Brewing Up Citizen Engagement: The Coffee Party on Facebook

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ABSTRACT

With this study we seek to provide an understanding of the discourse and agenda setting practices of an online issue based political group, "Join the Coffee Party Movement" (JCPM) in the United States. The stated goals of JCPM are to establish a place for individuals who identify themselves as disenfranchised to discuss and take action on issues of social and economic policy in the US. JCPM is one example of hundreds of issue-based organizations emerging on Facebook worldwide. Since its inception in January 2010, over 344,000 Facebook members have become followers of the JCPM page. Our analysis of the text of the discourse and the social networks, which emerge on the JCPM page, show three surprising results. First, in contrast to prior studies, significant deliberative discourse among members emerges in this open, public space without prompting. Second, the discourse practices and structure that emerge on the JCPM Facebook page show two types of leadership: Centralized, organizational leadership, and decentralized leadership from participants. Third, we identify two structural characteristics of this virtual political organization using social network analysis of trace data: a) Organizational leaders are not central to discussions of controversial topics; b) Advocacy and dissent behavior in the discussions are reflected in the social network structure. Our findings have implications for the practices and technology designs used to engage citizens through social and participatory media.

Keywords

Issue entrepreneurship, deliberative discourse, democratic discourse, politics, social networking, group formation

INTRODUCTION

The role of the Internet in political discourse is changing from broadcast oriented models of information dissemination toward more social, citizen engagement focused models. Participatory media like Facebook enable people to self organize around issues and allow organizations to rally the like minded in a geographically independent virtual town square [19]. Before participatory media, adoption of Internet enabled information and communication technologies (ICTs) in political campaigns lagged behind the state of the art. Socially focused ICTs have changed that by lowering barriers for creating a virtual network of supporters and providing tools that facilitate large-scale discourse [34].

Social and participatory media are, consequently, becoming more central to the political process around the world in two ways. First, information is distributed to organization leadership and membership simultaneously, leading to immediate discussion. In this configuration, geography is less central to discourse and the topic is more central. Second, the social web enables citizens to draw attention to and organize around issues in the tradition of a town square, but on a global scale. New forms of virtual political organization are emerging around these new mechanisms for information distribution and low-effort self-organization of groups. To date, this scale of socio-technical citizen participation in the political process is little examined. These new forms of political participation affect campaign workers, issue groups, candidate supporters and the citizenry at large.

The effects of ICT adoption in local political environments to facilitate discourse and citizen participation have been examined from numerous perspectives [17, 18]. Previous research on the use of technology in political campaigns, principally conducted from 1994-2008, has focused on the use of each new technology and its effects on the election cycles of the period studied [2, 30, 36]. As technology use by campaigns and issue groups becomes more participatory and geographically independent, studies of these phenomena must explicitly consider their social and technological implications. Specifically, the 2008 campaign for President of the United States demonstrated that social and participatory media can be used effectively to mobilize voters and volunteers of a candidate, but little research to date examines the influence of social media participation on discourse in a political process [34].

This paper narrows two specific gaps related to our understanding of social and participatory media use in politics. First, prior work focuses on the use of social media by traditional political organizations, and does not attend to the new forms of organization enabled by these technologies. Second, the literature on technology use in the political process does not fully address how individuals interact with others through social media. For citizens,

candidates and candidate supporters, social media potentially diffuses the process and may enable new, disruptive forms of virtual political organization.

Introducing the Coffee Party

This paper uses the formation and evolution of the Coffee Party, a political organization in the US that began as a Facebook Group, to further understand the discourse, agenda setting mechanisms and network structure of an online political group. Documentary filmmaker Annabel Park formed the party as a forward leaning response to the Tea Party movement in the US. As an experiment, Park setup a Facebook group called, "Join the Coffee Party Movement," hypothesizing that the way to inspire political participation in the general population was to create a public space for civil discourse [27]. The popularity and critical mass of participation on Facebook presented a new, and well-suited platform for Park's experiment [2, 29].

From its inception on January 26, 2010 through March 1, 2011, the Facebook group "Join the Coffee Party Movement" had amassed over 344,000 followers who posted 242,973 comments in direct response to 1,642 official Coffee Party posts. Over 858,000 "likes" were registered to these posts during the same period. On Facebook, being a follower is a low commitment form of group membership and a "like" is a single click mechanism for voicing agreement. Facebook followers of the Coffee Party movement have also set up 173 local Facebook groups, with followers of their own. Moving from the virtual world to the physical world, The National Coffee Party drew 350 participants to its first convention in September 2010. Through Facebook, the Coffee Party also orchestrated numerous "National Meeting Days", during which local chapters met at coffeehouses to attempt to move the party from Facebook into the physical world.

We study The Coffee Party because it exemplifies a new form of virtual political organization in the contemporary US, which is likely to recur across technologically advanced democracies around the world. This organization type is rooted online, but directed to action in the physical world. Such organizations appear to lower the barriers to entry for political organizers by effectively using social and participatory media like Facebook.

LITERATURE REVIEW

Internet content is an increasingly dynamic corpus of user-generated information. Further, the emergence of social media like Facebook is enabling a transformation from a broadcast oriented information model to a citizen engagement and collective information-sharing model. Research on social networking sites (SNSs) describes Facebook and its effects on traditional conceptualizations of social capital [5, 28]. First, Facebook is strongly correlated with the maintenance of social relationships originally established in the physical world, especially in the university setting [9, 25]. Since 2006, when Facebook opened up its membership, non-university users have displayed the same propensity to associate with friends from the physical world on Facebook [33]. Second, Facebook profiles tend to represent an individual honestly [26]. This tendency for more honesty on social networking profiles is likely attributable to the strong connection the online network has to the physical world and the potential for verification of the profile information [8]. This truthfulness in profiles makes social mobilization and discourse in online social networks authentic because social capital developed in the physical world is at stake online.

Early research on the use of the Internet to support political activist organizations showed that many organizations were not fully utilizing the technology [37]. Technological immaturity and misunderstanding of design concepts among activist groups contributed to this early underutilization. More recent research identifies some of the specific limitations of recent Internet technologies for activist work. For example, a framework and numerous case studies of youth advocacy on the Internet highlight the specific limitations of current Internet technologies for issue advocacy [38].

Some socio-technical tools do appear promising for organizing activities. For example, Facebook Groups are positively associated with a greater level of civic and political engagement among college students [40]. The Internet and social networking sites are used to organize and mobilize individuals in countries with limited media freedom such as Egypt, Ukraine and Iran [10, 24, 35]. In fact, in a classic case of turnabout, Facebook has been effectively utilized by its own members to protest changes to the website [31]. The use of this set of socio-technical tools is becoming more widespread as deliberative discourse is more fully realized and organizations are now able to further specific issues and agendas.

Deliberative Discourse and Issue Entrepreneurship

Activism through social media is one dimension of larger questions about the influence of the Internet on the political process. Continuing evolution of the tools & technologies available through the Internet makes it difficult to focus our understanding around specific tools and how to use them. Instead, we adopt a socio-technical perspective. Dahlberg (2001) argues that in order for the public sphere as conceptualized by Habermas (1984) to be realized online and for online deliberations to facilitate rational-critical discourse, certain social and technical requirements must be met. These requirements include:

- "Exchange and critique of reasoned moral-practical validity claims"
- Reflexivity
- Ideal role taking
- Sincerity
- Discursive Inclusion and equality
- Autonomy from state and economic power

At the time of Dahlberg's initial research no public, virtual

space capable of meeting these requirements existed. Political theorists support Dahlberg's focus on the importance of enabling deliberative discourse through technology; for example, they established criteria for effective political deliberation and discourse that can now be achieved through social networking technology [11, 42].

New social technologies may enable new types of deliberation and discourse, but they may also enable new forms of advocacy. Agre (2004) argues that the Internet has radically changed political activity and instead of helping to facilitate democratic deliberation as was initially conceptualized, it is better suited to facilitate what he describes as "Issue Entrepreneurship". According to Agre, the "Issue Entrepreneur" is an individual situated in a network, who proliferates the existence of an issue and information about it to a network of others. Agre contends that these networks exist in the national, local, institutional and ideological contexts. Individuals in each of these respective lattices will tend to network with others in their lattices that have an interest in the same issue, contributing to the formation of a four-dimensional network.

This model of issue entrepreneurship differs from traditional forms of deliberative democratic discourse that Agre addresses [32]. Agre contends that traditional deliberative democracy theory does not take into account the scale of the political atmosphere that exists as a result of the Internet [1]. Agre's theory suggests that individuals do not have the ability to form an opinion on every issue that they are exposed to and thus must specialize in certain issues. This leads to a group of individuals that form relationships and networks around certain issues that relate to other groups of issue entrepreneurs.

Mobilizing Support On the Internet
The ability to mobilize support on the Internet significantly changed the way that candidates campaign in the US and other democratic nations. For example, the Internet significantly reduces the costs of obtaining information for those interested in doing so [3]. The need to collect emails to engage supporters plagued the use of the Internet for many early campaigns, because they only contacted those already involved in the campaign [22]. The introduction of social networking technologies enables a public discourse on politics and current events, which increases civic and political engagement, especially among younger populations [21, 44].

Delli Carpini (2001) describes three characteristics of 21st century youth which lead to civic disengagement generally, and which may be overcome through social media specifically. These characteristics include a lack of motivation, a perceived lack of opportunity for involvement and an inability to take part in the civic process. The evolution of the socio-technical tools available for communication and involvement have helped to overcome the causes of disengagement and may have contributed to the overwhelming involvement of youth voters in the 2008

election cycle in the US. Bolstering this theory is the significant propensity of young voters (66%) to vote for the candidate who used these tools most actively in the United States, Barack Obama [20].

Broadcast oriented to citizen engagement models
Tools enabling the public to directly interact with candidates on a large scale first emerged in the US during the 2004 Presidential election. Social networks were beginning to gain popularity on college campuses, though they played a minimal role in that election cycle. Instead, candidate Howard Dean used participatory media, including blogs effectively in 2004 [39]. A critical enabler for the role of Facebook in US politics in 2008 was the 2006 opening of its membership to the general public. A second important step was the establishment of *Election Pulse,* a portion of Facebook focused on national elections in the US [42]. Facebook membership was still limited in 2006, but *Election Pulse* established a model environment for social media in the 2008 Presidential election.

All three of the major candidates in the 2008 US Presidential Primary and General Election, Barack Obama, John McCain and Hillary Clinton, relied on social media for mobilization and fundraising. Immediately following his November 2008 election victory, Barack Obama's Facebook page had over 3 million supporters (facebook.com). At that time Obama was also number 1 in Twitter followers with over 100,000 (twitter.com). In addition to the use of social networking websites, more than 1 billion email messages were sent by the Obama campaign to a list of 13 million supporters amassed from campaign rallies and other online activity [41].

Social media did not replace existing uses of Internet content for election-oriented information. In the 2008 United States Presidential election, at least 46 percent of Americans used the Internet to get election news during the primary season [34]. Further, 40% of Internet users with profiles on social networking sites and 50% of those under the age of 30 used Facebook for political information gathering or expression. Most of the political activity included mobilizing support and sharing information on the site [34]. The successful use of the Internet in political campaigns leaked into other aspects of online organizing, including political issue groups and the creation of online political parties like the Coffee Party.

Social Networks and the Political Domain
Prior research of political discourse on the Internet has focused on modeling the structure of the discourse independent of specific participants or threads of discussion [15]. There are significant obstacles to this type of large-scale research. First, it is difficult to collect large amounts of data on these groups because automated web crawling programs violate the terms of service for many social media sites, including Facebook. Second, these phenomena are quite new. In fact, The Coffee Party group is the first "political party" to form completely online with no support

from traditional political vehicles and to gain a wide base of followers, mostly in the United States.

Early research in the political domain analyzed the Facebook walls of 67 Democratic and Republican candidates in the 2006 US midterm election [36]. The study found that supporters participated in the walls of candidates in an attempt to establish a relationship with the candidate and other supporters. Comments made on the walls were either shallow or neutral and this may have been the result of limited use of the wall by supporters. Our study follows a similar methodology, but takes an integrated view of the topics posted to the Coffee Party wall and their associated comments. The comments and posts together help us to determine the group agenda and existence of deliberative discourse (more fully described in section five).

Analysis of the contents of the Facebook walls of the 2008 Presidential Candidates surfaced characteristics of the specific posts and patterns of activity among participants [29, 30]. These findings illustrated that SNS's are shown to approximate a socio-technical representation of Habermas' (1984) public sphere. More generally, SNS's provide unique avenues for political discourse. This work focused on the technical capabilities and potential of Facebook to support such discourse, but not on the network of individuals involved, the extent of their involvement in political discourse or how this network evolved over time.

Not all participation in social media related to politics is motivated by political considerations. For example, users of social networks often friend candidates to fulfill a social need, such as the need to interact with others who share their viewpoint [2]. In another study, it was illustrated that divisive Facebook Groups consist of constructive discourse within the group [23]. This illustrates the potential of socio-technical tools to facilitate civic discourse.

These prior studies do not examine virtual political organizations without close connections to long-standing political parties or candidates. In our examination of The Coffee Party, a prominent example of this type of virtual political organization, we address two primary dimensions, enacted through technology. First, we work to understand the extent to which deliberative discourse, as described by Dahlberg, emerges. Second, we focus on issue entrepreneurship, described by Agre. The implications of the realization of these two concepts in social and participatory media like Facebook are numerous and are addressed in the discussion section. Our research questions set out to address these gaps in our understanding of how virtual political organizations emerge and operate.

RESEARCH QUESTIONS
Our research seeks to build an understanding of the structure and dynamics of online political discourse and online political group formation. Therefore, we address the specific concepts of issue entrepreneurship and deliberative discourse, but we also examine the structure of

the Coffee Party leadership and membership participation.

1. To what extent do the characteristics of the discourse on the national coffee party Facebook page demonstrate deliberative discourse on the Internet as conceptualized by Dahlberg?
2. To what extent does the Coffee Party Facebook page appear to reflect Agre's notion of ICTs as principally useful for supporting issue entrepreneurs? Are there examples of emergent discourse on the Facebook page that might appear to be more deliberative, and incorporate a wider involvement?
3. How does the network structure of a new, issue focused political organization evolve in the months leading up to a democratic election?

METHODS AND DATA SET
Our data set includes all activity on the National "Join the Coffee Party Movement" page on Facebook from August 24, 2010 (one month before the national convention) until November 9, 2010 (one week after the US midterm elections). All of the Coffee Party posts on the main Facebook Group pages were manually collected no less than 6 days after the original parent post (N=320) along with the comments associated with each parent post. In total, 56,125 unique comments were collected. The comments to each post were parsed using a custom script built for this effort. As a result of parsing difficulties with some comments, 55,809 total comments were used in the analysis (less than 1% throwaway rate).

We then performed open coding on all of the Coffee Party parent posts, grouped the codes and then performed axial coding on all parent posts [4, 12]. Each parent post received one code, with the exception of posts that also incorporated a call to action. This subset of posts (n=27) contained both a salient theme and a call to action. Therefore, the number of codes applied to the posts was 347 as opposed to the total number of posts (n=320). We followed a protocol for analysis of electronic trace data that reprocesses the data to account for its presentation on a page when the user is posting [13, 14]. Our analysis incorporates this information display in the construction of a weighted social network derived from the trace data. In our analysis, each comment in a thread has some relationship to all the comments before it in a topic, but the strength of that relationship decays along two dimensions. First, the strength of connection between a comment and the comments before it, which are always displayed while a comment is being added, are strongest. Second, comments that occur within one hour of each other have a more significant strength of connection (~50x at 1 hour as at 1 day, with a sloped decline) than comments that occur after a 1-hour window. We chose one hour for this basic "decay cliffing" because the responses occur quickly, and one hour appears from our qualitative analysis as an approximate time distance in which discourse shifts in a thread.

We then performed weighted network analysis on the trace

data pulled from the Coffee Party Facebook page. We looked at network centralization, total post activity, and high betweeenness actors across three dimensions: 1) Time, 2) Parent Post Category and 3) Parent Post. For each dimension, we calculated network centralization for the entire network and betweenness for each actor within that network using the TNET package in the statistical software program, R. Our analysis of the central role of different actors and the differences in network centralization over time are reported in the findings. Betweenness is a social network measure that identifies actors who play a broker role between clusters of people. Betweenness in electronic trace data has two semantics: One related to the broker role, and another related to the identification of "lurking behavior" [13].

FINDINGS

We present findings from an analysis of the 78 days leading up to and encompassing the week following the 2010 United States midterm elections. On average, 4.10 official Coffee Party parent posts were made each day. Each parent post averaged 175.4 comments and 731.5 "likes" during this timeframe. These averages represent a greater rate of participation than the average of comments from the inception of Coffee Party to March 1, 2011 (Comments=147.9, Likes=522.9). The time close to an election cycle is more active and the data reflects this.

The distribution of participants to the Coffee Party parent posts followed a power-law distribution found in many studies of Internet behavior. There were 15,203 unique participants in the discourse with the most prolific contributor, user 4283, commenting 437 times. There were 8,269 unary posters and 3 other categories of participants:

- Low Frequency: 2-20 comments (n=6,578)
- Medium Frequency: 21-70 comments (n=309)
- High Frequency: greater than 71 comments (n=47)

Table 1 illustrates the top 6 posters by number of comments and percentage of comments containing a direct address to another individual during the timeframe (addressed in the next section).

User ID	Comments	Direct Addresses
4283	437	43%
4633	359	92%
4109	337	67%
5159	242	71%
4028	186	61%
4080	183	61%

Table 1 – Top 6 Participants Contributions

The sections that follow present an analysis of the atmosphere and happenings on the Coffee Party Group page. First, the agenda of the Coffee Party is explored through the lens of issue entrepreneurship and the agenda setting function of Coffee Party Administrators. Second, the characteristics of user discourse are analyzed and

evidence is presented to illustrate the emergence of unprompted deliberative discourse. Finally, the structure of the network is examined along three dimensions: time, parent post and parent post category. The network structure illuminates the roles that individuals play in the discourse and the existence of individual issue entrepreneurship.

Coffee Party Issue Entrepreneurship

The data demonstrates that issue entrepreneurship in social media is structured around roles instead of traditional dimensions of nation, geography, or institution [1]. We further find that ideological issue entrepreneurship is the primary type occurring in the Coffee Party group. This ideological issue entrepreneurship is reflected in three ways: the agenda setting function of the party administrator, the presence of individual issue entrepreneurs in the subsequent discourse and the avoidance of controversial topics by party leaders and prolific contributors.

The categories reflected in the parent posts on the Coffee Party's wall are an indicator of which topics the party leaders wish to promote most. The frequency of parent post categories is displayed in Table 2. This table shows that the Coffee Party parent posts focused on domestic issues in the US. A lesser number of parent posts focused on security and international issues like terrorism or the Afghanistan and Iraq wars (n=13).

Parent Post Category	Frequency
Political Quote	21
Social Leader Quote	8
Writer/Academic Quote	10
Pop Culture Quote	3
Economy	66
Environment	8
Immigration	6
Social (Education, Healthcare)	9
Security (International, Military)	13
Media	8
Religion	9
Campaign Finance	26
2010 Election Results	5
2010 Election Info	19
State of Society	11
Mobilization	62
Convention News	19
Organizational Info	11
Platform Definition	33

Table 2 – Parent Post Category Frequency

The most prevalent code that emerged from the parent posts was the Economy. These posts mostly linked to news articles about the job market and economic recession in the United States (n=66). There was also a focus on campaign finance reform and the influence of money in elections (n=26). The Coffee Party also used the parent posts to

define its platform (n=33) and to appeal to individuals to take specific action (n=62) such as calling a Congressman. In addition to providing news stories, the Coffee Party administrators would prompt discussion by posting quotes from Presidents, social leaders such as Martin Luther King, famous writers and other historical figures from US popular culture (n=42). The dominant post topics suggest that the Coffee Party leadership plays the role of an issue entrepreneur focused on defining itself, getting individuals involved in the political process and bringing news for issues they are most focused on to the forefront and into the public forum. Each of the issues discussed are national in scope, and lack an organizational, geographic or clear ideological boundary.

The Emergence of Deliberative Discourse

Our data reveals evidence of deliberative discourse as conceptualized by Dahlberg. Specifically, one on one discussion around issues emerges in the open public space of the Coffee Party's wall without prompting or structure. We identified this trend using latent semantic analysis, performed using the R package "lsa". Overall, a significant portion of the comments (4,962 comments or ~9% of the total) contained an explicit direct addressal to another individual in the discourse. We identified these posts by filtering for text that contained "@" followed by a name. It is possible that other techniques for directly addressing members are used, which could be explored in future analysis. Directly addressing other members represents private discourse in a public space around the specific issue in the parent post.

The percentage of comments containing the @ sign compared to the overall number of comments per posts varied significantly, with deliberative discourse emerging most profoundly in response to a handful of parent posts. The Parent Post with the greatest percentage of overall comments that contained a direct addressal occurred on September 19. This post discussed whether to include the Tea Party in the Coffee Party Convention (47%) and it drew a significant number of individuals who found the inclusion of the Tea Party to be both a positive and negative. There was also a significant use of the @ sign in parent posts discussing a trend of gay teenage suicides (45%) and a discussion surrounding healthcare insurance for children (42%). Ten of the 320 parent post discussions we analyzed contained more than 30% of the comments with a direct addressal to another individual in the discussion. These topics focused on the types of controversial social issues described above along with parent posts discussing tax cuts, government spending and campaign finance reform.

In some cases the deliberative discourse identified initially through the @ sign also reflected intense discussions between a specific number of users. For example, user 4109 contributed 68 times to a parent post discussing the limited existence of new ideas from Democrats and Republicans (The two main political parties in the US). Forty-nine of the 320 parent posts (15%) had one individual contribute twenty or more comments. In most cases, when a person posts at a high rate on one topic, most of those individuals' total posts are in that topic. One parent post that focused on tax cuts for the middle class, for example, received twenty or more comments from 6 participants who were mostly absent in other topics.

Just as some individuals take an active role in the discourse related to a single parent post, other individuals devote considerable energy to sparking discourse across a range of topics. The six most prolific commenter's utilize @ signs in at least 42% of their posts, and as many as 92%. User 4633, identified as a constructive challenger during our axial coding, used the direct addressal mechanisms in almost every comment (92%) to clarify other viewpoints and offer his opinion. User 4109, who was coded as a Coffee Party supporter, directly addressed others (67%) as a mechanism of agreement or to further clarify a previously stated position in the context of someone's comments.

Deliberative discourse is routinely identified in our analysis as co-existing with the use of the @ sign. The case of one of the most outspoken critics of the Coffee Party, user 4283, demonstrates that ordinary statistics like posting frequency are likely to be less effective for identifying deliberative discourse than analysis centered on occurrences of the @ sign. User 4283, for example, was the most prolific commenter during the period studied, but did not frequently address others. User 4283's comments tended to not be focused on other individuals, but instead questioned the overall platform of the Coffee Party in relation to the Tea Party (of whom user 4283 was a fan of on Facebook). User 4283 routinely dissented in a non-specific way; disagreeing without participating in discourse and directing comments to an amorphous group instead of specific individuals.

Although deliberative discourse emerges, dissent like that of user 4283 is not preserved on the Coffee Party Facebook page. When revisiting the Coffee Party Group page weeks after our initial data gathering, we noticed the deletion of user 4283's comments. Analysis also indicates that user 4283 and user 4080 often worked together as dissenters and often joined together to jointly refute others viewpoints. User 4080 used the @ sign to highlight and reference others viewpoints and discuss the disagreements he had with the expressed viewpoint. User 4283 acted to "shout down" other views in a public, online space, while user 4080 engaged in discourse and opposition.

The @ sign, then, is used for discourse and destructive discourse. A third use of the @ sign is to draw attention to individuals who did not fully support their position with facts. User 5159 is one example; she used the @ sign to directly address others and to point them to a news articles or websites that refuted their unfounded points. User 4028

played a similar role, using the @ sign less frequently, but to state support for the assertions of others.

Network Structure

Evidence of issue entrepreneurship and deliberative discourse online suggests that some type of new, virtual political engagement is emerging. The structure and organization of the discourse and issue entrepreneurship is not yet clear, however. How are relations constructed, and how do groups form? How does this structure change? To answer these questions, we applied social network analysis to the parent post and comment data. We learned that advocacy and dissent behavior on the Coffee Party Facebook page is visible through social network analysis of the parent posts and comments along three dimensions: time, parent post and parent post topic category.

Time Dimension

The levels of participation and centralization of the network varied, but throughout most of the timeframe, network centralization paralleled rates of participation. The network was most centralized on September 21, 3 days before the Coffee Party convention. Participation on that day contained 1,618 total comments amounting to the fourth highest day of participation. The first day of the Convention had the fewest number of comments (n=132) to parent posts, but had a spike in centralization. This is most likely indicative that a few people were dominating a limited set of discussions and is likely the result of the high number of convention planning and information posts in which extended discourse was minimal. This low level of participation may also indicate that the more prolific participants were traveling to or attending the convention.

The highest levels of participation occurred during the timeframe of September 4 – September 8 where 7,071 comments were made over the 5 days including the 3 highest days of participation (9/4, 9/6, 9/8). This timeframe was a holiday weekend in the United States and just days before the anniversary of 9/11. It was also the time of a heated debate regarding a mosque that was to be built blocks from Ground Zero. The Coffee Party Group was dominated by discussions regarding the *Ground Zero mosque controversy* along with other platform defining posts regarding open debate and dialogue that were correlated with the issues raised in the Ground Zero Mosque discourse. The centralization of the network was significantly higher during this timeframe relative to other parts of the period studied. During this period, the comment network was less active, but more highly centralized (9/5) than on other days in this relatively active period. This is an inversion of the usual covariance of centralization and participation level, suggesting that a significant amount of discourse occurred among a small set of individuals drawing in other actors.

The days surrounding the election also reflect a critical period in the Coffee Party's group with discernable traits in our network analysis. The second highest measured network centralization occurred the day after the midterm election (11/3). Participation on that day was also well above average (1,352 comments). Most of the parent posts on November 3 were related to the Coffee Party's platform and the accompanying discourse focused on how members of the group might continue to advance issues still deemed important in society. The network measures coupled with the category of posts that occurred on that day indicate that a subgroup drove this regrouping, much like what party leaders in a non-virtual party might do following defeat.

Parent Post Dimension

The variability of the centralization of the network by specific parent posts also illuminates some interesting events. One of the most centralized topics of the timeframe occurred on September 6. The parent post responsible for the discourse discussed a Florida preachers plan to burn the Quran in protest of the Ground Zero mosque. This topic sparked a lively discourse, between individuals who were not found to be central in any topic during the timeframe. Many of these individuals also posted to other religious parent posts immediately before and after that parent post, further indicating interest in only one set of issues and the emergence of individual issue entrepreneurship.

None of the Coffee Party administrators or more prolific contributors were found to be in the top 5 of betweenness in the most centralized parent post of the timeframe, which occurred on September 20. This parent post by the Coffee Party discussed the state of the economy and the disappointment that many Coffee Party members expressed regarding President Obama's economic policies. Four of the five individuals who appeared most central in the discourse in the comments for that post were medium frequency posters and one of them was a low frequency poster who only posted 7 times during the study period. The emergence of a subgroup of individuals who were not active in other parts of the discourse around one topic illustrates how low barriers to discourse can draw in diverse contributors.

One of the more significant findings is in the ability of one individual to significantly affect the centralization of the network. The most prolific poster (4283) is a dissenter, and his comments are widely rebutted. He draws in comments from a swarm of Coffee Party supporters, leading to a diffuse, decentralized comment network. This is evidenced in his absence in parent posts with the highest network centralization. We define these Coffee Party supporters as "issue guardians" who are very active for the period of one parent post where they participate aggressively to counter the dissenter's comments, but then disappear and do not contribute significantly to any other posts.

Temporal analysis of the topics that had the most centralized networks of individuals also highlights another significant characteristic of the network. As time passes, the individuals that were traditionally frequent contributors, including the Coffee Party administrators, do not emerge as

central in the most centralized topics. This could indicate that the Coffee Party and prolific contributors were able to spark discourse in the group and allow for other individuals that had not been previously central in the network to emerge as issue entrepreneurs in the network as time passed.

Topic Category Dimension

Network structures and central members differ discernibly by topic category; high betweenness individuals differ significantly by category, for example. The Coffee Party Movement administrator account had a high betweenness score in 10 of the 19 parent post categories (refer back to table 2) and user 4109 had the highest betweenness score in another header code category in which the Coffee Party was absent. The 8 remaining parent post categories that did not have a prolific contributor or the main Coffee Party account as a significant participant in the discourse included: 2010 Election Information, 2010 Election Results, Religion, Media, Environment, Pop Culture, Immigration, Social Issues (Healthcare, Education).

The most central individuals in the 8 parent posts that were not dominated by the Coffee party or prolific supporters such as user 4109 were all unique. Few individuals showed high betweenness centrality in more than one of those 8 parent post categories. Two exceptions included 2 of the more prolific users, 4283 and 5159, who each appeared in the top five betweenness actors for Media and one other category. The diversity of central actors across these 8 topics exposes a decentralized group of individual issue entrepreneurs in the Coffee Party discourse.

Topic categories where Coffee Party leaders are not central to the discussion follow two themes. The first theme is the 2010 Election. The absence of the Coffee Party Administrators and prolific contributors in these discussions indicates that the 2010 election discourse is happening among individuals that are not directly tied to other parts of the network. This may illustrate that individuals are there to obtain information from others or discuss the overall implications of the election. The second is that topics where Coffee Party leaders are absent tend to be social and media issues. With the exception of users 4283 and 5159, none of the more prolific contributors appeared as a highly central in these issues. While it is impossible to ascribe motivation to the Coffee Party leadership's absence from these issues, the network analysis reveals a clear choice that warrants future investigation.

DISCUSSION

New forms of virtual political organization are changing public discourse by broadening and altering participation. Issue entrepreneurship, first conceptualized by Agre to explain the effects of the Internet's openness and immensity on political discourse is shown here to be at once prescient and insufficient. The anticipation of the issue entrepreneur as a central player in Internet enabled political discourse, before it really existed, is prescient. We see issue entrepreneurs emerge from Coffee Party Leadership, from amongst the members and in a few different types of dissent. Agre's lattice structure, however, fails to anticipate the one-dimensional nature of the political context studied here. Ideology is dominant, and nation, geography and organizational dimensions are nearly absent. Discourse enabled by social and participatory media reduce physical barriers, but in this case also make traditional boundaries nearly invisible. The theoretical, design and practical implications of this for socio-technical citizenship are immense. The social and economic interests of citizens are more closely related to nation, geography and institutional dimensions; yet, for the Coffee Party, discourse is not focused there. Self-interest is, in some ways, marginalized by the socio-technical system from which Coffee Party discourse emerges.

The emergence of deliberative discourse around issues on the Coffee Party page without prompting or deliberate structure demonstrates that Dahlberg's criteria for deliberative discourse through technology are all realized on the Coffee Party Facebook page. One important dimension of deliberative discourse on the Coffee Party Facebook page is the presence of both official leadership and leadership that emerges from members. Members lead in two ways; by joining in the discussion for a compelling topic (low frequency posters), or by sparking discourse across a range of topics (high frequency posters).

One caution about the discourse we analyzed is the disappearance of user 4283's comments on the Coffee Party Facebook page. The elimination of contributions of dissenters, for whatever reason, would not be commensurate of Dahlberg's criteria. In a socio-technical space, however, they demonstrate rudimentary gardening of content similar to what occurs on Wikipedia. Future designs of political discourse oriented social and participatory media ought to consider tools and practices for maintaining awareness of editing and what some might view as censorship.

Finally, the network structure of this emergent, virtual organization reveals that, although the Coffee Party Administrators are responsible for the parent post content, they avoid participation in discourse regarding controversial ones. Advocates show up as central figures in the discussions that they lead, as do dissenters. Dissenters, however, draw a more diffuse, less centralized network around them. This phenomenon warrants future study focused on understanding how dissent that limits discourse might be separated from dissent that engages discourse. An interesting contrast to focus on here is between user 4283, who dissented without discourse and user 4080, who dissented with reason and direct references to other discussants. Designers of social and participatory media for political discourse might consider incorporating

more sophisticated social cues for identifying and managing both dissent and advocacy.

Social and participatory media has the potential to engage citizens. The Coffee Party is an illustrative example of how this type of technology begins to realize deliberative discourse through technology; and also a study of how this discourse is constrained. Future research should consider both what we learned, and how new social and practice oriented designs can lead to greater citizen engagement.

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