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Unpredictably Trump? Predicting Clicktivist-like Actions on Trump’s Facebook Posts During the 2016 U.S. Primary Election

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ABSTRACT

This study aims to identify the factors that might cause a Facebook post to be “liked” by Facebook users. We analyze all the Facebook posts made by the Donald Trump’s campaign during the U.S. 2016 primary election. Several possible variables were considered, such as the types of Facebook posts, the use of pronouns and emotions, the inclusion of slogans and hashtags, references made to opponents, as well as candidate’s mentions on national television. The results of the Ordinary Least Squared (OLS) regression show that the use of highly charged (positive and negative) emotions and personalized posts (first-person singular pronouns) increase likes of the candidate’s Facebook page. Visual posts (videos and photos) and the use of past tenses do not have a significant effect on the posts’ likes. And television mentions decrease the number of likes. The study offers empirical findings contributing to the growing literature on digitally networked participation [1] and support the development of the emerging notion of the new ‘hybrid media’ system [2] for political communication. It also raises questions as to the relevance of platforms such as Facebook to the democratic process since Facebook users are not necessarily engaging with the content in an organic, democratic way; but instead might be guided to specific content by the Facebook timeline algorithm.

CCS CONCEPTS

• **Networks** → **Network types (social media)** • **Computing methodologies** → **Computerized Text Analysis**

KEYWORDS

Facebook, political engagement, clicktivism, U.S. primaries, Trump

1 INTRODUCTION

Within a relatively short period, social media went from being viewed as a possible channel for engaging people in politics [3], to being actively used by political parties and candidates during elections [4], as well as by activists to organize and coordinate protests and even revolutions around the world [5]. For politicians, social media is another channel to reach the voting masses. For the electorate, engaging with politicians via social media presents a form of online political participation [6], [7]. Given that public participation remains a strong component of functioning democracies [8], online engagement is an important indicator for levels of voter engagement during an election period [1].

One of the most basic forms of voter online engagement is a phenomenon coined as ‘clicktivism’, which refers to the online action that one can perform to express their support towards a cause or a candidate by clicking a ‘like’ button or retransmitting a message. Although it is still widely debated whether ‘clicktivism’ is a legitimate form of political engagement [6], knowing what the masses liked or shared online creates an opportunity for social media researchers, pollsters, political strategists, and mainstream media to learn what issues resonate with the public and what are the most effective ways to engage one’s supporters. Political candidates and their communication staff can also use such information to refine their social media strategies. We use the 2016 U.S. primary election as a case to investigate this continuously evolving form of online participation

empirically. Primaries are distinct from general elections, since they are “intraparty, multiple and serial” elections [9]. In a primary election, candidates must appeal to multiple audiences - such as party leaders, elected officials and public supporters - at once. Because of this need to satisfy multiple stakeholders with competing interests, to get an edge on the competition, primary candidates are more likely to adopt novel campaign methods, and use new, often untested, technology to reach their supporters and raise money. Obama’s innovative use of social media in the 2008 primaries and presidential campaigns, leading him to be called the first “Internet candidate” [10], is a relatively recent example of the adoption of new Information and Communication Technologies (ICTs) in the political sphere to gain a competitive advantage over adversaries.

This research analyzes Facebook posts made by the US primary candidate Donald Trump between February 1, 2016 and July 28, 2016. We ask what, in a ‘media hybrid system’ [2], causes some posts made by a political campaign to gain higher rates of ‘likes’ (a proxy for ‘clicktivist’ engagement). Predictors related to the content of the posts and the hybridity of the media system in which the primary elections took place were adopted to explain the variability of the number of likes in the candidates’ Facebook posts.

2 THEORETICAL BACKGROUND

2.1 Clicktivism and Political Participation

Political participation can be broadly characterized as an action to impact government policies [11]. Social media have created new possibilities for political engagement [10]. Indeed, Facebook users who posted supportive, if shallow, positive messages to a political candidate’s wall during the 2006 U.S. midterm election were found to perceive themselves as friends of that politician [12], suggesting many users might see Facebook interactions as a form of political participation.

Facebook users can also like and share candidate posts and these metrics can be used to understand individuals’ preferences towards a campaign’s content as well as their level of engagement with these posts [13]. The assumption is that “the number of likes implies exposure, attention, and some sort of affirmation, ratification, or endorsement of what is posted” [14].

In the context of political participation, there is a considerable debate around the notion of clicktivism [15]. Some scholars consider clicktivism as a ‘lazy’ alternative to political engagement [16]. For example, [17] highlights the ineffectiveness of clicktivism and draws a clear line between traditional forms of political participation and new forms of online engagement. [18] describes clicktivism as an exercise by individuals of moral justification rather than considering it as a form of political participation.

Other authors recognize clicktivism as a distinctive category of online political participation. From a theoretical perspective, [6] argues that technology is facilitating the emergence of new forms of online political participation such as clicktivist-like actions. Though these new forms of participation do not require as much effort as those of the traditional political participation, they still are political acts and as such they should be considered a form of political participation. From an empirical point of view, [19] demonstrated the validity of using clicktivist-like actions as a proxy to study engagement between political parties in Catalonia and their Facebook followers.

2.2 Facebook in a Hybrid-Media System

Facebook was chosen for this study as it represents the biggest proportion of Americans on a social networking site with 79% of internet users (68% of all U.S. adults) use Facebook [20]. In 2015, the U.S. presidential elections topped the list of most talked about topics on Facebook (both globally and in America). While social media content is not widely viewed as credible by politically interested consumers of it [21], news shared by known, trusted opinion leaders on Facebook has been found to influence audience perceptions [22]. Likewise, political journalists have equated social media content with public opinion [23].

Our analysis of Facebook will be conducted through the lens of the hybrid media analytical approach [2]. In a contemporary hybrid media system, the internet and social media are continuously interacting with and being influenced by mass media such as television or newspapers and vice versa. In particular, “the boundaries between older and newer media are always porous, as the disruptions caused by the emergence of newer media are gradually working their way through the institutions of the previously dominant print and broadcast media system” [2]. Following this analytical approach, this research will, for example, use instances of the audiences’ exposure to news about the candidates on television as a predictor of the clicktivist-like behavior of the candidates’ Facebook followers.

2.3 Too many Ways to Analyze Political Facebook Content

There are many ways to analyze Facebook posts. This study considers several possible variables drawing from existing social media and communications research. The first focuses on the types of posts made on Facebook, known to affect engagement rates. Posting videos and photos to Facebook has been found to increase engagement rates for a variety of organizations including political parties [19] as well as academic institutions [24]. Industry research has also confirmed that visual posts enjoy higher rates of engagement than text-only posts with links [25]. Given these findings, this study analyzed some of the most common Facebook post types including: image, video, link, and status update.

A second stream of research has focused on the linguistics characteristics of the posts as a mean to influence user response. Persuasive language has been found to influence the number of likes and comments a Facebook page received in past campaigns, such as in the 2012 U.S. Presidential election [26]. A linguistic analysis of Obama’s Facebook page during the 2012 campaign revealed that posts representing ethos (credibility) and pathos (emotion) enjoyed higher rates of engagement, including likes, shares and comments, than posts without such content [14].

A candidate’s use of pronouns can denote the speaker’s attitude, social status, gender and intent [27]. The use of the first-person plural pronoun ‘we’ has also been found to create a sense of group identity, while positioning the speaker as part of a distinct set of people apart from that of another [28]. The manipulation of personal pronouns is a subtler approach to persuasion, having a more subliminal effect on target audiences [29]. The flexible use of pronouns enables politicians to position themselves differently depending on the situation. For example, a study of State of the Union speeches by George W Bush and Barack Obama revealed that the use of “I” positioned the speaker as an individual, “you” could be intended generically or to speak to the audience, “we” invoked collectiveness or shared responsibility, and “they” distanced the speaker from another group of people [28]. Building on previous research in this area, this study considers the use of positive and negative emotions, the past and future grammatical tenses, as well as the use of personal pronouns, to determine whether any of these variables influence engagement rates.

Last, we also considered the use of campaign slogans and hashtags. In political campaigns, slogans are viewed as an important tool to help connect with an audience. A slogan can “be a phrase, a short sentence, a headline, a dictum, which intentionally or unintentionally, amounts to an appeal to the person who is exposed to it to buy some article, to revive or strengthen and already well- established stereotype, to accept a new idea, or to undertake some action.” [30]. More than just a simple statement, slogans are the embodiment of a political platform resonating with the target audience’s culture and needs. According to [30], slogans also “imply a value judgment” (p.450) and are used to “arouse people to high patriotic, [or] religious ardor” (p.451), while also luring in those who do not dig too deeply into campaign platforms. Given the weight assigned to slogans in political campaigns, this study considered the role of such phrases in social media engagement, in part to ascertain if such communication techniques transcend from off- to online platforms.

Initially a user-driven convention on Twitter [31], Facebook adopted hashtagging in 2013. Hashtagging helps organize massive amounts of information around key topics, identified by the addition of a ‘hash’ symbol (#) in front of a term. Increasingly, political hashtags are used to cover

political events, such as #iranelection which was the top trending news event on Twitter in 2009. Political slogans were also turned into hashtags by all three candidates analyzed, thus this version of campaign messaging was also included as a variable.

3 DATA

We collected all posts from Donald Trump’s Facebook page between February 1, 2016 and July 28, 2016. This period was chosen as it represents the primary election campaigning period, from the Iowa caucus (February 1, 2016) to the Republican (July 18-21, 2016) and Democratic (July 25-28, 2016) National Conventions.

The posts were collected using Netlytic, a cloud-based social media analytics platform for harvesting and analyzing the content of public posts from Facebook and other popular social media platforms [32]. We collected a total of 1,393 posts made by Donald Trump’s political campaign.

To provide additional context, page level statistics were collected manually on a weekly basis, including: rates of “People Talking About This Page”, “Total Page Likes”, and “New Page Likes”. Facebook defines “Likes” as the number of users who liked a page, whereas “People Talking About” measures the number of users who created a story about that page, including posting on the page wall, engaging with posts, mentioning that page, writing a recommendation, or confirming to attend an event posted by that page.

4 METHODS

The candidate’s data set containing Facebook campaign posts and corresponding likes was exported and analyzed using the Linguistic Inquiry and Word Count program or LIWC [33]. For each post, LIWC measures the prevalence of various psychologically meaningful categories of words based on its empirically grounded dictionaries [34]. The data set was then uploaded and processed using the Statistical Package for the Social Science (SPSS) software. The Ordinary Least Squared (OLS) regression analysis was employed to ascertain the factors that might help to explain post engagement (i.e., the number of likes) by the candidate’s Facebook page visitors. Table 1 shows the independent variables included in the model.

Table 1: Independent Variables

Dimensions	Content-Based Independent Variables	Non-Content-Based Independent Variables
Personalization	I, me, mine, my	
Cohesiveness	We, our, us	

Temporal Outlook	Focuspast; Focusfuture	
Emotional Tone	Posemo; Negemo	
Campaign Slogan Hashtags	Trumpcampaignhashtag	
Opponent Candidate	Bernie; Hillary	
Type of Post		Post Type
Media Coverage		Media Coverage

As shown in Table 1, the types of post characteristics analyzed in this study can be broken into two broad groups: content-based and non-content-based.

4.1 Content-Based Characteristics

For the purposes of this study, we measured the following LIWC categories:

Personalization - measured by the frequency counts of the posts containing the first-person singular pronouns (e.g., *I, me, mine*)

Cohesiveness - measured by the frequency counts of posts containing the first-person plural pronouns (e.g., *we, us, our*).

Temporal Outlook - measured by the frequency counts of posts containing words related to either the past (one of 341 words such as *ago, did, talked*) or future (one of 97 words such as *may, will, and soon*), both analyzed separately.

Emotional Tone - measured by the frequency counts of posts containing words expressing either positive emotions (one of 620 words such as *love, nice, and sweet*) or negative emotion (one of 744 words such as *hurt, ugly, nasty*).

Campaign Slogan Hashtags - measured by the frequency counts of posts containing campaign slogan hashtags. A custom dictionary was created in LIWC to analyze posts with the hashtags #MakeAmericaGreatAgain and #CantStumpTheTrump.

Mentions - measured by the frequency counts of posts containing mentions of political opponents. A custom definition was created in LIWC to analyze posts containing the mentions of Hillary Clinton ('Hillary') and Bernie Sanders ('Bernie').

4.2 Non-Content-Based Characteristics

We also analyzed the following features:

Type of Post - a nominal variable to differentiate between one of the four possible post types: 1 - link, 2 - status, 3 - photo, 4 - video.

Media Coverage - daily media mentions of Donald Trump on Al Jazeera America, Bloomberg, CNBC, CNN, Comedy Central, FOX Business, FOX News, LinkTV, or MSNBC, based on data compiled and shared by the GDELT Project [35].

Engagement - measured through the total number of likes per post. As expected, the Q-Q plots showed that the distribution of the variable 'likes per post' was positively skewed i.e. few posts received most of the attention (Likes), which is a relatively common finding [36], [37]. Hence, the dependent variable ("likes per post") was normalized by performing logarithmic transformations.

5 RESULTS

While the adjusted R-squared value, representing the explanatory power of the regression model is very low (0.029), several statistically significant predictors indicate that some factors can predict variability in post engagement as measured by the number of likes. The use of first-person singular pronouns and emotions (either positive or negative) were found to increase post likes. And television mentions had a negative effect on Trump's likes. The result of the regression model can be found in Table 2.

Table 2: OLS Regression on the Likes of Donald Trump's Facebook Posts

	Number of Likes		
	Standardized Coefficients Beta	Standard Error	VIF
Personalization	.087*	.003	1.085
Cohesiveness	.013	.003	1.201
Positive Emotion	.155 **	.001	1.131
Negative Emotion	.082*	.003	1.168
Past	.029	.003	1.074
Future	.023	.003	1.143
Campaign Slogan Hashtags	.044	.004	1.048
Opponent Mention: Hillary	-.006	.004	1.008
Opponent Mention: Bernie	.030	.007	1.076
Type of Post	.012	.010	1.054
Media Coverage	-.062*	.000	1.018
Constant	4,688	0.39	
Adjusted R2	0.029		
N	1,393		

*p<0.05 ** p<0.001

5.1 Positive Significant Predictors

Pronouns. The use of the first-person singular pronouns (such as I, me, and mine) significantly predicted the number of likes ($\beta=.087$).

Emotions. Results show that positive emotions ($\beta=.155$) and negative emotions ($\beta=.082$) are associated with an increased number of likes on posts.

5.2 Negative Significant Predictors

Media Coverage. Results show that Trump's mentions in the U.S. television channels is negatively associated with the number of likes on his campaign's posts ($\beta= -.062$), likely due to the overwhelming negative coverage of Trump's campaign [38].

5.3 Non-Significant Predictors

Type of Post. Our findings show that visual posts (photos and videos) are not significantly associated with the number of likes for the campaign's Facebook posts.

Past Tense. We did not observe any association between the use of past tense and the number of likes.

6 DISCUSSION

Despite the low adjusted R-squared value of the regression model, this research discovered some significant factors to start explaining clicktivist-like user engagement with Trump's Facebook posts. First, the use of emotions (either positive or negative) was found to be one of the main predictors of the number of likes on the candidate's posts. This corroborates the results obtained by [14], which showed a positive correlation between the use of emotions and the number of likes on the Facebook posts. Personalized posts (first-person singular pronouns) were also found to be positively associated with the clicktivist-like behavior of the candidate's Facebook followers, in line with an earlier research on political engagement in general [29].

One of the most interesting results is the association between the candidate's mentions on the main U.S. television news networks and the clicktivist-like behavior of his Facebook followers. The observed association provides empirical evidence of the functioning of a 'hybrid-media' system [2].

Interestingly, some factors that we expected to be associated with the clicktivist-like behavior of the candidates' Facebook followers ended up not being statistically significant or being significant only for some of the candidates. For example, we expected to find a positive association between the use of the first-person plural pronouns (*Cohesiveness Dimension*), but our model did not show it. The case for the mentions of opponents shows similar results. Given how important slogans are to campaigns [30] it was also surprising how poorly they performed as a predictor of likes on posts.

Furthermore, our data showed that visual posts (containing photos and videos) were not associated with the number of likes Trump's campaign posts. This is a puzzling finding since considering previous research [19] we would expect that people would be more likely to engage with

visual posts than with text-only posts. If that is the case, then we would generally expect the post containing visuals would also predict the number of likes for Trump's.

Last, we expected to find an association between the use of past and future tenses, but we did not find any association with the clicktivist-like behavior of Trump's Facebook followers, likely because Trump had no political past to talk about and thus to be 'liked' by his followers.

The limited explanatory power of our regression model brought us to reflect on the role that the Facebook timeline algorithm might play in the clicktivist-like behavior of Facebook users who visited the Facebook pages of the three candidates. Despite having liked a candidate's page, Facebook controls what content will appear posted by a campaign in a follower's timeline or feed. Facebook uses an algorithm to curate content for subscribers based on what the social networking giant thinks a user will want to see. Changes to the Facebook timeline algorithm have been a point of contention for those working in the communications industry. As some industry research estimates, the percentage of followers seeing page content in their feeds had dropped from 16% in 2012 to just 6% in 2014 after yet more changes to the Facebook timeline algorithm. This means that a very small percentage of followers to a candidate's Facebook page will be exposed to campaign content in their feeds, which can partly explain such low rates of post engagement. Given how the Facebook timeline algorithm works in 'constructing' the visibility of content [39], i.e. putting content a user would likely want to see into their news feed, it is also possible that only most dedicated followers of the page are even seeing the content posted by the candidate and his team. This limitation, of only showing relevant content to the most ardent and dedicated amongst one's Facebook followers, could skew any predictive models, as the followers might not be necessarily engaging with the content in an organic, democratic way; but instead might be guided to specific content by the Facebook timeline algorithm. Such restrictions raise questions as to the relevance of platforms such as Facebook to the democratic process. If the social networking giant decides what sort of content a user wants to see, this can influence user perspectives [40] and places considerable power in the hands of Facebook, a private actor, to sway elections. A likely example of what [41] refers to as the rise of 'phatic communion' in social media that may limit the potential of social media to support and foster social change.

Future work should also try to identify and examine the role of bots and fake accounts in political engagement on Trump's Facebook page.

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