

# Youth comprehension of political messages in YouTube videos

new media & society I-20 © The Author(s) 2015 Reprints and permissions: sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/1461444815611593 nms.sagepub.com



# Benjamin T Bowyer and Joseph E Kahne

Mills College, USA

# Ellen Middaugh

San Jose State University, USA

### **Abstract**

This article investigates the extent to which young people are able to comprehend the political messages contained in satirical videos that circulate online. We do so through an analysis of responses to videos embedded within an online survey of 15- to 25-year-olds (N=2070) conducted in 2011. Respondents were randomly assigned to view one of two short, humorous YouTube videos relating to immigration policy and were then asked questions that tested their comprehension of what they had seen. Substantial proportions of our sample were unable to answer these correctly. Further analysis indicates that individuals' levels of political knowledge and their predisposition to agree with the message contained in the video are strong predictors of comprehension. These findings indicate that the potential impact of incidental exposure to online political communications is smaller than many scholars have assumed, particularly when the message is inconsistent with the viewer's prior beliefs.

### **Keywords**

Comprehension, motivated reasoning, social media, political knowledge, youth, YouTube

As the Internet and digital media facilitate the circulation of political messages outside the traditional channels of print or broadcast media, new opportunities arise for individuals to express their views and to engage with multiple perspectives. In particular,

### Corresponding author:

Benjamin T Bowyer, School of Education, Mills College, 5000 MacArthur Blvd., Oakland, CA 94613, USA. Email: bbowyer@mills.edu

the diversity of viewpoints that circulate online has the potential to expose individuals to a wider range of information and perspectives than they might typically encounter in their face-to-face social interactions (Brundidge, 2010; Papacharissi, 2002). Moreover, the Internet has changed the dynamics of media influence from a model that privileges "distribution" of information from a small number of producers to a large citizenry to one that privileges "spreadability" of information that circulates through social networks, giving the large body of readers greater influence on how information is shared and attended to (Jenkins et al., 2013). This increased exchange of information is especially consequential for youth, who have grown up in this new media environment and rely more heavily on online channels than do older adults. In particular, the online circulation of politically relevant media between peers means that even when young people are online for purposes other than seeking political news, they are likely to encounter political communications circulated in their social networks. For example, according to a 2013 Pew survey, 78% of people who get news from Facebook are on the site for other reasons, and young people are especially likely to fall into this class of inadvertent news consumers (Mitchell et al., 2013). In contrast to the ideological polarization that occurs when people intentionally seek out political information and discussion online (Bennett and Iyengar, 2008; Stroud, 2010), incidental exposure to political information online has been shown to be associated with greater exposure to diverse viewpoints (Wojcieszak and Mutz, 2009), knowledge of civic affairs (Tewksbury et al., 2001), and political participation (Kim et al., 2013).

However, while most research on such exposure assumes that individuals comprehend the political messages that they encounter, there is considerable reason to doubt that this is the case. For one thing, background knowledge about politics is distributed unevenly in the public (Converse, 1964; Delli Carpini and Keeter, 1996; Luskin, 1987) and this type of knowledge is strongly related to individuals' awareness of current events (Price and Zaller, 1993) and to their ability to provide reasons for opposing points of view (Price et al., 2002). In addition, research on motivated reasoning (Lodge and Taber, 2013) shows that prior beliefs exert a central influence on the processing of political information. As a result, arguments that are contrary to one's own predispositions are particularly challenging to comprehend. That is, both cognitive engagement with politics and prior attitudes may serve as lenses that shape how youth interpret the messages they receive when exposed to political communications.

In this article, we investigate the extent to which young people comprehend the sorts of political material that circulate online and how this comprehension is affected by their political knowledge and predispositions. We examine responses to an online video embedded within the Youth Participatory Politics Survey (YPP), administered in early 2011 to a nationally representative sample of 2070 US youth. Respondents were randomly assigned to view one of two short YouTube video clips (one liberal and one conservative) that presented humorous commentary on the immigration debate. We find that a substantial portion of our sample was unable to answer basic comprehension questions immediately after viewing these videos. In addition, comprehension is strongly related both to participants' general level of political knowledge and to their prior opinion about immigration. We conclude by discussing the implications of these findings for the effects of the circulation of political content through digital and social media.

# Online exposure to political information and opinions

A considerable amount of recent research has focused on the question of whether the plethora of news sources accessible in the Digital Age leads individuals to limit their exposure to information that challenges their preexisting beliefs. While mass media used to expose most Americans to a greater range of perspectives than they encountered in their largely homogenous interpersonal contacts, these effects were contingent upon the limited amount of choice provided by the media environment (Mutz and Martin, 2001). The expansion of options through cable television and the Internet has increased the potential for news consumers to select sources on the basis of political ideology and partisanship. Survey evidence and experimental studies establish that partisan viewers of cable television news demonstrate a preference to receive their news from ideologically aligned media outlets (Iyengar and Hahn, 2009; Stroud, 2011). The even greater diversity of news and opinion sources on the Internet leads to the prediction that even more ideological sorting will occur online (Bennett and Iyengar, 2008). Empirical evidence, however, suggests that ideological segregation in online news consumption is low in both relative and absolute terms and that it has not risen despite the exponential increase in the number of online sources (Garrett et al., 2013; Gentzkow and Shapiro, 2011).

Importantly, some new technologies, social media in particular, often expose individuals to political information even when they are not seeking it. Tewksbury et al. (2001) observed that the rise of portal websites in the late 1990s meant that Internet users were "increasingly likely to encounter news items, even when searching the Web for specific non-news information" (p. 537). Recent survey evidence indicates that the frequency with which people use social media sites (Kim et al., 2013), search for news, and engage in political discussion online (Brundidge, 2010) are all positively associated with heterogeneity in their political discussion networks, although the effect of online political discussion on heterogeneity does not hold for individuals with strong political partisanship (Brundidge, 2010). This latter finding is consistent with Wojcieszak and Mutz's (2009) study of participants in online chat rooms and message boards: those who participated in political discussion boards overwhelmingly encountered others who had political views similar to their own, but people involved in non-political groups, such as hobbies, were often exposed to a diversity of political perspectives. In sum, while the Internet offers ample opportunity for partisans to seek out like-minded perspectives, there is strong evidence to suggest that when people are online for purposes other than political discussion, they are often incidentally exposed to news and opinions that run counter to their own predispositions.

The circulation of political information through online social networks could have especially important consequences for young people, who are at a developmental stage where their political views are still crystallizing (Sears, 1983) and because digital media are central to Millennials' patterns of news consumption and social interaction (Kahne et al., 2012). For example, a survey of 15- to 25-year-olds indicates that 52% of American youth communicate with friends and family via social network services on a daily basis and that 45% received news about political issues from friends or family via Twitter or Facebook at least once a week (Cohen et al., 2012). Moreover, younger adults are more engaged with news through social media than are their older counterparts (Mitchell et al.,

2013). These new media also provide alternative channels than can circumvent the traditional gatekeepers of print or broadcast media and youth may be exposed to a wider range of viewpoints than in previous media landscapes (Kahne et al., 2015).

Online videos are of particular and growing importance among the types of political content to which youth are likely to be exposed. A 2013 Pew survey indicates that 51% of US adults used YouTube, one-fifth of these users (10% of the population) got news from the site, and that 39% of those who got news from YouTube were between 18 and 29 years-old (compared with 21% of the adult population) (Holcomb et al., 2013). YouTube was an extremely prominent force in the 2012 presidential election. Nearly 600,000 videos mentioning Mitt Romney or Barack Obama were uploaded to YouTube in between April 2011 and August 2012 and were viewed close to 2 billion times (YouTube Trends, 2012). Moreover, YouTube has become one of the most important and sizable platforms for participatory media (Burgess and Green, 2009). In all, 95% of the content viewed was user-generated rather than produced by any of the major presidential campaigns (Sifry, 2012). Thus, not only has there been a quantitative increase in the amount of political content circulated online, but there has also been an equally important qualitative shift in the nature of this content.

For one thing, because individuals have the capability to distribute their own political messages to a wide audience outside the traditional channels of political campaigns or the mainstream media, the number of voices in the public sphere has increased exponentially. A content analysis of the most-viewed YouTube political news videos in the 2008 election campaign indicates that even though the majority of content was produced by and featured "elites," non-elites dominated the distribution of the videos (Dylko et al., 2012). Moreover, the "serious" content of mainstream news media reporting and campaign advertising has been upstaged by content that is often satirical or parodic (Rill and Cardiel, 2013). For example, of the aforementioned YouTube videos, the single most popular was a mashup video, "Barack Obama Singing Call Me Maybe by Carly Rae Jepsen" (YouTube Trends, 2012). President Obama's March, 2014 appearance on Zach Galifianakis' Internet comedy show, "Between Two Ferns," to encourage young people to comply with the Affordable Care Act led to a 40% increase in traffic to the HealthCare.gov website (Aigner-Treworgy, 2014), demonstrating the political potency of parody. Moreover, if the circulation of these sorts of videos has more to do with their entertainment value than with their particular political point-of-view, then it has the potential to increase viewers' exposure to counter-ideological messages.

# Comprehension of political communications

While the increase in the amount of political information to which young people are exposed to online is unmistakable, the qualitative shift in the nature of content raises the question of what, if anything, youth are learning from these media. However, little research has been conducted on the effects that this sort of content on YouTube and other social networking sites might have on its viewers' political information or opinions. In particular, the literature on incidental exposure largely takes for granted that individuals exposed inadvertently to an online communication will comprehend the

views that they encounter. Studies of the effects of social media have generally found that their use does not lead to increased levels of political knowledge or efficacy (Baumgartner and Morris, 2010; English et al., 2011; Rill and Cardiel, 2013; Towner and Dulio, 2011). This failure to observe clear effects of online videos raises a question that, to our knowledge, has yet to be explored: do individuals comprehend political material they view online?

One approach to this question identifies individuals' cognitive engagement with politics as the key factor that determines whether they will encounter and comprehend a political message conveyed through the media. The "Receive-Accept-Sample" (RAS) model of opinion change proposed by Zaller (1992) emphasizes the importance of the cognitive process through which a communication is assimilated. The first stage of the model, reception, involves individuals' exposure to a message and their comprehension of that message. Importantly, Zaller (1992) draws attention to the fact that "different people can be exposed to the same message and yet receive quite different messages, or even no intelligible message, depending on their prior knowledge about the issue" (p. 274, emphasis in original). Studies have shown that prior political knowledge is an important predictor of how much people learn from the news (Price and Zaller, 1993; Rhee and Cappella, 1997), that is, cognitive engagement with politics is a key determinant of whether individuals will absorb available political information. Similarly and more specifically, Eveland's (2001) cognitive mediation model posits that learning from news content is facilitated through the cognitive processes of attention and elaboration. Learning is most likely to occur when an individual consciously attends to news content and subsequently links this new information with information stored in memory. Since individuals who display relatively high levels of political knowledge also tend to have greater political interest (Luskin, 1990) and better organized knowledge structures to process information (McGraw and Pinney, 1990; Rhee and Cappella, 1997), they are more likely to learn from news media.

Individuals' comprehension of political messages may also be limited by a bias against information that is contrary to one's preexisting beliefs. While Zaller's RAS model predicts that political predispositions do not influence whether an individual will encounter and comprehend a message, the theory of motivated reasoning (Lodge and Taber, 2013; Taber and Lodge, 2006) contends that prior attitudes influence all stages of the processing of political information, including reception. The bias that results from people's motivation to maintain their prior beliefs is pre-conscious and largely unavoidable; even irrelevant and unnoticed affective cues have effects on recall and evaluation of political issues (Lodge and Taber, 2013). Laboratory experiments have demonstrated that individuals take longer processing information that runs counter to their prior attitudes (Redlawsk, 2002), evaluate arguments congruent with their predispositions more favorably than contrary arguments (Taber and Lodge, 2006), and demonstrate a preference for attitudinally congruent information when allowed to select the source of the arguments that they read (Redlawsk, 2002; Taber and Lodge, 2006). That is, prior attitudes bias all stages of the processing of a political communication, including the comprehension and recollection of its message.

Motivated reasoning may be particularly relevant to the comprehension of political humor, because individuals process comedic content differently than they do news. Kim and Vishak (2008) randomly assign participants in their experiment to view segments on the same political topic from television news (NBC and CNN evening news shows) or an entertainment show (*The Daily Show with Jon Stewart*) and find that the types of information processing vary across the media conditions. Specifically, viewers of entertainment media tend to rely more upon affect-driven processing of political information than those exposed to news media, who are more likely to use a memory-based process. Further studies indicate that these biases are especially strong in the processing of humor that is satirical or otherwise ambiguous in their message. For example, while liberal viewers of *The Colbert Report* tend to identify the host's conservative persona as satire, conservatives tend to see his performance as sincere (LaMarre et al., 2009). These findings demonstrate that individuals are biased to interpret ambiguous humor in a manner consistent with their own political views. Consequently, these biases mean that incidental exposure to satirical online videos may lead to polarization based on political predisposition rather than learning or persuasion.

In summary, we can distinguish two stages in the process by which an individual receives a political communication. The first stage of the process, attentiveness, involves individuals' exposure to a particular communication. The second stage, comprehension, involves individuals correctly perceiving the message contained in the communication. Both stages of the process could be influenced by the individuals' cognitive engagement with politics or prior attitudes. In the first stage, these two factors act as filters that determine which political communications an individual will be exposed to. In the second stage, cognitive engagement and predispositions serve as lenses, focusing or distorting the communication to which the individual is exposed in ways that change the likelihood that the intended message will be received. While the literature on selective exposure demonstrates the impact of predispositions and interest on the exposure stage, much less research has been done on the comprehension stage. Given the growing importance of political satire and circulatory media as sources of political information, especially for youth, we are interested in exploring the extent to which the sorts of videos circulated online are understood by their viewers. Specifically, we investigate the following research questions:

Research Question 1. How well are young people able to comprehend political messages contained in satirical online videos?

Research Question 2. What individual-level factors affect whether youth are able to comprehend these videos?

The literature cited above leads us to two primary hypotheses, which are not mutually exclusive, relating to the second question:

*Hypothesis 1.* Comprehension of satirical online videos will be positively related to cognitive engagement with politics (Zaller, 1992).

*Hypothesis 2.* Comprehension will be greatest among those attitudinally predisposed to agree with the political message in the video (Lodge and Taber, 2013).

### Data and measures

We explore the capabilities of young people to understand satirical political content that circulate online through an analysis of responses to two online videos embedded within the 2011 Youth Participatory Politics Survey. The survey was administered by Knowledge Networks (now GfK) between 9 February and 14 July 2011 to a nationally representative sample of US youth between the ages of 15 and 25. The survey was conducted online and by telephone in both English and Spanish; however, since the videos were administered only to those taking the English-language version online (N=2070), phone and Spanish-language respondents are excluded from the analyses reported here.

Participants were exposed to the videos in the context of a survey regarding digital media use and political participation. Respondents were randomly assigned to view one of two short video clips that presented humorous commentary on the immigration debate at the time. The videos were selected from YouTube as examples of the sort of user-generated content—short and humorous—that often circulates widely online. The videos are of similar length (approximately 30 seconds) and feature actors whose political views would not be previously known to the study's participants. Indeed, the videos' creators and actors meet Dylko et al.'s (2012) definition for "non-elites," that is, they are not affiliated with a major party, government agency, or major organization, nor are they celebrities. At the same time, the two videos were also selected to represent opposing stances on the debate surrounding immigration policy that was prominent at the time the study was conducted. This was done because viewers' comprehension of the video might be affected by the congruence between their beliefs and the video's message (see Hypothesis 2 above).<sup>2</sup>

One group (n=995) saw a video, "What's Your Plan for Illegal Immigration?," created by Bryan Barton for the CNN/YouTube Republican Party presidential debate in November 2007.<sup>3</sup> This amateur video mocks the laxness of the enforcement of immigration laws. It pictures Mr. Barton—who appears to be an Anglo in his twenties—hopping over a fence at the US-Mexico border as the words "Bryan Barton, Illegal Immigrant" appear on the screen. Stating that "I, like millions of others, just illegally immigrated into the United States of America," Mr. Barton goes on to mock the Democrats' immigration policy (an alarm sounds and the word "liberal" flashes on the screen as Mr. Barton waves to the border and announces, "Free Healthcare, come on over"), before turning to the camera to direct his question, "What's your plan?," for the Republican candidates.

The second group (n=1075) was assigned to watch "Travel Arizona Part 2—It's a State of Mind."<sup>4</sup> This video was professionally produced by Andy Cobb and Ithamar Enriquez of the Second City Network in May 2010. The video lent its support to the boycott of Arizona following that state's passage of the anti-immigration SB 1070, which was criticized for promoting racial profiling. The creators re-worked a promotional video originally created by the Arizona Office of Tourism entitled "Free to Be AZ," which begins with images of the state's desert landscapes as smiling, Anglo actors praise its inspirational nature. The video then cuts to Mr. Enriquez, a brown-skinned man who halts his own half-hearted praise for Arizona and runs off camera in dread upon hearing a police siren. Voiceovers deliver the punchlines, "Arizona, it's not for everybody," and "Come for the barren desert wasteland, stay for the hospitality," as Mr. Enriquez is shown being forced to present identification to a police officer.

In sum, the main difference between the videos is that they present opposite positions regarding the enforcement of immigration laws. However, the videos differ in other respects that might affect individuals' ability to comprehend them. "Travel Arizona" is professionally produced, while "What's Your Plan?" is not; the former is subtly satirical and the latter presents its message in a more blunt manner. Moreover, while there is a degree of ambiguity in both videos—in neither instance does the video's star state his own position on the issue—the ambiguousness seems greater in "Travel Arizona," which does not explicitly mention immigration at all. Indeed, the essence of that video's satire—the juxtaposition of the welcoming message of the tourist board with the racial profiling of Mr. Enriquez—requires viewers to make the association between Arizona and SB 1070 on their own. That is, a literal understanding of the video would not be sufficient to comprehending the video creator's intended message. Though coverage of SB 1070 was prominent in the months prior to administration of the survey experiment (Fryberg et al., 2012), comprehension of "Travel Arizona" would seem to require a greater degree of awareness about the policy debate than "What's Your Plan?," which a savvy viewer likely could identify as satirical without any knowledge of the political parties' positions on immigration.

# Comprehension of the video

Immediately following the administration of the videos, participants were asked two questions that measured their comprehension of the video. The first question asked respondents to identify whether "the creator of the video would support measures to toughen immigration laws." The second asked them to indicate which piece of information would be "most useful for judging whether the main argument in the video is something that people should be concerned about." For each video group, the first answer choice related to the video's main message while the other two choices were not germane to either video and were identical across the two conditions.<sup>5</sup> A summary measure of comprehension is created by summing the number of correct of responses to these two questions.<sup>6</sup>

# Political knowledge

We operationalize respondents' level of cognitive engagement with politics through a standard measure of political knowledge: the number of correct responses that respondents provided on a five-item battery of questions about the American political system (Delli Carpini and Keeter, 1993). While this variable only captures a factual dimension of political sophistication and not the structural dimension by which knowledge is organized (Eveland et al., 2004), past research indicates that this sort of knowledge of political facts is a strong predictor of the ability to recall news stories (Price and Zaller, 1993).

# Attitudes toward immigrants

Participants' predispositions to agree with the messages presented in the videos are measured by an item about the economic impact of immigrants. This question was asked

prior to the administration of the online videos, so it cannot be affected by the participants' assigned video condition.

# Control variables

Past research indicates that media use habits, particularly the consumption of political news, are correlated with political knowledge (Sotirovic and McLeod, 2004). The survey contains a battery of questions regarding respondents' use of a variety of news sources, which we group into three types: traditional sources (newspapers, magazines, television, and radio) accessed offline, traditional sources accessed online, and online participatory sources (online communities, Twitter, Facebook, blogs, and YouTube). Political interest is measured on a scale in which respondents' indicated their agreement with the statement that, "I am interested in political issues." We also include measures of the frequency of both face-to-face and online political discussion. In addition, since discussing politics with one's family has been shown to be particularly important for youth political engagement (Hively and Eveland, 2009), we include a measure of respondents' political discussions with their parents. Finally, we include a set of social and demographic controls, including race, ethnicity, gender, age, education (whether the respondent was currently attending high school or college, and whether the respondent had completed a college degree), and country of birth.

# Method

We test Hypotheses 1 and 2 by estimating multivariate models of participants' comprehension of the video to which they were randomly assigned. Since this dependent variable can take three values (0, 1, or 2 correct responses), it is modeled with ordered logit (Cameron and Trivedi, 1998). A dummy variable is included to capture the effects of the "What's Your Plan?" video condition relative to "Travel Arizona" (the baseline category). Hypothesis 2 predicts that attitudes toward immigrants will have opposite effects on the two immigration videos—agreement that immigrants take economic resources from people born in the United States is expected to be positively related to comprehension of "What's Your Plan?" and negatively related to comprehension of "Travel Arizona." Consequently, it is operationalized by interacting video condition with attitudes toward immigrants. In addition, an interaction between video and political knowledge is included to test whether Hypothesis 1 is supported in both video conditions.

# **Results**

We begin our analysis by evaluating the extent to which participants exposed to the YouTube videos were able to correctly answer the two comprehension questions. As Figure 1 demonstrates, a large proportion of our sample was unable to answer these questions immediately after exposure to the videos. In general, participants appeared to have a harder time understanding the message of "Travel Arizona" than that of "What's Your Plan?" This comprehension gap is particularly wide for the question regarding the position of the video's creator on immigration laws: while 63% of those who viewed the

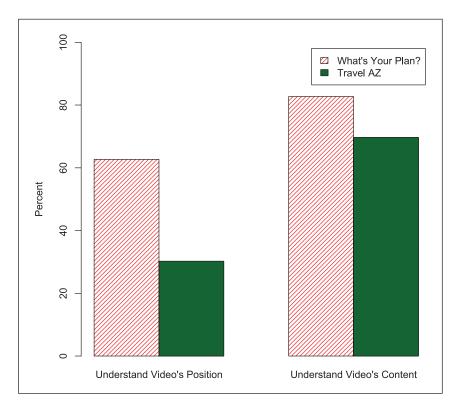


Figure 1. Comprehension of video by experimental condition.

latter video were able to identify the video's position correctly, only 30% of those exposed to the former video could. Overall, 26% of participants who watched "Travel Arizona" correctly answered both comprehension questions, compared with 58% of those assigned to "What's Your Plan?" These findings are consistent with previous research that suggests that many individuals have particular difficulty understanding satirical political content (LaMarre et al., 2009). Even in the relatively "easy" condition, more than 40% of participants could not correctly answer two basic questions about the video, underscoring that exposure to a political message does not guarantee reception.

Table 1 presents the results of the ordered logit model estimated to test the hypotheses about the factors that influence the comprehension of the videos. Consistent with Hypothesis 1, political knowledge has a statistically significant, positive effect on comprehension in both video conditions. The statistically significant interaction term between political knowledge and the "What's Your Plan?" video condition further indicates that this relationship is more strongly positive for this group than for the group that was assigned to the "Travel Arizona" video. Figure 2 illustrates the estimated effect of political knowledge for each of the two video conditions. The predicted probabilities are computed separately for the two videos across the range of political knowledge scores, holding all other variables constant at their means, and are plotted with their 95%

Table 1. Ordered logit model of comprehension of video.

Variable	Logit coefficient	Standard error
Video: What's Your Plan?	.145	.237
Attitudes toward immigrants	940*	.205
What's Your Plan X attitudes to immigrants	1.604*	.300
Political knowledge	.252*	.042
What's Your Plan X political knowledge	.186*	.058
Political interest	090	.190
Offline traditional media use	013	.016
Online traditional media use	.007	.016
Participatory media use	002	.013
Discuss politics face-to-face	.058	.076
Discuss politics online	113	.078
Discuss politics with parents	.306*	.061
Race: Black	<b>464</b> *	.124
Race: Asian	.148	.153
Race: Hispanic	.132	.131
Male	312*	.094
Age	.004	.018
College degree	.224	.159
Enrolled in high school or college	005	.120
US born	.310	.159
Statistics		
N	1934	
Log-likelihood	-1757.4	
Pseudo-R <sup>2</sup>	.125	

Dependent variable: number of correct answers to video comprehension questions.

confidence intervals. Among viewers of "Travel Arizona," the predicted probability of providing the correct answer to both comprehension questions increases from .15 for those who did not answer any of the political knowledge questions correctly to .37 for those who correctly answered all five knowledge questions. In the "What's Your Plan?"

<sup>\*</sup>p < .05 for a two-tail t-test.

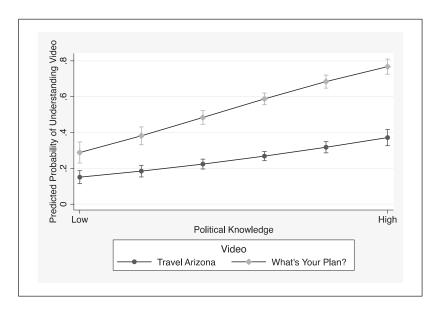


Figure 2. Predicted probability of understanding video by political knowledge and video.

condition, this predicted probability rises from .29 to .77 as one moves from one end of the political knowledge spectrum to the other.

The other key finding reported in Table 1 is that comprehension of the videos is also affected by participants' predispositions. Consistent with motivated reasoning theory and Hypothesis 2, participants were more likely to understand the video if its message aligned with their prior attitudes toward immigrants. Among participants in the "Travel Arizona" condition, agreement with the statement that immigrants take resources from people born in the United States is negatively related to comprehension of the video. Furthermore, the positive interaction between this variable and the "What's Your Plan?" condition indicates that among participants who were assigned to "What's Your Plan?," the opposite relationship holds: those who agreed with the statement are more likely to understand the anti-immigration video. To illustrate the size and direction of these interaction effects, Figure 3 plots the predicted probability of a respondent correctly identifying both the video creator's position and the information that would be useful in judging the video. The predicted probabilities are computed separately for the two videos at each potential response to the question about the effects of immigrants (holding all other variables constant). The diverging slopes of the two lines indicate that respondents whose predispositions were congruent with the video's position were most likely to comprehend each of the videos. For those participants who saw "What's Your Plan?," the predicted probability of understanding both the video's position and its content increases from .52 for someone who strongly disagreed with the statement that immigrants take jobs, housing, and healthcare to .86 for someone who strongly agreed. By contrast, among participants who saw "Travel Arizona," the predicted probability of correctly answering both comprehension questions decreases from .36 to .04 as one moves from

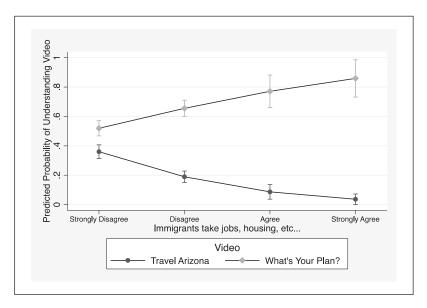


Figure 3. Predicted probability of understanding video by anti-immigrant sentiment and video.

"strongly disagree" to "strongly agree." Put somewhat differently, the model indicates that an otherwise typical respondent who strongly agreed with the statement about the negative consequences of immigrants would be quite likely (predicted probability of .86) to answer both comprehension questions correctly if assigned to see "What's Your Plan?" but extremely unlikely (.03) to do so if assigned to "Travel Arizona."

The media use, political interest, and political discussion variables have little independent effect on participants' abilities to understand the videos. Of these variables, only political discussion with one's parents or other adults has a significant positive effect, consistent with previous research (Hively and Eveland, 2009).

# **Discussion**

The circulation of digital media through online channels has generated a major shift in how citizens receive information about politics. As online for such as YouTube grow in importance, the nature of political discourse is undergoing a fundamental change. Because politically oriented content circulated through these channels often bypass the traditional gatekeepers of political news and circulates largely due to its entertainment value, individuals are increasingly likely to be inadvertently exposed to political news. This has the potential to circumvent the filtering effect of political ideology and political interest, and the content can circulate well beyond the originally intended audience, thus increasing overall exposure to political information and perspectives. These dynamics are particularly important for young people, who are less likely than older adults to get news through traditional print and broadcast media, but are more likely to encounter political information through online social media (Mitchell et al., 2013).

The evidence presented in this article, however, demonstrates an important limitation of incidental exposure to political information: mere exposure to political messages via humorous videos does not guarantee that individuals comprehend these messages. A large proportion of the nationally representative sample of young people whom we exposed to YouTube videos relating to immigration was unable to answer basic questions about these videos immediately after viewing them. Our findings are consistent with research that demonstrates that subtle humor is particularly difficult to comprehend, especially when one is predisposed to disagree with the political message contained within the joke (LaMarre et al., 2009). If satire and parody are becoming an increasingly important part of political discourse (Jones, 2013), then these findings suggest an important limitation to their power to inform. More generally, they suggest that studies of the effects of the communication of political information through digital and social media need to consider not only factors that govern the circulation of content, but also to those that affect its comprehension.

While we believe that the YouTube videos that our participants viewed are representative of the type of satirical political content that circulates widely online, there are some important limitations to our experimental design. For one thing, this study does not capture the social dynamics of social media. Our research design—the random assignment of participants to a video embedded in an online survey—allows us to eliminate the possibility of self-selection based on political predisposition or interest, while varying the ideology of the videos. However, the videos were presented in the context of a survey rather than through a social network. It is possible that individuals exposed to political content circulated within their social networks may be more attentive and attach more credibility to the message than our participants were. Moreover, intimate knowledge of the political views of the person who circulated the video might provide vital context for making sense of the video's message, especially when the content is satirical. Thus, future research should explore how the social aspect of the circulation of digital media affects what individuals take away from these messages.

In addition, the use of existing videos available on YouTube required a sacrifice in terms of experimental control. The two videos were selected primarily because they presented alternative viewpoints on the debates surrounding immigration policy at the time of the study; however, the videos differed in several respects beyond the ideology of their creators. Consequently, the finding that participants in our study tended to have more difficulty comprehending the intent of "Travel Arizona" than they did of "What's Your Plan?" needs to be interpreted with caution. In particular, the experimental manipulation is too blunt for us to speak to the ongoing academic debate about whether conservatives are more likely to reject ideologically dissonant information or if the biases associated with motivated reasoning are equally strong among liberals (see Nisbet et al., 2015 for a recent review and some evidence for the latter view).

Even though the forms of communication examined here are relatively new, we find support for existing theories regarding the influence of long-standing political beliefs and orientations on individuals' comprehension of the political messages contained in the YouTube videos. In particular, our findings suggest that both cognitive engagement with politics and political predispositions act as lenses that influence individuals'

comprehension of the videos. Supporting the contention that receptivity of a political message depends on an individual's cognitive engagement with politics (Zaller, 1992), we find that comprehension of the videos is strongly related to participants' level of political knowledge. Like Price and Zaller (1993), we find individuals' political knowledge to be a much stronger predictor of their comprehension levels than their patterns of news media usage or political interest levels. At the same time, our study suggests an important limitation of research that, like Zaller (1992), operationalizes exposure to media and the reception of the messages transmitted through those media with a single measure. Our findings indicate the importance of distinguishing between exposure and reception—a lesson that would appear to apply with equal force to studies of the effects of "traditional," broadcast media as to those of new media.

The other important finding is that comprehension is influenced by individual's political predispositions, which runs contrary to the assumptions of Zaller's cognitively driven RAS model. Consistent with Lodge and Taber's (2013) theory of motivated reasoning, reception of a political message depends not just on cognitive engagement but also on political attitudes: in this case, attitudes toward immigrants. Exposure alone is not enough to ensure that individuals will understand divergent viewpoints. Indeed, many of our participants appeared not to realize that the video that they had seen advocated a stance that was different from their own. In a media landscape in which individuals increasingly can avoid information that might contradict their prior beliefs (Bennett and Iyengar, 2008) and given the importance of individuals' attention to views that differ from their own for the functioning of a democratic society (Mutz, 2006), this finding raises particular concerns about the potential of incidental exposure to inform individuals about diverse perspectives.

In addition, we believe that it highlights the need for research on the sorts of support structures that might enhance young people's ability to make sense of the messages to which they are exposed. In particular, we find that participants who report spending time discussing politics with their parents are much more likely to understand the videos (even after controlling for political discussion in other settings). This is consistent with Hiveley and Eveland's (2009) study of adolescent political discussion, and underscores the importance of adult support for the development of young people's cognitive engagement with politics. Moreover, the finding that political knowledge is a strong predictor of comprehension suggests that schools, too, have an important role to play. We measured cognitive engagement with politics using a standard battery of civics knowledge (Delli Carpini and Keeter, 1993) and our findings are certainly consistent with the idea that the background knowledge provided by civics instruction provides youth with the necessary context to understand political messages. Nonetheless, this focus on general factual knowledge is a rather incomplete specification of political sophistication (Eveland et al., 2004; McGraw and Pinney, 1990), and more complete measures would allow researchers to better assess which dimensions of political sophistication are most important for the processing of political messages contained in humorous videos. Specifically, these measures should capture individuals' attitudes and practices toward assessing the credibility of information they encounter online (e.g. whether they believe it is important to consider if a message is backed by relevant evidence and what strategies they use to evaluate online messages). This is essential as the changing media landscape means that

youth will need to be trained in a new set of literacy skills, as comprehension of the sorts of videos presented in this study would seem to require both an awareness of current events and the savvy necessary to interpret satirical and ironic content. If the standards regarding argumentation and evidence that are applied in the sorts of user-generated content that circulate through new media are different from those of traditional main-stream journalism, then future research might fruitfully explore what skills or educational experiences enable youth to make sense of and evaluate political messages communicated by unknown and ambiguous sources.

# **Acknowledgements**

The YPP survey was conducted in collaboration with Cathy Cohen of the University of Chicago. We would also like to thank Christina Evans, Erica Hodgin, Sandra Mistretti, and Chad Raphael, as well as the anonymous reviewers, for their helpful comments on earlier versions of this article.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by a generous grant from the John D. and Catherine T. MacArthur Foundation [grant number 10-96384].

## Notes

- The survey included over-samples of African American, Asian American, and Latino youth.
   The sample analyzed here includes 733 White, 504 African American, 361 Asian American, and 472 Latino respondents. Full details regarding the sampling plan and survey methodology can be found in Cohen et al. (2012).
- 2. The random assignment of survey respondents into the two video conditions means that any differences across the groups observed after the administration of the video cannot be attributed to self-selection by political interest or ideology. Randomization checks indicate that the two groups were indistinguishable on key demographic and attitudinal variables, such as attitudes toward immigrants and ratings of the major political parties, collected prior to exposure to the videos.
- 3. Downloadable from YouTube at http://youtu.be/4n-18Idux8Q.
- 4. Downloadable from YouTube at http://youtu.be/AD227bUv4c8.
- 5. Specifically, the first response choice for the "What's Your Plan?" group was "How much the government spends on services for illegal or undocumented immigrants," while the first choice for the "Travel Arizona" group was "How many legal residents or citizens are mistakenly detained for illegal immigration." For both groups, the second and third choices, respectively, were "How many illegal or undocumented immigrants graduate from high school," and "How many illegal or undocumented immigrants currently speak English."
- 6. A potential concern with this measure of comprehension is that respondents' answers to the questions may be affected by their own views on immigration laws. In particular, respondents who are uncertain as to the policy position advocated by the video's creator might

simply project their own beliefs onto the video. That is, an anti-immigration respondent unsure of the video's message would answer that the video's creator supported tougher immigration laws, while a pro-immigration respondent would answer that the video did not support tougher laws. This would lead us to overestimate comprehension in those cases where the respondent's opinion on immigration happened to match that of the assigned video, producing a spurious correlation between respondents' policy beliefs and comprehension levels. However, the question about the information needed to evaluate the message in the video is expected to be free of such bias, as the distinctions between the correct and incorrect answer choices are factual and are not related to a specific opinion regarding immigration policy. Consequently, in addition to the analysis of the two-item measure of comprehension reported below, we conducted the analysis separately for each question. The results of both were consistent with the results for the composite dependent variable, leading us to dismiss the possibility that our findings are just a product of respondents projecting their beliefs onto the video to which they were assigned. Results of these analyses are available from the authors upon request.

7. Specifically, this question asks respondents whether they agree with the statement that "Immigrants, especially immigrants from Latin America, Asia, and Africa, take jobs, housing, and healthcare away from people who were born in the United States."

### References

- Aigner-Treworgy A (2014) HealthCare.gov gets 40% jump in traffic after funny or die video. Available at: http://politicalticker.blogs.cnn.com/2014/03/12/healthcare-gov-gets-40-jump-in-traffic-after-funny-or-die-video/ (accessed 26 March 2014).
- Baumgartner JC and Morris JS (2010) MyFaceTube politics: social networking web sites and political engagement of young adults. *Social Science Computer Review* 28(1): 24–44.
- Bennett WL and Iyengar S (2008) A new era of minimal effects? The changing foundations of political communication. *Journal of Communication* 58(4): 707–731.
- Brundidge J (2010) Encountering "difference" in the contemporary public sphere: the contribution of the Internet to the heterogeneity of political discussion networks. *Journal of Communication* 60(4): 680–700.
- Burgess J and Green J (2009) YouTube: Online Video and Participatory Culture. Cambridge: Polity Press.
- Cameron AC and Trivedi PK (1998) Regression Analysis of Count Data. West Nyack, NY: Cambridge University Press.
- Cohen C, Kahne JE, Bowyer BT, et al. (2012) Participatory politics: new media and youth political action. Available at: http://www.civicsurvey.org/sites/default/files/publications/Participatory\_Politics\_Report.pdf (accessed 26 June 2012).
- Converse PE (1964) The nature of belief systems in mass publics. In: Apter DE (ed.) *Ideology and Discontent*. New York: Free Press, pp. 206–261.
- Delli Carpini MX and Keeter S (1993) Measuring political knowledge: putting first things first. *American Journal of Political Science* 37(4): 1179–1206.
- Delli Carpini MX and Keeter S (1996) *What Americans Know about Politics and Why It Matters*. New Haven, CT: Yale University Press.
- Dylko IB, Beam MA, Landreville KD, et al. (2012) Filtering 2008 US presidential election news on YouTube by elites and nonelites: an examination of the democratizing potential of the internet. *New Media & Society* 14(5): 832–849.
- English K, Sweetser KD and Ancu M (2011) YouTube-ification of political talk: an examination of persuasion appeals in viral video. *American Behavioral Scientist* 55(6): 733–748.

- Eveland WP (2001) The cognitive mediation model of learning from the news evidence from nonelection, off-year election, and presidential election contexts. *Communication Research* 28(5): 571–601.
- Eveland WP Jr, Marton K and Seo M (2004) Moving beyond "Just the Facts": the influence of online news on the content and structure of public affairs knowledge. *Communication Research* 31(1): 82–108.
- Fryberg SA, Stephens NM, Covarrubias R, et al. (2012) How the media frames the immigration debate: the critical role of location and politics. *Analyses of Social Issues and Public Policy* 12(1): 96–112.
- Garrett RK, Carnahan D and Lynch EK (2013) A turn toward avoidance? Selective exposure to online political information, 2004–2008. *Political Behavior* 35(1): 113–134.
- Gentzkow M and Shapiro JM (2011) Ideological segregation online and offline. *The Quarterly Journal of Economics* 126(4): 1799–1839.
- Hively MH and Eveland WP Jr (2009) Contextual antecedents and political consequences of adolescent political discussion, discussion elaboration, and network diversity. *Political Communication* 26(1): 30–47.
- Holcomb J, Gottfried J and Mitchell A (2013) News Use across Social Media Platforms. Washington, DC: Pew Research Center.
- Iyengar S and Hahn KS (2009) Red media, blue media: evidence of ideological selectivity in media use. *Journal of Communication* 59(1): 19–39.
- Jenkins H, Ford S and Green J (2013) Spreadable Media: Creating Value and Meaning in a Networked Culture. New York: NYU Press.
- Jones JP (2013) Parody, performativity, and play. In: Hartley J, Burgess J and Bruns A (eds) *A Companion to New Media Dynamics*. Oxford: Wiley-Blackwell, pp. 396–406.
- Kahne JE, Middaugh E and Allen D (2015) Youth, new media, and the rise of participatory politics. In: Allen D and Light JS (eds) *From Voice to Influence: Understanding Citizenship in a Digital Age.* Chicago: University of Chicago Press, pp. 35–58.
- Kahne JE, Middaugh E, Lee N-J, et al. (2012) Youth online activity and exposure to diverse perspectives. *New Media & Society* 14(3): 492–512.
- Kim Y, Chen H-T and Gil de Zúñiga H (2013) Stumbling upon news on the Internet: effects of incidental news exposure and relative entertainment use on political engagement. *Computers* in Human Behavior 29(6): 2607–2614.
- Kim Y, Hsu SH and Gil de Zúñiga H (2013) Influence of social media use on discussion network heterogeneity and civic engagement: the moderating role of personality traits. *Journal of Communication* 63(3): 498–516.
- Kim YM and Vishak J (2008) Just laugh! You don't need to remember: the effects of entertainment media on political information acquisition and information processing in political judgment. *Journal of Communication* 58(2): 338–360.
- LaMarre HL, Landreville KD and Beam MA (2009) The irony of satire: political ideology and the motivation to see what you want to see in the Colbert report. *The International Journal of Press/Politics* 14(2): 212–231.
- Lodge M and Taber CS (2013) The Rationalizing Voter. New York: Cambridge University Press.
  Luskin RC (1987) Measuring political sophistication. American Journal of Political Science 31(4): 856–899.
- Luskin RC (1990) Explaining political sophistication. *Political Behavior* 12(4): 331–361.
- McGraw KM and Pinney N (1990) The effects of general and domain-specific expertise on political memory and judgment. *Social Cognition* 8(1): 9–30.
- Mitchell A, Kiley J, Gottfried J, et al. (2013) *The Role of News on Facebook: Common yet Incidental*. Washington, DC: Pew Research Center.

Mutz DC (2006) Hearing the Other Side: Deliberative versus Participatory Democracy. New York: Cambridge University Press.

- Mutz DC and Martin PS (2001) Facilitating communication across lines of political difference: the role of mass media. *American Political Science Review* 95(1): 97–114.
- Nisbet EC, Cooper KE and Garrett RK (2015) The partisan brain: how dissonant science messages lead conservatives and liberals to (dis)trust science. *The ANNALS of the American Academy of Political and Social Science* 658(1): 36–66.
- Papacharissi Z (2002) The virtual sphere: the Internet as a public sphere. *New Media & Society* 4(1): 9–27.
- Price V and Zaller J (1993) Who gets the news? Alternative measures of news reception and their implications for research. *The Public Opinion Quarterly* 57(2): 133–164.
- Price V, Cappella JN and Nir L (2002) Does disagreement contribute to more deliberative opinion? *Political Communication* 19(1): 95–112.
- Redlawsk DP (2002) Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making. *The Journal of Politics* 64(4): 1021–1044.
- Rhee JW and Cappella JN (1997) The role of political sophistication in learning from news: measuring schema development. *Communication Research* 24(3): 197–233.
- Rill LA and Cardiel CLB (2013) Funny, Ha-Ha: the impact of user-generated political satire on political attitudes. *American Behavioral Scientist* 57(12): 1738–1756.
- Sears DO (1983) The persistence of early political predispositions: the roles of attitude object and life stage. In: Wheeler L and Shaver P (eds) *Review of Personality and Social Psychology*, Vol. 4. Beverly Hills, CA: SAGE, pp. 79–116.
- Sifry ML (2012) User-generated online video swamping official Obama, Romney content on YouTube. Available at: http://techpresident.com/news/22777/user-generated-online-video-swamping-official-obama-romney-content-youtube (accessed 9 March 2014).
- Sotirovic M and McLeod JM (2004) Knowledge as understanding: the information processing approach to political learning. In: Kaid LL (ed.) *Handbook of Political Communication Research*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 357–394.
- Stroud NJ (2010) Polarization and partisan selective exposure. *Journal of Communication* 60(3): 556–576
- Stroud NJ (2011) *Niche News: The Politics of News Choice*. New York: Oxford University Press. Taber CS and Lodge M (2006) Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science* 50(3): 755–769.
- Tewksbury D, Weaver AJ and Maddex BD (2001) Accidentally informed: incidental news exposure on the World Wide Web. *Journalism and Mass Communication Quarterly* 78(3): 533–554.
- Towner TL and Dulio DA (2011) An experiment of campaign effects during the YouTube election. *New Media & Society* 13(4): 626–644.
- Wojcieszak ME and Mutz DC (2009) Online groups and political discourse: do online discussion spaces facilitate exposure to political disagreement? *Journal of Communication* 59(1): 40–56.
- YouTube Trends (2012) Videos mentioning Obama or Romney Top 2 Billion views. Available at: http://youtube-trends.blogspot.com/ (accessed 9 March 2014).
- Zaller JR (1992) *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

### **Author biographies**

Benjamin T Bowyer is Senior Researcher in the Civic Engagement Research Group at Mills College. His research focuses on how individuals' political attitudes and behavior are shaped by their social and political environments.

Joseph E Kahne is a Professor of Education at Mills College, Director of the Civic Engagement Research Group, and Chair of the MacArthur Research Network on Youth and Participatory Politics. His research focuses on ways school practices and new media can influence youth civic and political development.

Ellen Middaugh is an Assistant Professor of Child and Adolescent Development in the Lurie College of Education at San Jose State University. Her research focuses on the impact of digital media on adolescent social and civic identity development.