanishingly small number of connections.

³ Smolin, Lee. *Time Reborn: From the Crisis in Physics to the Future of the Universe*. Penguin, 2013.

The ability for citizens to engage in political discussion has only partly been affected by developments in communication technology. Prior to the widespread adoption of the internet, broadcast and print media were the only stable sources of information beyond the local level. From an individual citizen's perspective⁴ these sources of information were entirely asymmetrical and served to restrict both the variety of information disseminated and the range of perspectives aired. As such, the diversity of both sources and analyses of information was curtailed (not necessarily for nefarious reasons) and for most citizens (i.e. those with neither the time nor inclination to undertake independent research) the public political space was shaped by a relative handful of broadcasters and print outlets, leaving most citizens with little choice but to receive information from a limited number of sources with little to no means of verifying the merits of that information.

This gatekeeping role played by traditional media has been supplanted by the modern gatekeepers of digital access to information: search engines, content providers and social media platforms. Unlike traditional media, which restricts information flow through editorial control and selecting which stories to broadcast/publish, search engines and social media function differently. Although it would be incorrect to say that there is a symmetry between users of Google and Google the corporation⁵, there is an interaction at the core of that relationship which is absent in the relationship between a reader and a newspaper or a viewer and a television station. Users choose what to search for and are able to endlessly iterate their queries. Consequently, the results are (largely) dictated by the choices of the user and are not presented in a pre-packaged form decided by someone else.

Search engines run sophisticated algorithms to try to simultaneously match results to the desires of the user and collect data for commercial purposes. These results each act as potential conduits to other sites, search results and related content all linked by relevance to the initial query. Given that the user decides which option(s) to select out of the search results, they effectively construct their own information network, albeit subject to the search tools and the sophisticated monitoring and matching undertaken by the provider. This basic power imbalance means that we cannot say that users are the gatekeepers of their digital worlds but their choices do play a causal role in the construction of these worlds.

Echo chambers

The dynamics underlying the establishment of digital worlds invariably lead to the formation of relatively homogenous virtual communities⁶. This 'echo chamber' phenomenon was described by Cass Sunstein⁷ as far back as 2001—well before social media, smartphones, video streaming and mobile internet became embedded in the fabric of advanced democracies:

In most ways, the system of communications is better now than it has ever been. But for all its virtues, the emerging system has vices as well. Many of these vices involve the risk of fragmentation, as the increased power of individual choice allows people to sort themselves into innumerable homogenous groups, which often results in amplifying their preexisting views. Although millions of people are using the Internet to expand their horizons, many people are doing the opposite, creating a Daily Me that is specifically tailored to their own interests and prejudices. (p. 2)

⁴ Users of traditional media are able to interact with the sources of information in an aggregative sense, most visibly through the use of ratings, sales and circulations. The individual is of course subsumed by the collective set of users.

⁵ There remains a clear asymmetry in the autonomy of a user and the provider of a search engine. The algorithms used to sort search results act as barriers to access, albeit for different reasons than those in effect in traditional media.

⁶ For instance, a groups of individuals who share an interest in a genre of pop culture may vehemently disagree on aspects or artists of the cultural genre but they are united in their interest in it.

⁷ Cass Sunstein, *Echo Chambers: Bush v. Gore, Impeachment and Beyond*. Princeton University Press, 2001.

There are two layers to the dynamics at play within echo chambers: 1) the curation of digital worlds based upon similarity and relevance; and 2) the positive feedback loops which reinforce existing interests, beliefs, opinions et cetera and further differentiate digital worlds from others (also known as polarisation). The technological changes since Sunstein articulated the problem have only served to make echo chambers simpler to form and much more difficult to interact with.

The echo chambers enabled by modern communications technology create engagement problems for institutions like the parliament. Citizens' digital worlds are the result of a series of complex feedback loops composed of individual initiative and responses from their online connections. The exact nature of each citizen's digital world varies tremendously depending on their interests, which will obviously reflect their upbringing, education, successes and failures, personal beliefs and social milieu. Importantly, politics plays a highly variable role within these diverse digital worlds.

Despite the individualised nature of the digital worlds created by citizens, some categorisation of types of users is possible. While it is correct to point out that digital diversity far exceeds the standard categories used in discussions about diversity (gender, ethnicity, sexuality, religion et cetera), the digital worlds curated by users are still reliant upon digital gatekeepers to provide them with the services and platforms needed to build their worlds. A digital gatekeeper—for example, Facebook—functions primarily as an enabler of communication between individuals and organisations. A natural consequence of this is that users gravitate towards people, organisations or subjects which capture their interest. Given the ease of establishing connections in this higher-dimensional information space, users inevitably expand their range of connections through links, shared content, promotions and recommendations from fellow citizens entangled in their digital world.

In addition to users sharing content with each other, which is a powerful method of promotion (and forms the basis of all viral phenomena), the digital gatekeepers add further dimensions to users' digital worlds through the use of algorithms that seek to connect users to content assessed to be relevant to them. No digital gatekeeper mines users' data, analyses their various interests and then seeks to connect them to content that they will have no interest in⁸. Consequently, digital worlds are constructed on a logic of relevance and similarity, which is reinforced by other users within someone's digital world and by governing algorithms which determine what users are presented with online.

The end result of this process of initiative, feedback, sharing, relevance and reinforcement is the establishment of relatively robust assemblages of digital worlds that share multiple points of overlap. The forces at play in bringing different digital worlds together range from regular social factors like friendship and shared tastes through to religious, philosophical and political commonalities. Variations will always be found between different participants in these assemblages, but each grouping will still be anchored to some core set of interests or beliefs which distinguish them from others. Due to the ease with which online connections can be formed and discarded, the lifespans of particular digital world assemblages vary significantly, but unless users disconnect entirely from the internet they will simply gravitate toward other people and organisations and form new connections to other assemblages.

For any organisation, not just parliaments, wishing to engage diverse individuals and groups, the core problem is how any information at all can find an audience within the echo chambers inhabited by citizens. With the combined power of individual preferences and the logic of relevance governing the curation of digital worlds, there is no clear means by which information could be transmitted to citizens in a way that:

⁸ The business model of most digital gatekeepers rests primarily on marketing and advertising, so there is little incentive to expand the range of online connections for users unless it serves that business model. For instance, there would be little commercial value in advertising fishing equipment to vegans.

- a) preserves the content of the original information,
- b) successfully arrives at the intended recipients,
- c) is not immediately swamped by competition for citizens' attention.

By its very nature, the relationship between citizens and a tradition-bound institution like parliament mirrors the asymmetrical nature of traditional media and its consumers. Parliaments publish significant volumes of information on parliamentary events, but each publication is authorised and/or governed by internal rules that are designed to protect the status of the institution. For instance, the papers published by the House departments as well as publications like Hansard transcripts are produced by parliamentary employees working in accordance with internal rules and standards that are often opaque to members of the public. For the carefully prepared, traditionally authoritative records of parliamentary proceedings like *Hansard* and the *Votes and Proceedings*, it is likely that b) and c) are the initial barriers to dissemination—most citizens would not encounter either publication in their digital worlds and, even if an encounter was made, would not engage with the content.

Most parliaments continue to impose conditions of access on parliamentary publications and audiovisual content—for instance, the uses to which parliamentary information may be put typically exclude things like commercial resale, electoral advertising and satire/ridicule (leaving aside the question of enforceability). From the perspective of parliamentary employees who value the institution of parliament, as well as members who have an understandable interest in being authentically presented in any official parliamentary information, the desire to reduce the likelihood of images and information from parliament being manipulated for partisan or satirical purposes is sincere. In some cases, the imposition of conditions of access to parliamentary information is designed to minimise the extent to which members themselves may adapt textual or audiovisual content for partisan purposes.

By placing, if not actually enforcing, conditions of access on parliamentary information, the effect is to construct a privileged boundary around the information and define it as worthy of a particular level of respect. The problem, however, is that when such information makes contact with the digital worlds of citizens it becomes subject to the norms governing those worlds and dissonance can be the result.

A story on the *ABC News* website on 22 June 2018 exemplifies this disconnect⁹. The rule in the Queensland parliament against the use of audiovisual records for satire and ridicule had led to the referral of a member of the public to the parliament's ethics committee after distributing a video clip of a member and making negative commentary. Irrespective of how this particular incident is resolved, it serves to highlight the differing expectations at play within our digital society. As the ABC article suggested, rather than preserve the integrity of the parliament by curbing ridicule, the imposition of such a condition of access can in itself become a source of ridicule. Irrespective of the logic parliamentary staff and members may see in such prohibitions, sequestering textual or audiovisual reproductions of public parliamentary events from the full range of potential responses from an audience is far from conducive to establishing either trust or respect. Given that the audiovisual content produced by parliaments forms but one small channel of information in people's digital worlds and that those worlds are defined by greater symmetry between senders and receivers of information, the attempt to reserve special status for parliamentary senders of information is not only certain to fail but also likely to engender the opposite reaction to that intended.

⁹ <http://www.abc.net.au/news/2018-06-22/queensland-parliament-has-rules-against-being-ridiculed/9889190>

Interacting with citizens' digital worlds

Access

Access to information by citizens is not necessarily the central problem for parliaments to overcome. Parliaments disseminate large quantities of information through websites and (somewhat) through social media in the form of transcripts, House papers, tabled papers, committee reports and other information published online. The volume of information disseminated by parliaments is quite substantial, but if we wish for parliaments to connect to more of their citizens' digital worlds we need to adopt different tactics and strategies beyond mere dissemination.

It remains the case that some parliamentary information is not yet available in digital formats. For instance, one of the most significant powers of some upper houses is the ability to order the production of documents from the executive government. In NSW this is a commonly used power and results in substantial amounts of sensitive information being reluctantly delivered to the parliament. Although access to parts of these documents is often restricted, a lot of released content is technically viewable by the public. However, a citizen must physically attend the Legislative Council office and read the content at a designated desk during business hours. Although there are no doubt good logistical reasons for such a practice (due to the physical volume of information released), in the light of what has been discussed in this paper, this practice only minimally qualifies as being 'access'. For real accessibility, the House would need to order the documents to be delivered digitally by the executive and published (where appropriate) online. More routinely, the same requirement for digital delivery could be introduced for all other documents tabled, and the parliament could publish an index of hyperlinks to tabled documents that are already available elsewhere such as annual reports of government agencies.

Interaction

We have outlined how the nature of the information relationships formed between individuals and organisations through digital gatekeepers such as search engines and social media is fundamentally different from the asymmetrical traditional media. At its core, the relationships between digital worlds are interactive—the sending and receiving of information is more symmetrical. Citizens play a significant causal role in the construction of their digital worlds through the selection of information channels. Given that the fundamental dynamic governing the construction of digital worlds is based on relevance and similarity, any information disseminated by parliaments must meet the following two criteria to have any chance of establishing a connection between parliaments and citizens:

1. It must enable citizens to assimilate it into their digital worlds and repurpose it according to the relevance it has in those worlds; and
2. It must allow citizens to respond and meaningfully affect future communications.

Each criterion poses a significant number of challenges for any tradition-bound institution, not just parliaments. With the relative degree of autonomy granted to citizens through digital technology, expectations for information access have grown in direct proportion with exposure to technology. It is reasonable to assume that the vast majority of digital worlds will rarely, if ever, encounter parliamentary information. Those who have connected to assemblages oriented towards political issues will obviously have a higher probability of accessing parliamentary information, but for most citizens their digital worlds will be largely directed towards social, familial and entertainment purposes. Traditional reporting mechanisms, such as annual reports or statistical publications, and traditional sources of parliamentary information, such as transcripts or committee reports, will find no obvious point of contact with these worlds. Thus, interaction will remain out of reach.

A recent example serves to highlight the importance of interaction in communication, especially in the parliamentary process. *Crikey*¹⁰ reported on 18 June that the federal Department of Parliamentary Services had declined a request to provide a list of all organisations currently in possession of 'sponsored' security passes. A sponsored security pass is one granted to an individual who is not an employee of any parliamentary/public service department, member/minister or media organisation. These are individuals who are granted physical access, typically by members, to the non-public areas of the building and are typically labelled as 'lobbyists'. The connections between lobbyists and members (and members' staff) are commonly described as giving 'access' to members. However, given how the information space in modern digital democracies has been outlined in this paper, the term 'access' does not capture the significance of the connection. In digital societies like Australia, there are few genuine barriers to merely accessing members (via social media, email et cetera). Whereas, interpersonal, direct communication between lobbyists and members is interactive and mirrors the type of communication most citizens enjoy at both the local level and within their digital worlds. Withholding information about which organisations in the Commonwealth parliament are able to interact directly with members and their staff serves to conceal one of the core dynamics at play within the legislature. This kind of concealment is fertile ground for distrust to grow.

Accessibility

So what can be done by parliamentary employees to meet the two criteria for successful digital communication outlined above? A useful first step would be to demarcate between *access* to information and access to *accessible* information. This distinction serves to demonstrate how the mere dissemination of information is insufficient to establish successful connections to digital worlds. The world is awash with information, which is growing exponentially but without any corresponding increase in the ability to synthesise, analyse, interpret or verify the growing store of information. The first step in the curation of accessible information by parliaments could involve the repackaging or customising of existing information to meet the particular needs of different constituencies. This kind of approach to accessibility would involve services like live captioning of broadcasts (which has begun at the Commonwealth level and which NSW intends to introduce in the coming years). While originally designed to help citizens with hearing impairments, live captioning offers a less obvious benefit to the far greater number of us who ever want to catch what is being broadcast in a noisy environment (pubs and airports, for example) or in a quiet environment (without disturbing a sleeping or reading companion at home, or colleagues in the workplace).

Despite the cost, complexity and inherent limitations of live captioning, this kind of accessibility is relatively simple. Of much greater difficulty, particularly in highly multicultural societies like Australia, is making parliamentary information accessible across cultural, linguistic and educational divides. For citizens whose command of English is less than proficient or whose knowledge of the machinery of government is slight, it is difficult to conceive how the types of parliamentary information presently disseminated could effectively connect to their worlds. Not only is the language used to structure parliamentary activities relatively opaque, but the language used in modern policy and legislative documents tends to be technical, specialised and bureaucratic. The delicate editorial layer supplied by Hansard is not sufficient to render such information accessible to citizens outside of the political, legal and policy realms. Consequently, there is a potential space for parliaments to repackage the language used in parliament, particularly for debates on legislation or other matters of broad, practical significance to citizens' lives, for a more general audience. It is clearly not feasible for parliaments to offer translated material for the many different linguistic groups in Australia, but the provision of simplified parliamentary information could form part of the community outreach undertaken by parliaments.

¹⁰ Summers, William. "The bizarre reason Parliament House won't tell us who has a security pass", *Crikey*, (18 June, 2018).

Most of the parliamentary information referred to thus far has been textual, but it is important to acknowledge the significance of audiovisual content in the digital worlds citizens inhabit. Cisco has forecast that within three years video content will comprise 80 per cent of all internet traffic¹¹. If parliaments are intent on constructively interacting with the digital worlds of citizens, it is clear that audiovisual content will have to play a leading role. Web streaming of both chamber and committee proceedings is a common service offered by parliaments, but streaming falls foul of the same coordination problems as traditional broadcast media—citizens must have access to a web stream at a particular time, and it is not reasonable to expect that interested parties would have the time to view such web streams. Consequently, streaming is a relatively poor form of audiovisual access to parliament. It only overcomes the spatial limitations preventing people physically attending parliamentary events, but offers nothing to counteract the temporal limitations within which we are all confined.

Video-on-demand (VOD) services are clearly a superior form of audiovisual access to parliament because they do not require citizens to be available at a particular time to access the content. However, it would be rash to presume that the mere provision of VOD would do much to overcome the connection problems outlined in this paper. Presenting parliamentary events in audiovisual form as a supplement or alternative to the traditional text publications of parliaments does not necessarily increase the accessibility of information. The same issues identified in connecting to diverse cultural, linguistic and educational populations remain with VOD, but, given the growing preference for audiovisual content by citizens, the provision of VOD would form a minimal level of accessibility by satisfying the preferences of citizens to receive information in video form. However, the true relevance of audiovisual content for engaging with digital worlds would be much more felt as part of the potential outreach role for parliaments. If the trend is towards greater and greater audiovisual content on the web, then providing concise, simplified video content on parliamentary matters would serve a greater communicative purpose across diverse digital worlds than the mere provision of VOD.

The second step, which develops out of the first, that parliamentary employees can take is to build interactivity into as much disseminated information as possible. This can take a number of forms. For instance, the educative role of the public engagement sections of parliamentary departments can be further strengthened through the establishment of online connections that not only allow but encourage responses from citizens. Of course, many parliaments already have education and/or communications units who undertake community outreach, youth education and public events, and otherwise promote the activities of parliament. It is also common for House departments to publish blogs or similar condensed summaries of events in parliament. There is much greater scope for parliaments to distribute this kind of information in a more digital-friendly way through the use of targeted communications to particular networks of citizens who are interested in particular issues. For example, the practical import of most bills (at least for those other than technical amendment bills) can be summarised concisely. The language, format and delivery of second reading speeches are typically far too specialised and (unavoidably) legalistic, but a suitably resourced parliamentary research service could ably condense the essential elements of bills, embellished with video clips of pertinent fragments of debates, for distribution by the education and community outreach units within parliaments.

Some parliaments around the world have taken steps to expand the range of the parliamentary process beyond chambers and committees through measures such as e-petitions, submissions of regulatory or budgetary proposals, crowd sourced research et cetera. The French initiative, *Parlement et Citoyens*¹², is a good example of how the kinds of tools available in the digital age can be directed towards greater engagement of citizens in the parliamentary process. In essence, the process involves

¹¹ <https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html>

¹² <https://www.nesta.org.uk/feature/six-pioneers-digital-democracy/parlement-et-citoyens/>

members of parliament directly consulting with interested citizens on legislative matters through the use of videos and forums which allow people to scrutinise draft bills or other legislative instruments prior to their introduction to parliament.

For parliamentary officers, the extension of digital engagement into forms of digital democracy carries more risk than the kinds of initiatives already outlined. Rather than engage citizens in the parliamentary process through the provision of targeted, concise and relevant information, digital democracy projects like *Parlement et Citoyens* are far more entangled in the decision-making processes of parliaments. The kind of engagement parliamentary staff would be required to undertake in such arrangements could blur the line between the work expected of members and their staff and the work of impartial parliamentary staff.

Conclusion and future steps

At first glance, the digital landscape outlined in this paper would appear to pose intractable problems for engagement by any tradition-bound institution like parliament. This would certainly hold true if parliaments made no calculated efforts to adapt their communication and engagement methods to the expectations of citizens inhabiting digital worlds. However, a willingness to change how parliamentary information is packaged and disseminated to match the less asymmetrical dynamics at play within digital worlds, combined with a greater degree of interaction with the digital citizenry, could form the foundation of a new kind of relationship between parliaments and the public.

The provision of supplementary, condensed information of parliamentary events (not just bills, but any subjects of relevance to some or all citizens) is already taking place in some areas—for example, as part of committee inquiries—but this could be further expanded into a wider range of events. Succinct outlines of parliamentary events, in both video and textual form, combined with targeted and interactive digital communications could only help to reduce the asymmetry between parliaments and citizens. Such measures by themselves will be insufficient to overcome distrust of parliaments, but replicating the dynamics of local interactions as much as possible by disseminating concise and relevant information is a necessary step in the establishment of any relationship of trust.