YouTube as a public sphere: The Proposition 8 debate

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Paper presented at the Association of Internet Researchers conference, October 8-10, Milwaukee


Introduction

The Internet provides users with an unprecedented amount of political information at their fingertips. But perhaps the most influential way the Internet is affecting politics is through the ability of almost anyone to create and widely disseminate their own ideas. YouTube, for example, allows anyone with basic knowledge about video and audio technologies and Internet access to “broadcast” themselves to a large audience. It also provides the opportunity for individuals to comment on videos that are uploaded for public consumption, adding their voices to the online debate.

Although activity on social media websites—like YouTube—is not solely political, there does appear to be a trend toward the politicizing of social media. For example, YouTube has become a political forum, with public officials uploading video content (e.g. President Obama delivering the first YouTube address), citizens producing content that is picked up by mainstream media (e.g. the popularity of the Obama Girl videos), and the channel itself sponsoring of a series of political debates during the 2008 primaries, in which they encouraged members of the general public to send in questions to ask the candidates. Specifically, we examine YouTube—a social media site that both appeals to a wide scale audience and allows for diverse modes of expression through video and comments—to shed light on the extent to which social media can function as a public sphere.

Habermas (2006) argues that under certain conditions, the media act to facilitate discourse in a public sphere. The rise of the Internet has brought about a resurgence of scholars applying theories of the public sphere to Internet technologies (Jansen & Keis, 2005). The Internet has been praised for providing the opportunity for large-scale interaction and the
inclusion of voices that would otherwise be unheard (Stromer-Galley, 2003), yet concerns about the quality of these interactions persist (Cammaerts, 2008; Goodin, 2000). And while the YouTube context is different from the often studied “online forum,” it does contain similar features which warrant taking a closer look at its potential to act as a public sphere. Furthermore, the greater reach and diverse audience of YouTube may yield a more accurate depiction of online discussion quality.

To add to this line of research, this study proposes a case study of one particular issue and how people respond on the video-sharing website. We focus on the Proposition 8 legislative battle over gay marriage rights in California during the 2008 election. Proposition 8 makes an excellent case study, as it was the most expensive social issue campaign in U.S. history and garnered media coverage at both the local and national level. This study seeks to test the ability of YouTube to serve as an online public sphere by (1) examining the quality of discussion present across a large sample of YouTube video comments and (2) exploring the relationship between video content and comments. This examination will allow us to make some preliminary conclusions about the ability of social networking sites to contribute to an online public sphere by fostering quality political exchanges.

**Literature Review**

*The Public Sphere*

At the most general level, the public sphere has come to represent a space where public issues are discussed. According to Habermas (1996), the public sphere represents “a network for communicating information and points of view” (p. 360). In his original application, the bourgeois public sphere was exemplified by the coffee houses and solons of the late 18th century (1962/1991). It was in this social space where people—in this case, the bourgeois male—could
gather away from the influence of the state to discuss public issues and form opinions. Habermas points to the increasing role of media in the 18th century as providing a catalyst for the emergence of the public sphere. The printing press, for example, allowed for increased literary expression, public consumption of this expression by a larger audience, and the possibility for discussion among this audience. Therefore, the interplay between conceptions of the public sphere and the media environment is of importance (Goodnight, 1982). As the media environment becomes more complex—such as the development of and increasing access to a wider variety of sources, including newspaper, radio, television, and Internet—the ways in which the public sphere manifests itself becomes equally complex.

Dahlberg (2001) identifies six characteristics of Habermas’ public sphere: (1) Autonomy from the state and economic power ensures that communication is truly free from state and economic control; (2) Exchange and critique of criticizable moral-practical validity claims expects that the public sphere is focused on rational-critical discourse that can facilitate ongoing exchange; (3) Reflexivity refers the internal process of critically reflecting and adjusting one’s position in light of a ‘better argument’; (4) Ideal role-taking involves people putting themselves in another’s place and often manifests itself in respectful listening; (5) Sincerity ensures the possibility of understanding and making rational assessment of perspectives; and (6) Discursive inclusion and equality is needed to capture the wide range of perspectives on a given issue.

The deliberative paradigm is often evoked when examining the public sphere discourse. The existence of deliberation is seen through the exchange and critique of claims, while the quality of deliberation can be judged through levels of reflexivity, ideal role-taking, sincerity, and discursive inclusion and equality (Dahlberg, 2001). The exchange and critique of information is an important component of discussion because no single person can foresee or
anticipate all perspectives on a given issue, nor can an individual possess all the relevant information pertaining to a decision (Benhabib, 1996). In addition ideal role-taking, specifically respectful listening, is vital because people need to feel comfortable sharing viewpoints that may run counter to the majority. After all, deliberation is deliberation is the “dual-process of speaking and listening” (Park, 2000, p. 5).

*An Online Public Sphere*

Advances in technology coupled with a growing population, have prompted many scholars to examine the potential for an online public sphere (Jansen & Keis, 2005). An online public sphere has the capabilities for both discourse and dissemination—whereby reaching a large audience on issues of public concern (Page, 1996). According to Habermas, “the public sphere is rooted in networks for wild flow of messages—news, reports, commentaries, talks, scenes and images, and show and movies with an informative, polemical, educational, or entertaining content” (2006, p. 415). As technology advances, the arenas that the public sphere can operate within widen, and the Internet in particular has provided a new arena for the public sphere to grow to encompass new forms and formats of participation (Kellner, 1999).

The Internet offers several unique features that make it compatible with public sphere theory. First, the structure of the Internet allows a wide range of voices to be expressed. The ‘low barrier of entry’ allows people to produce content in a variety of ways: from updating a personal blog or constructing a profile on a social networking website, to uploading videos, photographs, and personal reports of current events to social websites (i.e. YouTube, flickr) and professional news organizations (i.e. CNN’s I-Report). Other media, such as television or radio, have higher barriers to entry and thus do not lend themselves individual expression (Hacker & Dijk, 2000). The ability to freely create content speaks to the breath of issues that the Internet can address and
should encourage the voicing of many perspectives (Benhabib, 1996; Fraser, 1992).

Second, the structure of the Internet allows for feedback and exchange. For example, many media organizations have a “comment” feature allowing users the opportunity to share their opinion, while blogs offer more opinionated information on a wide range of topics to which readers are encouraged to respond. Similarly, other online services, such as message boards and chat rooms, offer users the ability to engage directly and synchronously with each other on a given topic. The Internet offers not only the increased ability to create unique content, but also the ability to respond to others’ content. After all, a public sphere cannot consist of only a plethora of voices with no uptake of the message or opportunity to respond.

Scholars provide mixed results about the potential for the Internet to act as a public sphere (Koop & Jansen, 2009). Research has suggested that most discussants in political Usenet newsgroups generally expressed viewpoints in a civil and polite manner (Papacharissi, 2004), that chat rooms exemplified norms of viewpoint diversity and idea exchange (Hill & Hughes, 1998; also see Stromer-Galley, 2003), and that most postings on bulletin boards were related to or in response to earlier messages, suggesting a high level of fluidity among postings (Rafaeli & Sudweeks, 1997). However, other researchers point to the tendency for Internet users to not embrace opinion diversity and to provide content that is of little deliberative merit, with online bulletin boards serving as ideologically congruent ‘communities of interest,’ (Wilhelm, 2000), online forum offering debates likened to the “Did so” “Did not” argument mantra of teenagers (White, 1997), and campaign blogs like Howard Dean’s offering primarily negative posts, few reasons, and discouraging opponents from offering substantive comments (Meraz, 2006). These findings suggest that online political conversations may have the potential to serve as a deliberative arena, but often do not meet even the minimal standards of a public sphere.
Despite falling short in some areas of the Habermasian public sphere, Dahlberg (2001) concedes that, “the Internet facilitates an expansion of the public sphere that is constituted whenever people enter into deliberation on political questions” (p. 10). Within specific enclaves, meaningful exchanges take place—even if they may not be the norm. Therefore, it may be more accurate to focus not on the potential of the Internet to facilitate a public sphere, but rather to question the realistic quality of information, debate, and participation we expect from specific online communities. This question may be especially important with the fusion of politics and social media. Social media websites – and YouTube in particular – present a different arena to explore the quality of political speech in which citizens voluntarily and naturally engage.

_YouTube as a Public Sphere_

Since being founded in February of 2005, YouTube has grown steadily, with over 10 hours of video content posted every minute and 200 million videos watched daily (Alleyne, 2008). Although YouTube is not directed toward facilitating political discussion per se, the website does promote itself as a space for community and the exchange of ideas, proclaiming “YouTube provides a forum for people to connect, inform, and inspire others across the globe and acts as a distribution platform for original content creators” (Overview and Features, 2009).

YouTube features both video content and comments that appeal to traditional notions of the public sphere. First, YouTube offers a wide range of videos that appeal to a large and diverse audience. YouTube is the world’s largest online video host, broadcasting about 60% of all videos online (Cha et al., 2007) that vary across the categories of entertainment, news and politics, travel, people and blog, and sports. Furthermore, video content can take the form of original content or repurposed content. As such, YouTube positions itself as a site that is not exclusively devoted to a singular category of video, allowing users to express themselves in varied formats.
that best suit their needs and ability. Second, by granting users the ability to comment on videos, the possibility for opinion and information sharing emerges. The ‘comments feature’ affords the opportunity to critique and applaud video content or to reply to other comments. Seen in this light, the comment boards have the potential to enact a type of public discussion that has long been praised as a vital component to healthy democracy (e.g., Dewey, 1954; Barber, 1984; Schudson, 1997).

Past research on video expression has shown it to be an effective facilitator of personal identification and emotional expression (Bruce, 1996; Bekkering & Shim, 2006). According to Milliken & O’Donnell (2008/09), user-generated videos afford citizens the opportunity for “self-expression and exchange that is open, accessible, compelling, unconstrained and unmediated within the forum of the Internet” (p. 1). Research on YouTube suggests the site can play an influential role in the political process: one study found the volume and tone of YouTube videos during the 2006 mid-term election played an influential role in two Senate races (Fernandez, 2006), while another praised YouTube as being an influential force for mobilizing young people during the 2008 Presidential election (Dalton, 2009). In regards to commentary, Lange (2007) found that YouTube users do differentiate negative comments from comments that offered constructive criticism and users appreciate the arguments that occur online that would be too uncomfortable in a face-to-face setting (Lange, 2007).

Conversely, other studies about YouTube present a more skeptical outlook on the website’s ability introduce new content and engage in political discussion. Bryant (2006) found most of the content posted about the 2006 Senate races to be primarily TV coverage, with little to no re-purposing. Others find that negative political clips generate the most attention, suggesting that people will consume political videos on YouTube, but only when sensationalized
In an experimental study, Towner, Dulio, and Pazdro (2009) found exposure to user-generated content on YouChoose’08 (i.e. YouTube’s official 2008 Election page) increased levels of cynicism among viewers. It was unclear, however, why this relationship exists and how variations in user-generated content—for example, footage of a protest rally versus a scripted political parody—may influence the outcome of cynicism. In regards to YouTube commentary, studies found the average number of YouTube video comments to be only about 1.60 (Carlson & Strandberg, 2007), and that these comments were often negative in tone (Molyneaux, Gibson, O’Donnell, and Singer, 2008).

The relationship between video content and comments is also unclear and understudied. Research about YouTube has focused mainly on video content or the comments posted about the video. However, the influence of certain types of videos on comment quality and focus remains underexplored. Rojas et al. (2005) introduce the term ‘media dialogue’ to refer to the ability of media to serve as a springboard for subsequent discussion. They found exposure a documentary about race relations increased the likelihood people would engage in future interpersonal discussion about race. YouTube videos may act as a similar springboard for comments. One of the few studies to explore the relationship between video and comments found little up-take between video topic and comments posted (Milliken et al., 2008). It is unclear however, if variations in video content tone, position, or genre can influence comments, and in what way. As a result, this study focuses on both the production of YouTube videos and the reception of those videos through posted commentary.

By focusing on a single salient political issue, the viability of YouTube to facilitate quality political exchanges can be more readily assessed. The Proposition 8 debate was chosen as a case study because, although it was rooted in a state election context, it had national
implications and received national wide coverage. Elections also represent a context where everyday, mediated, and elite communication is more narrowly focused on politics. During an election context, “votes do not “naturally” grow out of the soil of civil society… they are shaped by the confused din of voices rising from both everyday talk and mediated communication” (Habermas, 2006, p. 417). Proposition 8, or more generally same-sex marriage, remained on the media agenda even after the election—which allows us to examine any differences that may arise between pre and post election commentary.

Proposition 8

Proposition 8 was a measure on the California state ballot during the November 4th general election. The proposition called for a change to the state constitution by defining marriage as consisting of opposite-sex couples only and was a direct challenge to the May 2008 ruling of the California State Supreme Court which found it unconstitutional to prohibit same-sex couples the right to marry. A record-breaking $73 million was raised by both sides of the Proposition 8 debate, making it the most expensive social issue campaign in U.S. history. Support and opposition for the proposition cut across political figures, religious organizations, corporations, and Hollywood celebrities. On November 4th, the citizens of California passed Proposition 8 with 52% voting in support of the measure. Even after the passing of Proposition 8 the issue remained salient in the public eye with protests occurring across the state and nation, and boycotts of companies that supported Proposition 8. On May 26, 2009, the California State Supreme Court upheld the passing of Proposition 8. A current effort is underway to place the sex-sex marriage ban back on the ballot in California.

In the analysis that follows, we explore the extent to which political commentary on YouTube videos meet these criteria. Following in the steps of many studies; we will focus on the
concepts of reason-giving (Koop & Jansen, 2009; Wilhelm, 1999) and civility (Jensen, 2003; Park, 2000) in our assessment of comment quality. Our analysis can be broken down into three guiding areas of interest: First, we are interested in the prevalence of specific reasons in comment postings and if some reasons are correlated with other reasons. This analysis will shed light on the types of language people are using to discuss Proposition 8 on YouTube, as well as provide an overview of which types of language appear to function similarly. Second, we are interested in the relationship between video features—content origin and tone—and the use of reasons. As noted above, little research has examined the interplay between video and comment content in online websites, although media dialogue research suggests that the two should be closely intertwined (Rojas et al.’s, 2005). Third, we examine whether the observed relationships differ if the video was uploaded before or after the November 4th election. Specifically, we examine whether videos in support vs. opposition to Proposition 8 cause a different type of discussion to arise depending on whether the original ballot proposition had been decided by the public. We suspect that although Proposition 8 is still a controversial issue, even after the measure passed in November 2008, the terms of the debate has shifted as opponents and supporters gear up for a new round of battles around the issue.

**Methods**

To examine the nature of comments produced by Proposition 8 videos, as well as how the quality of discussion relates to the type of video posted, we used the video itself as the unit of analysis. As such, each video was given a score based video content as well as the presence of specifically chosen words and phrases in the video’s comments. The data for this study was collected during the first three weeks of August 2009 using the combination of hand coding and the YouTube crawling tool TubeKit (for more information, see [http://www.tubekit.org](http://www.tubekit.org)).
To generate our sample, the words “Proposition 8” and “Prop 8” were entered into TubeKit to obtain a list of videos related to the California ballot measure on same-sex marriage. From the list of 2,852 videos generated by TubeKit, a random sample of videos of 801 videos was selected by assigning each video a number and then using a random number generator to select the sample (see Thorson, Borah, Ekdale, & Namkoong, 2009 for more details about video sampling produces). Due to videos having no comments or the comment option being disabled, TubeKit collected comments from 236 of the 801 videos, and could only retrieved up to 1,000 comments per video. Therefore, the final sample used in this study includes the video content and comments from 236 videos. The videos range in date from June 18, 2008, to July 29, 2009, with about half of the videos uploaded before the November 4th election. The comments associated with the sample of videos ranged from 23 to 1,000 comments ($M = 204.05$, $SD = 261.52$, Median = 99).

To understand the nature and quality of discussion related to the type of video posted, we data was collected from both the video and their corresponding comments. Video data from the selected sample was gathered both by TubeKit on August 19th, 2008 and included (but was not limited to) date uploaded, number of views, video rank, running time of the video, and number of comments. The information collected by TubeKit was then combined with a more in-depth hand coding effort (see Appendix for complete codebook). Each video was coded for its position on the Proposition 8 debate (pro, against or neutral) and origin of the content (original or borrowed). Each video coded as original was further coded as to its form: scripted, filmed live event, or extemporaneous monologue. For the purposes of this study, the scripted and extemporaneous monologue categories were then collapsed into one category. Lastly, video tone was coded by indicating the presence of incivility and humor. The hand-coding process took place over three
weeks in August with seven trained coders achieving a moderate level of inter-coder reliability on a common subsample of 30 videos (Cohen’s Kappa= .67).

The comments were analyzed using a textual analysis program that allowed for the creation of specific dictionaries. Four dictionaries were created to capture common reasons a person may have for supporting or opposing Proposition 8. For example, the religion dictionary contained the words “God,” “bible,” “faith,” “Mormon Church,” and “religious belief” (for a complete list of dictionary words, see appendix). The legal dictionary contained the words “Bill or Rights,” “equal protection,” “constitution,” “activist judges,” and “separation of church and state.” The values dictionary contained the words “discrimination,” “equality,” “fair,” “human rights” and “tolerance.” And the children dictionary contained the words “schools,” “teaching,” “children,” “family” and “mother and father.” These particular dictionaries were chosen after examining the arguments presented on several websites supporting and opposing the proposition (e.g. protectmarriage.com and NoOnProp8.com). Although the four dictionaries do not cover all possible arguments posted on the comments boards, by limiting the number of categories coded, the process avoids being a mere word count with no distinction between genuine or bogus reasons (Cappella, Price, et al. 2002).

Additional dictionaries were constructed to gauge comment quality. The level of incivility present among video comments was measured by creating a dictionary of uncivil words and phrases. A dictionary for political figures/groups was created to count the number of comments that mention any member of the republican or democratic presidential ticket, or the words “democrat,” “republican,” “liberal,” or “conservative.” And lastly, in an attempt to gauge the level of direct references to voting on the proposition, a ‘yes on proposition 8’ dictionary included the words “support prop 8,” “vote for,” “vote yes,” “yes on,” and “yes on 8.”
Conversely, the ‘no on proposition 8’ dictionary included “oppose prop8,” “vote against,” “vote no,” “no on,” and “no on 8.”

Beyond developing a theoretical list of words associated with each of these reasons, we also used a deductive approach to ensure our lists included the words and ideas that the comments actually included. To better build these dictionaries, we reviewed the frequency of more common words and phrases used in the comments (any words listed over roughly 1 percent of the time). These frequently-used words and phrases were examined and included in the appropriate dictionary based on face-validity. All categories are mutually exclusive. For words/phrases that were ambiguous, a small sub-sample of comments was analyzed to determine if the word belonged in a given dictionary.

It is important to note that this study attempts to shed light on an area of research that has primary been explored through more in-depth qualitative approaches, or by using a smaller sample. A primary drawback of our approach involved the lack of details we have about comment posts. The mere counting of words does not imply we understand the context of how they words were used, nor that they were used in a way that mimics reason giving. This study examines the use of single words that fall into specified dictionaries are a proxy for the types of reasons people may have in support or opposition to Proposition 8. A smaller sample would be better equipped to explore the nuances of a comment poster’s motivation, intention, and direct engagement with other posters. However, what this study lacks in measurement depth and context it aims to make up in the ability to look for trends across a large sample of both videos and comments.

*Obtaining Video Content Scores*
The entire sample of comments was analyzed using the eight dictionaries. The textual analysis program counted the number of times a comment invoked a dictionary word. Therefore, a single comment that used the words “God” and “bible” would score a 1 in the religious category—signifying the use of a religious word in the posting, not the number of times a religious world was used in the single posting. Moreover, a single comment that used the words “God” and “kids” would score a 1 in both the religious and children category. After every comment received a score among the eight dictionary categories, the dictionary score were then aggregated to the video associated with the comment and divided by the total number of comments. The result is a video specific score for each of the eight dictionary categories that explain the percent of comments that evoke a specific type of language.

**Results**

To begin our analysis, we examined the frequency with which particular reasons appeared in the comments. In this descriptive analysis, we wanted to determine which reasons were being offered most commonly in response to videos about Proposition 8. To do so, we ran descriptive statistics which provided the mean levels of comments per video that address each of these reasons, as well as those which displayed incivility and those which expressly supported or opposed the proposition (see Table 1 below).

As the table indicates, religious language was the most commonly identified reason, with roughly 20% of the comments for each video using some type of religious language. The next most common reason given was the legal reason at roughly 14%, followed by language regarding children (9%) and values (7%).

Looking beyond the specific types of reasons provided, we next examined the level of incivility in the comments. Roughly 12% of the comments reverted to uncivil language, such as
the swear words and derogatory terms noted above. Many fewer comments provided explicit support or opposition to the proposition, and supportive and oppositional comments appeared with roughly the same frequency – each comprised just under 5% of the comments provided. Finally, the videos provoked very few references to specific political actors – under 2% of comments referenced these actors – and spurred only limited references to the video itself during the commentary, occurring only roughly 4% of the time. This may be due to the fact that half of our videos were taken from videos uploaded after the November 4th election, and therefore political figures were not as strongly tied to this specific issue. It appears that although videos did provoke significant commentary, most of these comments were not specifically referencing the video under which the comments are placed.

However, we are not only interested in specific types of reasons provided and their tone, but also in the connections between these reasons. In other words, we are interested whether particular types of reasons are being offered in conjunction with others, or with support or opposition for a particular position. Running some bivariate correlations provides preliminary answers to this question: language regarding values, children, and legal ramifications all appear to correlate together (see Table 2). Furthermore, values and religious language are also positively correlated, indicating that they often co-exist in commentary, but religious language is not linked to discussion of children or of legal reasons.

We next examine how these reasons match with the tone of comments and the position taken on the proposition. We find that incivility in the commentary is not linked to any specific reason – incivility is equally present across types of reasons being offered. Furthermore, incivility is not linked to either a more supportive or oppositional tone being taken in the commentary for that video, but those comments that specifically reference the video are also less
uncivil. We also see that oppositional language is highly correlated with supportive language, which is hardly surprising when remembering that the video itself, rather than the specific comments, is the unit of analysis. In other words, videos that provoke many comments in support are also likely to provoke oppositional comments to counter. Therefore, we see many of the reasons that appear for those videos with highly supportive commentary also appear for videos with oppositional commentary. That said, we can compare the strength of the correlations between videos with more supportive vs. more oppositional comments. Preliminary analysis suggests that discussion of children, values, and legal reasons are all more prominent for videos with more supportive commentary, while the discussion of religious reasons is significantly less frequent for videos with strongly oppositional commentary. Therefore, although the tone of the commentary remains the same regardless of the types of comments produced, we do see certain reasons being grouped together, and this set of reasons (values, children, and legal) are more frequent for those videos with strong supportive language in the commentary.

To address the relationship between video and comments we performed a series of multivariate correlations between video tone and comment language (see Table 3). To ensure any relationship between the video and its commentary is not accounted for by spurious relationships, we control for the number of times the video has been viewed, the number of people rating the video and its average rating, the running time of the video, and whether the video was uploaded before or after the election on November 4th. As expected, videos that were coded as uncivil were associated with a high level of uncivil language in their comments and were also less likely to use language involving children. On the other hand, humorous videos appear to be devoid of the language investigated in this study, as these videos were associated with low levels of value, legal, and religious language, as well as less direct discussion of support or
opposition for the video. Perhaps unsurprisingly, humorous videos did produce more discussion of the video itself, although this relationship is only marginal. These results suggest that humor may suppress discussion of the topic and the reasons behind it, instead focusing attention on the video itself. Although humor alone was not related to uncivil language, the interaction between humor and incivility did produce a high level of uncivil comments.

Differences in the creators of video content also produced variation in language used. Original videos (i.e. user-generated), as compared to borrowed videos, were negatively correlated to use of religious language, such that original videos produced lower levels of religious comments. Much like humor, these original videos produced more discussion of the video itself in the content. To further explore the relationship between original content and comment language, original videos were broken down into more specific categories. Results indicate that original content that was a filmed-live event (compared to a web-cam monologue or scripted scene) was positively correlated uncivil language and support for Proposition 8, and negatively correlated with language about religion and references to the video. These results indicate that both the topics and tone mentioned in comments differs depending on the creator of the video and the type of video content.

Lastly, the stance of the video appeared to impact the use of certain language. Videos that supported Proposition 8 were associated with higher levels of language evoking values, children, legal, God, and support of Proposition 8, and marginally lower levels of incivility.

As a final step, we also examine videos that were posted before and after the election to determine whether the relationship between supportive videos and the comments that result changes as a result (see Table 4). We are primarily interested between those videos that take a clear position on the proposition and the types of comments that they provoke. We do see some
clear differences in the types of comments are related to the video depending on the upload time. While videos posted before the election that are judged to support prop 8 produce comments that use more language dealing with values, with children, and with legal reasons. Conversely, those supportive videos posted after the election produce commentary skewed toward religious language. Furthermore, these supportive videos after the election also produce less uncivil language. Therefore, it is clear that the types of language and the tone of that language provoked by supportive videos did change as a result of the election context.

Discussion

Our study follows in a growing line of research that explores the transformation of the public sphere as one that is intrinsically linked to physical space to one that can exist in virtual space (for a comprehensive review, see Janssen & Kies, 2005). We extend this effort by analyzing the social media website, YouTube, and the use of a large sample of both videos and comments. Our results shed light on the relationship among comment language and videos, and how the election context plays an influential role.

First, within the comments we found the co-occurrence of types of languages— in other words, people were using certain referents in conjunction in making their arguments. For example, we find that although religious language is the most commonly used in comments about Proposition 8, it is only linked to discussion of values, whereas other potential reasons—using language that refers to children, legality, and values—were often grouped together in video commentary. Of course, we cannot know how integrated the use of this type of language was—that is, we cannot determine if the language is being presented in an argument-counterargument manner, or if the language is evoked in separate pages of a video’s comment board. It does,
however, provide a preliminary examination of what types of language are co-existing on a discussion thread for Proposition 8 videos.

Results from our analysis also indicate comment diversity within our video sample. Language that was supportive of Proposition 8 was associated with language in opposition to Proposition 8. In other words, a video’s comment page contained messages advocating both positions, which is a hopeful finding for the potential of social media sites to operate outside the “echo chamber” (Jamieson & Cappella, 2008). Additionally, we found evidence that some of the same types of language were being used across positions, such as language about children and values being used both in support of Proposition 8 and in opposition. This finding shows that people on both sides of the issue can evoke language about the same reason, even if not at the same rate. Our finding also provides hopeful evidence that “blinkered deliberation” (Goodin, 2000), which occurs when there is no-uptake of a message, may be less of a concern. Our findings indicates that within a single video, language about children and values was used in conjunction with comments about voting yes and voting no—suggesting people on both sides of the issue were addressing this reason.

Second, our findings indicate that both video tone and origin can alter the nature of commentary. Of our two video tone variables—incivility and humor—only incivility was related to uncivil comments. Thus, if a video’s content dips below the civility line, it allows comments to more readily drop to this level also. Interestingly, humor alone does not produce this relationship, but the interaction between incivility and humor is associated with a high level of comment incivility. Humorous videos also produced an interesting finding, such that the presence of humor tended to suppress language about all four reason categories and language about Proposition 8. It appears then, that humorous videos lead comments away from substantive
discussion about the topic and instead to focus on the video itself and its contents. These findings could be of especially significant in light of the tendency for more entertaining political videos to garner more YouTube views (Milliken et al., 2008) and the growing trend of comedic content fusing with politics (Moy, Xenos, & Hess, 2005).

For content origin, we found that original content, as opposed to borrowed content, was related to comment language about religion. This relationship may be due to religion being a subject that more original videos took up (whereas most borrowed videos where taken from TV news programming). Perhaps a more intriguing result, though not as easily explained, was found when examining different types of original content. We found that filmed-live events (compared to monologues or scripted scenes) produced a high level of uncivil language. We speculate that this finding may be attributed to the event being filmed. Protest footage dominated this category, and therefore, uncivil language may be best attributed to the combative nature of the filmed-live event. This result points to the connectivity between video features and comments, even beyond the explicit issue position taken.

Third, ideological stance in the video also influenced comment language. Our results indicate videos that took a clear supportive stance on Proposition 8 were associated with high levels of language use among all four reason categories. This finding suggests that “yes on Proposition 8” videos encouraged a diverse set of reasons in their commentary.

Furthermore, the impact of the position taken on commentary was dependent upon whether the video was posted before or after the election. Before the election, “yes on Proposition 8” videos were associated with the use of language involving values, children, and legal. After the election, “yes” videos were characterized by religious language and lower levels of incivility. This finding points to the shifting nature of commentary and its malleable nature. It
is likely that not only the types of reasons being offered before and after the election changed, but also that the video content itself changed. Without having coded for the types of reasons discussed in the video, this remains speculation. However, the difference between mobilizing a general electorate in favor of a ballot initiative and the atmosphere in wake of the election is likely to have produced these differences. Therefore, we note the importance of considering the context in which a video is uploaded and comments offered as being of particular significance in setting the tone and language of the discussion.

Taken together, our study sheds new light on the extent to which YouTube can facilitate high quality commentary indicative of a public sphere. By focusing on reason-giving (through the use of specific language) and incivility, we were able to assess the nature of commentary that a single video produces. We found that the four categories for reasons were present across our video sample and often used in co-occurrence with other reasons. Additionally, we found videos that were uncivil or humorous, or of a filmed-live event tended to decrease the quality of comments that are generated. And lastly, the pre- vs. post-election context appears to have sparked very different responses to the content uploaded on YouTube about this proposition.

There are several limitations to our study that should be considered. First, due to limitations with Tubekit, our final sample is not representative of YouTube videos about Proposition 8. Although our initial list of YouTube videos was taken at random, Tubekit was not able to pull comments from all the randomly selected videos. This decreased our sample substantially and in the process randomness was sacrificed. Therefore, it could be the results observed in our study are unique to our study and are not representative of all video and comments on Proposition 8, or YouTube more generally. Similarly, Tubekit was only able to pull up to 1,000 comments from each video. Because of this, there were 12 videos in our sample
of 236 videos whose full comments were not analyzed. We are confident, however, that by analyzing 1,000 of these comments we obtained a good basis for characterizing the nature of comment postings on a given video.

Second, our results of our study are constrained by the language we coded. Before focusing on the language categories of religion, values, legal, and children we researched advocacy websites on both sides of the issue to determine the most salience reasons for supporting or opposing Proposition 8. It is possible that other, frequently evoked, reasons were present in the commentary and we failed to code for it. Although possibility exists, we did not have the ability to code all unique reasons posted to the comment boards and therefore focused on what our research told us to be the more salient reasons. It should be noted, however, that that these categories of reasons and tone ultimately provided coding for over half of the comments in our sample, indicating that we did highlight some of the most common ideas.

The third possible limitation involves the use of specific language to represent reason-giving and comment quality. Our approach to analyzing 48,566 individual posts across 236 videos did not allow for a more detailed extraction of comment content. Indeed, our results only touch on comment quality and the relationship between video and comments, requiring us to make assumptions about how this language is being used. Furthermore, this study did not explore aspects of reflexivity among posts. Goodin (2000) cautions that discussion absent uptake and engagement should be referred to as “blinkered deliberation”—where people are more concerned about “posting notices for all to see” than actively engaging each other (p. 91). More details about on-going threads or repeated posts by a single user would provide a more complete picture of comment quality. Also, future research should investigate how additional video features juxtapose with the posted comments. For example, coding the videos for reason-giving as well as
the comments would shed more light on the impact on video content has in commentary. Similarly, relevant aspects of deliberative theory such as story-telling and persuasive appeals (fact-based versus emotional appeals) could alter the nature of comments (Chang, 2001; Young, 1996).

**Conclusion**

Social networking websites, such as YouTube, offer users the opportunity to share user-generated content and directly engage with others. The 2008 election, deemed the first “YouTube election” (Cortese & Proffitt, 2009), ushered in the use of social media for political campaign purposes. Although these sites are not exclusively political, within specific enclaves, political speech can take hold and flourish. Scholars of the public sphere should continue to follow this trend and extend their work to areas of political social media. It should be noted that when extending traditional notions of the public sphere into an online environment, scholars should expect communication to take “different forms in different arenas” (Habermas, 2006, p.415).

*Total word count: 7,073
Date: August 31, 2009*
References


Bruce, V. (1996). The role of the face in communication: Implications for videophone design. *Interacting with Computers, 8*(2), 166-176.


Thorson, K., Borah, P., Ekdale, B., & Namkoong, K. (2009). YouTube and Proposition 8: A case study in video activism. Paper to be presented at the Association for Internet Research, Milwaukee, Wi


Appendix A: Codebook

The codebook for use in this content analysis was developed iteratively after viewing a wide variety of Proposition 8 videos. Eight coders cross-coded an initial sample of 40 videos as a test of the coding instructions. The codebook was then revised and all coders analyzed an additional sample of 30 videos in order to establish the reliability of the measures. Each video was uniquely identified by the 11-character string designated in its YouTube url.

1. **Video removal.** Select yes if the video has been removed. Otherwise select no.
2. **Identifying Prop 8 videos.** Is this a Prop 8 video? If there is any mention of Proposition 8, including in the video tags, choose yes.

*Now watch the video and code the remaining questions.*

3. **Content origin.** Is the content original or borrowed? Borrowed: Content is clearly identifiable as belonging to another source (i.e. a news logo is present). Original: Anything else. Be sure to check the user name to see if it matches the content (cbs content posted by cbsnews is original, not borrowed).
   a. For **original** content:
      i. Where did the original content come from?
         1. Scripted: Produced by its creator (not necessarily the poster, though it could be). May include actors, planned or scripted address to the camera.
         2. Filmed live event: May include footage from press conferences, speeches, rallies (NOTE: There may be editing or voiceovers, but if footage is of a live event (press conference, hearing, protest, etc) it belongs in this category.). HOWEVER, if the person filming the live event has a substantial amount of face time, code as monologue.
         3. Monologue: Webcam speech, extemporaneous, can include more than one person. Lacks a script.
   4. **Position on Prop 8.** Holistically, what is your impression of the position of the video? If it appears to be news coverage, default to "none" unless a clear position is taken by a newscaster or guest without opposition. A position taken in line with a position on prop 8 (for example, "I support gay marriage") without explicitly mentioning prop 8 should still be coded as taking a position.
   5. **Presence of Incivility.** Is the video civil or uncivil? (Incivility is indicated by slapping, yelling at someone (not into a crowd or chanting, etc), fighting, killing, violence, strong profanity even in signs, and derogation of the other side (describing them as terrorists, insane, etc). Even if YOU don't find it offensive, presence of any of these attributes indicates incivility.)
   6. **Presence of Humor.** Is the video INTENTIONALLY humorous?

Appendix B: Dictionary Lists

**Religion:** abomination, agnostic, atheist, bible, Catholic, Catholic church, Christ, Christianity, Christians, church, commandment, commandments, Corinthians, faith, God, God’s law, God’s plan, Gomorrah, Jesus, Jesus Christ, Joseph Smith, LDS, LDS church, Leviticus, lord, Mormon,
Mormons, Mormon church, new testament, old testament, pastor, priest, religion, religious, religious belief, religious institution, Satan, scripture, sin, sinner, Sodom, stone, word of God (total words: 45)

**Values:** consenting adults, discrimination, equal, equality, fair, freedom, human beings, interracial marriage, intolerance, justice, morals, second-class citizens, segregation, slavery, tolerance, values, human rights (total words: 17)

**Legal:** a right, activist judges, amendment, bill of rights, CA constitution, California constitution, California law, Canada, civil rights, Congress, constitution, constitutional amendment, equal protection, equal rights, Europe, freedom of religion, freedom of speech, fundamental right, judges, law, legal, Massachusetts, property, pursuit of happiness, religion and government, religious freedom, rights, separate but equal, separation of church and state, state constitution, state law, Supreme Court, the right (total words: 34)

**Children:** antichildren, antifamily, child, children, dad and mom, family, father, kid, kids, mom and dad, mother, mother and father, parents, public school, public schools, school, schools, teach kids, teacher, teaching (total words: 20)

**Uncivil:** ass, asses, assfucker, asshole asshole, bastard, bastards, bigot, bigoted, bitch, bitches, bs, bullshit, burn in hell, cock, crap, disgust, disgusting, douchebag, dumb, dumbass, fag, fags, faggot, faggots, fool, freak, fuck, fuck-up, fucker, fuckers, fuckin, hypocrite, idot, moron, mother fucker, nasty, nigger, pathetic, pervert, pussy, retard, ridiculous, shit, stupid, whore, wtf, the hell (total words: 48)

**Political Figures:** Barack Obama, Biden, Conservative, democrat, Joe Biden, John McCain, liberals, McCain, Obama, Palin, republicans, Sarah Palin, Democratic Party, Republican Party (total words: 14)

**Support:** support prop 8, vote for, vote yes, yes on, yes on 8 (total words: 5)

**Oppose:** oppose prop 8, vote against, vote no, no on, no on 8 (total words: 5)
Appendix C: Tables

Table 1: Descriptive statistics regarding language used in the comments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values language</td>
<td>24</td>
<td>7.29</td>
<td>4.98</td>
</tr>
<tr>
<td>Children language</td>
<td>34.88</td>
<td>8.52</td>
<td>7.27</td>
</tr>
<tr>
<td>Legal language</td>
<td>50</td>
<td>13.78</td>
<td>5.68</td>
</tr>
<tr>
<td>Religious language</td>
<td>88</td>
<td>19.51</td>
<td>14.25</td>
</tr>
<tr>
<td>Uncivil language</td>
<td>46</td>
<td>12.88</td>
<td>7.42</td>
</tr>
<tr>
<td>Oppositional language</td>
<td>32.43</td>
<td>4.39</td>
<td>6.55</td>
</tr>
<tr>
<td>Supportive language</td>
<td>32</td>
<td>4.33</td>
<td>5.68</td>
</tr>
<tr>
<td>Political figures named</td>
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<td>1.52</td>
<td>3.58</td>
</tr>
<tr>
<td>Video referenced</td>
<td>28</td>
<td>3.97</td>
<td>4.66</td>
</tr>
</tbody>
</table>

These numbers all refer to the percentage of comments associated with a particular video using these types of language.
Table 2: Bivariate correlations between different types of language

<table>
<thead>
<tr>
<th>Dictionary Language</th>
<th>Values</th>
<th>Children</th>
<th>Legal</th>
<th>Religious</th>
<th>Incivility</th>
<th>Video</th>
<th>Oppose</th>
<th>Support</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>Values</td>
<td>1</td>
<td>.289***</td>
<td>.493***</td>
<td>.130*</td>
<td>-.012</td>
<td>-.122#</td>
<td>.143*</td>
<td>.361***</td>
<td>236</td>
</tr>
<tr>
<td>Children</td>
<td>.289***</td>
<td>1</td>
<td>.222**</td>
<td>.031</td>
<td>.015</td>
<td>-.073</td>
<td>.253***</td>
<td>.417***</td>
<td>236</td>
</tr>
<tr>
<td>Legal</td>
<td>.493***</td>
<td>.222**</td>
<td>1</td>
<td>.114#</td>
<td>-.002</td>
<td>-.187**</td>
<td>.025</td>
<td>.253***</td>
<td>236</td>
</tr>
<tr>
<td>Religious</td>
<td>.130*</td>
<td>.031</td>
<td>.114#</td>
<td>1</td>
<td>-.088</td>
<td>-.149*</td>
<td>-.197**</td>
<td>-.009</td>
<td>236</td>
</tr>
<tr>
<td>Incivility</td>
<td>-.012</td>
<td>.015</td>
<td>-.002</td>
<td>-.088</td>
<td>1</td>
<td>-.268**</td>
<td>-.070</td>
<td>.086</td>
<td>236</td>
</tr>
<tr>
<td>Video</td>
<td>-.122#</td>
<td>-.073</td>
<td>-.187**</td>
<td>-.149*</td>
<td>-.268***</td>
<td>1</td>
<td>.102</td>
<td>-.038</td>
<td>236</td>
</tr>
<tr>
<td>Oppose</td>
<td>.143*</td>
<td>.253***</td>
<td>.025</td>
<td>-.197**</td>
<td>-.070</td>
<td>.102</td>
<td>1</td>
<td>.559***</td>
<td>236</td>
</tr>
<tr>
<td>Support</td>
<td>.361***</td>
<td>.417***</td>
<td>.253***</td>
<td>-.009</td>
<td>.086</td>
<td>-.038</td>
<td>.559***</td>
<td>1</td>
<td>236</td>
</tr>
</tbody>
</table>
Table 3: Multivariate relationship between the video and the commentary

<table>
<thead>
<tr>
<th>Video Content</th>
<th>Dictionary Language</th>
<th>Values</th>
<th>Children</th>
<th>Legal</th>
<th>Religious</th>
<th>Incivility</th>
<th>Video</th>
<th>Oppose</th>
<th>Support</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incivility</td>
<td></td>
<td>-.083</td>
<td>-.135*</td>
<td>-.020</td>
<td>.048</td>
<td>.153*</td>
<td>-.025</td>
<td>-.044</td>
<td>-.067</td>
<td>225</td>
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<tr>
<td>Humor</td>
<td></td>
<td>-.210**</td>
<td>-.129#</td>
<td>-.176**</td>
<td>-.161*</td>
<td>.085</td>
<td>.115#</td>
<td>-.144*</td>
<td>-.114#</td>
<td>236</td>
</tr>
<tr>
<td>Incivility*Humor</td>
<td></td>
<td>-.098</td>
<td>-.079</td>
<td>-.107</td>
<td>-.062</td>
<td>.133*</td>
<td>.042</td>
<td>-.050</td>
<td>-.030</td>
<td>225</td>
</tr>
<tr>
<td>Original</td>
<td></td>
<td>-.060</td>
<td>.069</td>
<td>-.028</td>
<td>-.180**</td>
<td>-.012</td>
<td>.262***</td>
<td>.033</td>
<td>-.054</td>
<td>225</td>
</tr>
<tr>
<td>Live event</td>
<td></td>
<td>.168*</td>
<td>-.004</td>
<td>.033</td>
<td>-.132#</td>
<td>.340***</td>
<td>-.236**</td>
<td>.198</td>
<td>.280***</td>
<td>174</td>
</tr>
<tr>
<td>Position (yes)</td>
<td></td>
<td>.198**</td>
<td>.258***</td>
<td>.183*</td>
<td>.205**</td>
<td>-.129#</td>
<td>-.054</td>
<td>-.035</td>
<td>.174*</td>
<td>190</td>
</tr>
</tbody>
</table>

Controlling for the number of times the video has been viewed, the number of people rating of the video and its average rating, the running time of the video, and whether the video was uploaded before or after the election on November 4th.

Table 4: Multivariate relationship between the supportive videos and comments, pre and post election

<table>
<thead>
<tr>
<th>Video Content</th>
<th>Dictionary Language</th>
<th>Values</th>
<th>Children</th>
<th>Legal</th>
<th>Religious</th>
<th>Incivility</th>
<th>Video</th>
<th>Oppose</th>
<th>Support</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-election</td>
<td></td>
<td>.264**</td>
<td>.376***</td>
<td>.338**</td>
<td>.088</td>
<td>-.092</td>
<td>-.010</td>
<td>-.043</td>
<td>.178#</td>
<td>98</td>
</tr>
<tr>
<td>Post-election</td>
<td></td>
<td>.074</td>
<td>-.027</td>
<td>-.035</td>
<td>.412***</td>
<td>-.257*</td>
<td>-.074</td>
<td>-.045</td>
<td>.058</td>
<td>87</td>
</tr>
</tbody>
</table>

Controlling for the number of times the video has been viewed, the number of people rating of the video and its average rating, and the running time of the video.