

Challenges for the Facilitation of Political Discourse in Technologically-Mediated Environments

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ABSTRACT

In the following workshop paper we provide a brief overview of existing research on technologies that have been used to engage the citizenry in the electoral process in the United States. We trace the early use of USENET for political discourse through the recent reliance of political candidates on social networking technologies for mobilizing support and engaging with the public. We use this prior research to identify a series of challenges that campaigns and issue groups may face when utilizing technology to engage in public discourse. Although we focus on the political discourse in the United States, our research has broader applications for understanding political coordination and discourse throughout the world.

Author Keywords

Collective intelligence, deliberative discourse, politics, democracy, citizenry

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI):

General Terms

Human Factors; Design

INTRODUCTION

The Internet has already demonstrated the ability to democratize communication and facilitate interaction between geographically and ideologically disparate individuals. Social networking technologies allow for individuals to seek out others to engage in discourse. Political discourse is one of the most common forms of discourse on these social networking sites. In the 2010 election, 73% of individuals used a social networking site to obtain political information [19]. This political participation varied from using these sites for information consumption purposes to participating in discourse with other citizens who may or may not share similar ideology.

Technology has been recently utilized to organize protests and revolutions throughout the world and this has been met with varying success [23]. Information and communication technologies (ICTs), such as Facebook and Twitter, have been attributed to facilitating protests that have led to the overthrow regimes in the Middle East and North Africa by some [1], while some have claimed that the role of these technologies in coordinating revolutions may be exaggerated [8] and a proxy for physical coordination.

Even with this skepticism, social networking sites have been used to disseminate information and coordinate protests on smaller-scales in the past [6; 13]. Recently, the “Occupy Wall Street” social movement in the United States has used social networking sites to facilitate and coordinate activity in the physical world [4]. These two recent examples illustrate the capability of social media to coordinate widespread geographically disparate social movements towards physical activity.

As more individuals begin to adopt technology for political purposes, the technological affordances that enable effective discourse become increasingly important. Political discourse in the physical world was often constrained by geographical proximity [3; 10], but technology facilitates discourse independent of geography which enables individuals to engage with others on a number of topics and keep a record of these interactions [10]. The introduction of technological-mediation into the facilitation of political discourse introduces many challenges such as the lack of common affordances between and within technologies and the variety in adoption by participants.

The increasing reliance on technology to facilitate political and societal discourse and as a mechanism for collective intelligence purposes illustrates the need to better understand how to facilitate effective technologically mediated discourse. We intend to use this workshop as a forum for refining our research agenda and share our current work. Through our analysis of political discourse we have identified a number of challenges to effective discourse including: citizen awareness of tools for engagement, existence of critical mass within the tools and designing to eliminate noise within the tools. We believe

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that the workshop would allow us to share our ideas with other researchers and develop a better understanding of how to address and examine some of our research questions.

In the following section, we provide a brief overview of the literature pertaining to technologically mediated political discourse to include a brief description of our previous and ongoing work in Facebook and Twitter. We use this section to ground our analysis in previous research. We then provide a description of areas that we are currently exploring in relation to technologically mediated political discourse in the context of the upcoming 2012 election cycle. We close with a section that attempts to address some of the design implications of our questions.

PRIOR WORK

Each new technology to facilitate technologically mediated discourse has brought about new technological affordances for users to engage with each other. Some of the earliest research in large scale technologically mediated discourse on the Internet focused on comment streams in USENET in both political and non-political groups [7; 9; 11]. One of the benefits of large-scale discourse networks facilitated by technologies such as USENET was the ability to expose individuals to others with differing viewpoints, helping to facilitate ideologically disparate discourse [12].

There was no prior research identified by the authors regarding political candidate utilization of USENET for mobilization or engagement with the public. Early use of technologies by political candidates such as static websites in both state and national elections found that the Internet was used as an electronic campaign brochure and as a way to conduct minimal fundraising [5; 14].

The 2000 election was the first election in which the Internet was widely used to disseminate information and accept campaign donations. Even though individuals were using the Internet more to participate in political activity, the content disseminated by candidates was still limited. In the 2004 Presidential Election, Howard Dean was the first presidential candidate to use blogs to provide dynamic content and facilitate discourse among supporters [26; 28]. The use of technology to engage with the public in the 2004 election, coupled with the increasing use of Facebook by the general public in 2006, found the wider adoption of social networking sites for political purposes in the 2006 mid-term election [31].

The 2008 Presidential Election built on earlier efforts of using the Internet through the utilization by all three of the Democratic primary candidates of social media to include Facebook, Twitter and other communication modes such as e-mail. President Barack Obama was the first Presidential Candidate to fully embrace the Internet and had a dedicated staff of 200 individuals working on social media strategy and engagement which lead to the collection of over 3 million supporters on his Facebook page along with 15 million other supporters on other platforms [27].

In the 2008 election, 46% of adult Internet users sought political information online [24]. This number increased to 73% in the 2010 election with 22% of the total adult Internet users using a social networking site to participate in the political process in 2010 [19]. The 2010 election cycle also found a significant increase in focus on Twitter with the then Republican House minority using Twitter to engage with citizens [22].

Even with the increasing use of social networking sites by political candidates research on activity within the social network remains limited. Early research on the political use of social networking sites has found that individuals join the candidate pages or groups to engage with others that share their viewpoints and to engage with the candidate [2; 25]. This research was done on earlier iterations of social networking sites and it is likely that such activity has changed. For example, in recent research by the authors, we found that dissenting viewpoints were common in the Tea Party Patriots Facebook group and that the administrators would sometimes remove comments from individuals who did not agree with viewpoints expressed by individuals in the group [18]. We also found that individuals only utilize the technologically afforded direct addressal mechanism of “@” 38% of the time. This has significant implications for discourse that we discuss in the next section.

Other research on social networking sites has looked at electoral effects of activity and found moderate gains when certain patterns of use are observed [29; 30]. Research on the 2008 Primary Candidates Facebook pages identified how social networking sites tended to be representative of the Habermasian public sphere [20; 21]. This research illustrated that many individuals only contribute once.

We extend this prior research in our analysis of the “Join the Coffee Party Movement” Facebook group (Coffee Party) during the 2010-2011 timeframe. The Coffee Party was a group started on Facebook that was to embody the ideals of open discourse and civil deliberation. We have analyzed the Coffee Party to identify networks of participation, the existence of deliberative discourse, how individuals utilize the technological affordances for discourse and the framing of parent posts by the administrators of the page and how this effects participation [15; 16; 18]. Through this work we have identified a set of challenges associated with technologically mediated discourse and participation that we outline in the following section.

LOOKING FORWARD TO THE 2012 ELECTION

In previous work, we have identified a series of challenges in the utilization of technology in the process of civic engagement [17]. These challenges guide a significant amount of our analysis of technologically-mediated interaction and include: citizen awareness of tools for engagement, existence of critical mass within the tools and designing to eliminate noise within the tools. Each of these

challenges introduces a barrier to widespread adoption of tools and technologies for civic engagement. It is important to address each of these challenges in engagement strategies and technology design. We now present each of these three challenges and discuss how they may apply to the context of the 2012 election.

Challenge #1: Citizen Awareness of the Tools

Citizens must be aware of technology in order to use it. Barack Obama's successful use of his own personal social networking platform and website, my.barackobama.com was a result of his campaign's strategy to make the website an integral part of the campaign. All of the peripheral presences that Obama had on social networks, including the 15 million followers he had spread throughout Facebook and other social networks all pointed citizens back to his website allowing for a successful presence in a niche platform. In this way, Obama connected public media where he did not control the message back toward a private site where he did control the message.

Candidate message control on social media will become more difficult as citizen awareness spreads. The candidates in the 2010 election and the upcoming 2012 election are relying less on bespoke technologies and are using widely adopted technologies such as Facebook and Twitter. Even with citizen awareness of the tools (they already have accounts), there is another level of awareness that must be established and that is developing the awareness of where the discourse is.

In Facebook, there are groups for each of the candidates in the 2012 Republican Primary race, but there are many parent posts on each page with different topical areas of discourse. In addition to candidate specific pages, there are pages for specific primary contests and issues that are being debated. Similarly in Twitter, there are official candidate accounts, but new hashtags are created surrounding new issues, debates, polls or elections. Without awareness of these hashtags or presence of other groups or parent posts of discourse individuals will not be able to engage with others. In some cases, hashtags may not emerge until right before an event making it difficult for some to find the appropriate hashtag.

Challenge #2: Existence of critical mass within the tools

One of the challenges cited in early research in political use of social networking sites was the lack of overall engagement in each tool [21; 25]. One of the reasons for this was the lack of a critical mass of individuals who would use the technology at all or return to engage on more than one occasion. These problems can be overcome with design solutions such as users being able to identify other users that they know who are using the technology or users being able to recommend other users who may be interested in the technology based on their engagement in similar technologies or similar domains. This can be done by establishing groups or "circles" of individuals similar to

Google+ or in the case of Twitter recommending appropriate hashtags for discussions of interest.

The high adoption rates of tools such as Facebook, Twitter, Google+ and Tumblr means that candidates can focus their efforts in a small subset of technologies to reach a significant majority of the citizenry that has adopted technology to obtain political information as illustrated by the recent surveys. The important aspect of these campaigns is to fully engage with the critical mass that exists and build up groups of supporters in which to narrow the engagement angle.

As identified in the previous section discussing awareness, critical mass is an important aspect of productive discourse. Without knowledge of the correct hashtag, group or parent post where discourse is occurring, discourse specific critical mass may be difficult even with the large presence of individuals in these technologies. Even though hundreds of thousands of individuals are members of these groups and may follow candidates or hashtags on Twitter, the lack of knowledge of the discussion might mean that individuals don't utilize the technology for discourse. Therefore, awareness of the technology and presence of discourse is closely related to establishing critical mass.

Challenge #3: Designing to eliminate noise within the tools

A common challenge with broadcast technology is that there is a lot of perceived noise by individuals in these technologies. In our analysis of the Tea Party Patriots group, we found that there was a limited amount of discourse when informal mechanisms of direct addressal were used [18]. The reason for this was that it was difficult for individuals to be aware of, or find comments directed towards them.

As a result of these challenges, it is important for technologies to highlight conversational threads through both formal and informal direct addressal mechanisms. Twitter has encouraged the use of the @ mention to directly address others, but other social networking sites such as Facebook have yet to fully promote this as a means of interaction with others. Many individuals are not aware of the technological affordance of tagging others in a post and in the case of our analysis of the Tea Party Patriots group, individuals did not correctly use the technological affordance which limited its efficacy. In the case of Facebook, one limitation of such a technological affordance may be that there are settings that limit the ability of users to tag others. This is an area we are currently research in relation to discourse in political groups.

In the 2012 election cycle, citizens and candidates will have an abundance of tools to engage each other in discourse and it will be important that the appropriate affordances are implemented and promoted. Tools like Twitter enable the broadcast of information with a hashtag included. For participants who are trying to follow a widely used hashtag, certain discourse (spam) may be distracting, while others

may be unaware of the existence of the discourse limiting their ability to participate. Therefore, it is important to identify how to overcome this noise and display information of importance to these individuals.

IMPLICATIONS FOR OTHER DOMAINS

We ground our examination of technologies to engage the citizenry in discourse in the political domain, specifically United States electoral politics. Although this work is focused on political activity and engagement, our findings and guiding research questions apply to a number of other domains. The manner in which individuals find others who they want to engage in discourse with and how they ground their discourse is important to explore. As most individuals use a small subset of tools, tool awareness and critical mass are not as significant of an issue. The two issues in other domains would be awareness of where the discourse is happening and having to manage trust relationships and peripheral relationships that constitute “noise”. It is further important that users are able to do this without being required to manage multiple lists and fine grained security settings.

The 2011 uprisings in the Middle East illustrate the importance of understanding where discourse and coordination activity are occurring and also establishing trust relationships with those individuals providing the information. The coordination of protests in certain technologies required both the knowledge by the individuals of the location of the coordination information and the trust by the participants that the information was valid. Additionally, those organizing the protests had to ensure that a critical mass of individuals were reached with the information to ensure a large physical turnout.

Recent scandals reported in the domain of college sports have generated a significant amount of discourse in social media such as Twitter. One of the greatest problems with identifying the streams of discourse is discovering where this discourse is occurring. In the case of the recent Penn State University scandal, new hashtags such as #psucharges emerged to facilitate discourse about one aspect of the situation. Conversation still happened independent of the hashtag as many were not aware of it, or were using other hashtags such as “#pennstate” or “#weare.” This makes identifying where the discourse is happening even more difficult. Analysis of the Occupy Wall Street movement identified over 100,000 hashtags associated with the discourse on Twitter and our ongoing analysis of 2012 election discourse on Twitter has identified previously unknown hashtags on a daily basis.

This problem of awareness is most pronounced in emergent events. Most breaking news events have similar awareness and information noise problems. For example, disasters often have hashtags or groups that emerge very soon after the occurrence, but some of the early messages that are most important to understanding what happened or

facilitating help may not be in an identifiable stream of discourse. Others use very generic tags, such as #earthquake that may cause confusion as to the specific event being referred to.

As previously mentioned, another unexplored challenge in the context of participating in discourse is trust and verifiability of information. In the context of breaking news and controversial information, misinformation or non-verified information may be relayed through a social network at a rapid pace. This propagation of false information may lead to negative information about individuals in the context of a scandal or may harm relief efforts in the context of a disaster. All of these challenges must be balanced with facilitating exchange of information in technologically mediated environments. This balance can be achieved through analysis of an individual's network position and analysis of their previous discourse. Although there are some drawbacks to this in the situation of a new event account.

COLLECTIVE INTELLIGENCE CONTRIBUTIONS

Public discourse is rapidly evolving through the use of various technologies. Social media platforms are not technologically homogeneous. Each social media platform enables the development of many distinct contexts and each platform includes an immeasurable number of topics that are not fully catalogued. Promotion of and participation in different topics is dominated by a few notable memes; namely discourse between individuals, discourse in declared groups and public discourse. Therefore, each of these technologies and the interactions that occur within them do not constitute one specific technological context. Instead, each of these platforms is, in effect, a transport protocol for public and semi-public discourse. Each of the technologies and the contexts must be examined in both a narrow and general context to understand how they facilitate or hinder discourse and how this translates to action both online and in the physical world.

REFERENCES

- [1] Allagui, I. and Kuebler, J. 2011. The Arab Spring and the Role of ICTs: Editorial Introduction. *International Journal of Communication*. 5, 2011, 1435-1442.
- [2] Ancu, M. and Cozma, R. 2009. MySpace Politics: Uses and Gratifications of Befriending Candidates. *Journal of Broadcasting & Electronic Media*. 53, 4, 567-583.
- [3] Bearman, P. S. and Parigi, P. 2004. Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure. *Social Forces*. 83, 2, 535-557.
- [4] Caren, N. and Gaby, S. 2011. Occupy Online: Facebook and the Spread of Occupy Wall Street.

- [5] Dulio, D. A., Goff, D. L., and Thurber, J. A. 1999. Untangled Web: Internet Use during the 1998 Election. *PS: Political Science and Politics*. 32, 1, 53-59.
- [6] Faris, D. 2008. Revolutions Without Revolutionaries? Network Theory, Facebook and the Egyptian Blogosphere. *Arab Media & Society*.
- [7] Fiore, A. T., LeeTiernan, S., and Smith, M. A. 2002. Observed Behavior and Perceived Value of Authors in Usenet Newsgroups: Bridging the Gap. *Computer Human Interaction*.
- [8] Gladwell, M. 2010. Small Change: Why the Revolution will not be tweeted. *The New Yorker*.
- [9] Gonzalez-Bailon, S., Kaltenbrunner, A., and Banchs, R. E. 2010. The structure of political discussion networks: a model for the analysis of online deliberation. *Journal of Information Technology*. 2010, 1-14.
- [10] Huckfeldt, R. and Sprague, J. 1987. Networks in Context: The Social Flow of Information. *American Political Science Review*. 81, 4.
- [11] Kaltenbrunner, A., Gomez, V., Mognie, A., Meza, R., Blat, J., and Lopez, V. 2007. Homogenous Temporal Activity Patterns in a Large Online Communication Space. *IADIS International Journal on WWW/Internet*. 6, 1, 61-76.
- [12] Kelly, J., Fisher, D., and Smith, M. 2005. Debate, division and diversity: Political discourse networks in USENET Groups. *Online Deliberation Conference*.
- [13] Kyj, M. J. 2006. Internet use in Ukraine's Orange Revolution. *Business Horizons*. 49, 71-80.
- [14] Lupia, A. and Baird, Z. 2003. Can Web Sites Change Citizens? Implications of Web White and Blue 2000. *PS: Political Science and Politics*. 36, 1, 77-82.
- [15] Mascaro, C. and Goggins, S. 2011. Brewing Up Citizen Engagement: The Coffee Party on Facebook. *Communities and Technologies*.
- [16] Mascaro, C. and Goggins, S. 2011. The Daily Brew: The Structural Evolution of the Coffee Party on Facebook During the 2010 United States Midterm Election Season. 2011 Political Networks Conference at The University of Michigan. 4th.
- [17] Mascaro, C. and Goggins, S. 2011. Challenges for National Civic Engagement in the United States. *Government and Citizen Engagement Workshop at Communities and Technologies 2011*. 8(2), 2, 8-14.
- [18] Mascaro, C., Novak, A., and Goggins, S. 2012. Shepherding and Censorship: Discourse Management in the Tea Party Patriots Facebook Group. 45th Hawaii International Conference on System Sciences (E-Government Track).
- [19] Rainie, L. 2011. *The Internet and Campaign 2010*.
- [20] Robertson, S. P., Vatrappu, R. K., and Medina, R. 2009. The Social Life of Social Networks: Facebook Linkage Patterns in the 2008 U.S. Presidential Election. *International Digital Government Research*. 6-15.
- [21] Robertson, S. P., Vatrappu, R. K., and Medina, R. 2010. Off the wall political discourse: Facebook use in the 2008 U.S. Presidential election. *Information Polity*. 15, 11-31.
- [22] Schaper, N. 2010. Entrepreneurial Insurgency: Republicans Connect With the American People. In *Open Government: Collaboration, Transparency, and Participation in Practice*, D. Lathrop and L. Ruma, Eds O'Reilly.
- [23] Shirky, C. 2011. The Political Power of Social Media: Technology, the Public Sphere and Political Change. *Foreign Affairs*.
- [24] Smith, A. and Rainie, L. 2008. The Internet and the 2008 Election. *Pew Internet & American Life Project*.
- [25] Sweetser, K. D. and Weaver Lariscy, R. 2008. Candidates Make Good Friends: An Analysis of Candidates' Uses of Facebook. *International Journal of Strategic Communication*. 2, 3, 175-198.
- [26] Trippi, J. 2004. The Revolution Will Not Be Televised: Democracy, The Internet, and The Overthrow of Everything. *Regan*.
- [27] Vargas, J. A. 2008. Obama Raised Half a Billion Online. 44 Politics and Policy in Obama's Washington. *Washington Post*: November 20, 2008.
- [28] Williams, A. P., Trammell, K. D., Postelnicu, M., Landreville, K. D., and Martin, J. D. 2005. Blogging and Hyperlinking: use of the Web to enhance viability during the 2004 US campaign. *Journalism Studies*. 6, 2, 177-186.
- [29] Williams, C. and Gulati, G. J. 2008. What is a Social Network Worth? Facebook and Vote Share in the 2008 Presidential Primaries. *American Political Science Association*.
- [30] Williams, C. and Gulati, G. J. 2009. Facebook Grows Up: An Empirical Assessment of its Role in the 2008 Congressional Elections. *Midwest Political Science Association*.
- [31] Williams, C. and Gulati, G. J. 2007. Social Networks in Political Campaigns: Facebook and the 2006 Midterm Elections. *American Political Science Association*.