Letter

Effects of Divisive Political Campaigns on the Day-to-Day Segregation of Arab and Muslim Americans

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How have Donald Trump’s rhetoric and policies affected Arab and Muslim American behavior? We provide evidence that the de facto effects of President Trump’s campaign rhetoric and vague policy positions extended beyond the direct effects of his executive orders. We present findings from three data sources — television news coverage, social media activity, and a survey — to evaluate whether Arab and Muslim Americans reduced their online visibility and retreated from public life. Our results provide evidence that they withdrew from public view: (1) Shared locations on Twitter dropped approximately 10 to 20% among users with Arabic-sounding names after major campaign and election events and (2) Muslim survey respondents reported increased public space avoidance.

How do racialized minorities respond to rampant discrimination? Do they retreat from public life or increase their visibility? One body of research indicates that they are worse off psychologically when they perceive greater discrimination or when members of their group are devalued in popular culture (Branscombe, Schmitt, and Harvey 1999; Crocker and Major 1989). Those minorities who see prejudice as indications of rejection by the dominant group may internalize negative evaluations, exhibit lower levels of self-esteem, and participate in fewer civic activities (Branscombe, Schmitt, and Harvey 1999; Oskooii 2016). In contrast, members of stigmatized groups may react to the dominant group’s negative assessments of them by cultivating positive self-esteem and increasing their involvement in activities that enhance their group status (Branscombe, Schmitt, and Harvey 1999; Crocker et al. 1989; Crocker and Major 1989; Oskooii 2016).

In this paper, we address the following question: How have Arab and Muslim Americans responded in the public sphere to the widespread national focus on them in the wake of the 2016 presidential campaign? The election season saw presidential front-runners deliver considerable doses of anti-Muslim rhetoric, with Donald Trump proposing a ban on Muslims from entering the country, a national database of all Muslims in the United States, and the wholesale surveillance of mosques; Ben Carson arguing that a Muslim should never be president; and Ted Cruz running on a platform to empower law enforcement to patrol and secure Muslim neighborhoods. Muslim Americans, in turn, experienced unprecedented amounts of discrimination, with imams across the country recommending that they may take extraordinary measures to protect their physical safety and decrease their visibility, such as by taking off the hijab (Calfano, Lajevardi, and Michelson 2017).

Yet, we do not actually know whether US Muslims and Arabs followed recommendations from community leaders to hide their identity and stay out of the public eye. On the one hand, we might expect discrimination to cause some people to retreat from the public sphere because discrimination is extremely hurtful. Some members of marginalized groups may avoid public exposure when the rhetoric is negative and is disproportionately concentrated on them to avoid feeling attacked or judged. And, there is evidence that in times of heightened discrimination American Muslims previously have responded by retreating. For example, surveillance programs after 9/11 led to a chilling effect, increased anxiety and depression, and post-traumatic stress disorder among Arab and Muslim Americans (Abu-Raiya, Pargament, and Mahoney 2011; ACLU 2017; Amer 2005; Shamas and Arastu 2013).

However, this retreat from public spheres is not a foregone conclusion. Scholarly work in political science also has shown that in some cases discrimination can powerfully motivate groups, such as Blacks, Asian Americans, and Latinos, to become more engaged in the public sphere and in politics (Barreto and Woods 2005; Pantoja, Ramirez, and Segura 2001; Parker 2009; Ramakrishnan 2005; Ramirez 2007; Walker and Garcia-Castañon 2017). Latinos, in particular, have responded to threat and anti-immigration and anti-Latino sentiment by naturalizing, acquiring more political information, protesting, and increasing their rates of turnout (Barreto et al. 2009; Pantoja, Ramirez, and Segura 2001; Pantoja and Segura 2003). Similarly, anecdotes about American Muslims in the 2016 election season suggest that a subset responded to the hostile sociopolitical context by mobilizing; some increased
their political participation, others started a political action committee, many began writing about politics and Islam on blogs, and a few even ran for political office. And, prior to the 2016 election, Oskooii (2016) found that Muslims reported becoming more active in response to political discrimination; they increasingly registered to vote, protested, and attended political meetings.

Nonetheless, little evidence exists to test how the 2016 campaign’s hostile environment affected Arab and Muslim American behavior at the macro- and individual levels because rich, systematic, and aggregate data on them is not as readily available as it is for other stigmatized groups (Calfano, Lajevardi, and Michelson 2017). This is in part because the US Census does not collect information on religion and those from the Middle East and North Africa must indicate that they are White.2

In this paper, we overcome these data limitations and analyze public space avoidance among Arab and Muslim Americans in day-to-day and non-political settings by bringing together several data sources: (1) television news coverage of Muslims; (2) social media activity of individuals with Arabic names (both Americans and US residents); and (3) a survey of Muslim Americans. Specifically, we explore whether Arab and Muslim Americans reduced their online visibility and retreated from public life. Together, our results provide macro- and individual-level evidence that Arab and Muslim Americans at least temporarily reduced their visibility in public spaces, both online and offline. We show that this segregation, a previously unmeasured phenomenon, occurred quickly after major presidential campaign events.

MEDIA DISCUSSION OF MUSLIMS

As a baseline, our analysis first evaluates news coverage throughout the 2016 election season to identify the major events that were connected to Muslim Americans in order to discern which events and what rhetoric were promulgated against them, and most importantly, when.

We summarize major events and news coverage related to Muslim Americans throughout the presidential election by analyzing a large corpus of television news transcripts. We are interested in identifying important events and rhetoric that may have negatively impacted Arab and Muslim Americans. As such, we concentrate on specific, concentrated, and highly salient events that could have affected their behavior. This approach allows us to link specific events that were more highly covered than others in the media to specific dates and then to observed changes in Arab and Muslim behavior on a social media platform. Without concentrated events, or with too many events, this task is made much more difficult. We also want to test whether we can associate important campaign events with changes in social media behavior in an automated way. In other words, we allow the news coverage to dictate which events are the most salient. This allows us to associate campaign rhetoric and Arab and Muslim American behavior without assuming that a specific date or event is important ex ante.

To summarize media coverage, we downloaded the universe of available broadcast transcripts from CNN, Fox News, and MSNBC on Lexis Nexis Academic from January 2015 to March 2017. We searched for all mentions of the word “Muslim” in each transcript and created a term-document matrix limited only to the mention sentence, as well as the sentences before and after.

With this data, we then used a method developed by Hobbs (2017) to scale the text using a combination of a standardized word co-occurrence matrix and word counts.3 This method orders each of the output dimensions by their contribution to variance in the data, similar to a principal component analysis. While comparable to other text as data techniques, this method has the additional benefit of upweighting very common words so that it effectively summarizes short text on a focused topic (e.g., here, a few sentences on “Muslims” in the news media). A specific advantage of this and other scaling methods over topic models (Blei, Ng, and Jordan 2003; Roberts, Stewart, and Tingley 2014) is that the user does not have to specify the number of topics and therefore has very little control over the output. The output, moreover, will ultimately guide us in deciding which events to examine in our social media analysis.

Table 1 displays the keywords of the dimensions extracted using this process.4 A substantial amount of discussion of Muslims in the transcripts focused on the Middle East and both international and domestic terrorism. Domestic-focused coverage on Muslim Americans and US politics concentrated on three major events: (1) Donald Trump’s proposed “Muslim ban” and immigration policy, (2) Khizr Khan’s speech at the Democratic National Convention, and, to a much lesser extent, (3) policing and Ted Cruz’s proposal to surveil Muslim American communities.5 In general, discussion

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2 The lack of quality data is further exacerbated because surveying Muslim respondents is now more difficult than ever. For example, when contacted to participate in a study by an advocacy group after the election, some Muslim respondents feared that they were being registered in Donald Trump’s promised “Muslim registry” (Calfano, Lajevardi, and Michelson 2017).

3 This method is related to familiar text scaling and ideal point methods used in political science, such as WordFish (Slapin and Proksch 2008) and WordScores (Laver, Benoit, and Garry 2003).

4 The keywords in this method are identified using the output from one side of a singular value decomposition. Slightly differently than in Hobbs (2017), which analyzes open-ended survey responses, the keywords were identified by multiplying the square root Euclidean norm of the scores from the word embedding side of the output by the specific values on the co-occurrence side of the output. This allows us to summarize highly specific clusters of words, rather than the general ideas of interest in open-ended survey response summaries. Figures A.1 and A.2 show the full output on which these keywords are based.

5 The Ted Cruz cluster was prominent during the first half of 2016 (when we first ran this analysis), but faded in importance after the Republican primaries.
EVIDENCE FROM TWITTER

Next, we turn to our substantive question of interest: How did Arab and Muslim Americans respond, in the aggregate, to events and discriminatory rhetoric in the 2016 election season? Specifically, we evaluate whether the visibility of Arab and Muslim activity on Twitter shifted at all in relation to salient events highlighted in the previous section, such as the “Muslim ban.”

We assembled a corpus of all geotagged tweets in the United States from 2015 through the middle of February 2017 to identify Arabic-named Twitter users who shared their precise location on the site.6 Because Muslims are a diverse group on national origin and racial dimensions, and because there is no distinctly Muslim dictionary that encompasses possible Muslim names, we use a name dictionary with distinctively Arabic names as a loose proxy for “Muslim.”

After identifying those accounts belonging to individuals with Arabic names, we reduced the number of accounts to US-only users by parsing locations shared in the Twitter account profiles. This allowed us to remove users who posted a tweet from the United States, but who lived elsewhere. We did not use language as our primary filtering method because the language of tweets is algorithmically assigned by Twitter and these language assignments often change abruptly (although, as we describe below, we do use this information in a robustness check in the appendix). This name- and location-based filtering method identified 3,845 geotagging Twitter users for our study.

Many of these precise locations are shared through services other than Twitter, such as Foursquare and Instagram.9 For example, Foursquare shares appear with the words “I’m at” by default and tend to be

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6 Mentions were collected using Crimson Hexagon, rather than the Streaming API.
7 These geotagged tweets were collected from Twitter’s public streaming API by setting a boundary box around the United States and collecting tweets appearing within that box as they were posted to the site. When restricted to the United States, the output of this method falls below the API limit.
8 We believe that this is the best—though admittedly imperfect—way of observing online Muslim activity. While many Arabs are Christian, the US Arab Muslim population has grown rapidly with the removal of the quota system and more lenient immigration laws. Combined with the fact that the United States admitted a record number of Arab Muslim refugees in 2016, it is likely the case that many of these users are Muslim. Moreover, we guess that around 1 of 4 of these accounts are Black Americans’ with names of Arabic origin. This aligns nearly perfectly with the Pew Research Center’s estimates of the Black Muslim population in America: 20%.
9 The original source of a tweet is provided in the data from the Twitter API.
restaurant visits and ordinary social activities. Instagram posts are accompanied by a photograph and can be associated with the location of the photograph. Geotags from these sites accounted for 73% of the data (57% Instagram and 16% Foursquare). We observe these precise geotags over time as a proxy for (1) how much US Arabs were out in public places during and after the 2016 presidential campaign and (2) whether they publicly shared their exact location or adjusted their visibility by altering their privacy settings to hide it. More broadly, alterations in privacy settings measure concern for personal safety among Arab Americans and residents. This proxy reflects warnings by the US Army and others that sharing location online compromises individual and family privacy and personal security.10

Figure 1 displays the number of daily unique geotagging Arabic-named US-based users from August 2015 through February 2017 and allows us to assess whether US Arabs avoid public spaces or altered their privacy settings to adjust their visibility. The purple line denotes that shared locations by Arabic-named Twitter users dropped by 10 to 20% after December 2, 2015 and 10% between the 2016 election and Donald Trump’s “Muslim ban” state-ment on December 7. On December 2nd, Donald Trump’s statements included that many people witnessed Muslims celebrating on their roofs after the 9/11 attack11 and that to defeat ISIS terrorists “you have to take out their families.”12 A decline in the geotags begins on December 2 and then drops around 10% within a few days after the “Muslim ban” statement. We once again observe declines in geotags after the date of the 2016 presidential election, which continue into 2017. That these drops occurred immediately after major campaign statements and election events is suggestive that campaign rhetoric negatively affected Arab and Muslim Americans, who responded by reducing their visibility. It is still important to rule out alternate explanations, however. In particular, some Instagram users were logged out of their accounts on December 2 and received incorrect error messages when they tried to log back in.13 In the appendix, we assess whether this bug could have driven the observed drop on December 2, and find a large drop among Arabic speakers with break point identification method described in Bai and Perron (2003) to identify discontinuities in the data. With the number of break points set to 2, December 2, 2015, and November 14, 2016, were identified as break points in the time series. December 2 was the San Bernardino terror attack and the event that immediately preceded Donald Trump’s Muslim ban statement on December 7. On December 2, Donald Trump’s statements included that many people witnessed Muslims celebrating on their roofs after the 9/11 attack11 and that to defeat ISIS terrorists “you have to take out their families.”12 A decline in the geotags begins on December 2 and then drops around 10% within a few days after the “Muslim ban” statement. We once again observe declines in geotags after the date of the 2016 presidential election, which continue into 2017. That these drops occurred immediately after major campaign statements and election events is suggestive that campaign rhetoric negatively affected Arab and Muslim Americans, who responded by reducing their visibility. It is still important to rule out alternate explanations, however. In particular, some Instagram users were logged out of their accounts on December 2 and received incorrect error messages when they tried to log back in.13 In the appendix, we assess whether this bug could have driven the observed drop on December 2, and find a large drop among Arabic speakers with break point identification method described in Bai and Perron (2003) to identify discontinuities in the data. With the number of break points set to 2, December 2, 2015, and November 14, 2016, were identified as break points in the time series. December 2 was the San Bernardino terror attack and the event that immediately preceded Donald Trump’s Muslim ban statement on December 7. On December 2, Donald Trump’s statements included that many people witnessed Muslims celebrating on their roofs after the 9/11 attack11 and that to defeat ISIS terrorists “you have to take out their families.”12 A decline in the geotags begins on December 2 and then drops around 10% within a few days after the “Muslim ban” statement. We once again observe declines in geotags after the date of the 2016 presidential election, which continue into 2017. That these drops occurred immediately after major campaign statements and election events is suggestive that campaign rhetoric negatively affected Arab and Muslim Americans, who responded by reducing their visibility. It is still important to rule out alternate explanations, however. In particular, some Instagram users were logged out of their accounts on December 2 and received incorrect error messages when they tried to log back in.13 In the appendix, we assess whether this bug could have driven the observed drop on December 2, and find a large drop among Arabic speakers with


11 https://twitter.com/realdonaldtrump/status/672149956208271360.
Arabic-sounding names on both Instagram and other platforms, along with a drop among all people with Arabic-sounding names for geotags not from Instagram. These same drops in activity were smaller or absent in a matched control group, despite the control group potentially containing other minorities due to a requirement that users have names unique at the state level (see appendix for details). This increases our confidence that the sustained drop was driven by the December 2 San Bernardino attack and rhetoric surrounding it, including the December 7 ban statement, rather than the Instagram software glitch.

Another lingering concern is that geotagged tweets constitute less than 1% of all tweets on Twitter and are not representative of the overall population of Twitter users (Sloan and Morgan 2015). As a robustness check, we include in the appendix an analysis of the representativeness of the sample by replicating our analysis with users who were linked to voter records.14 This data includes basic demographic information on those individuals with distinctively Arabic names in our study, and we show that they very closely resemble the racial identification of Muslim Americans in separate research by the Pew Research Center.15 Our analysis of the voter record data shows drops in activity among people with Arabic names in early December, but not after the 2016 election. This suggests that the drop in early December applied to both citizens and non-citizens, while the decline after the 2016 election might have been specific to noncitizens. However, these tests are not well powered among this small subset of users with both unique names and a record in the voter file, at least when compared to drops among others with uncommon names and similar demographic characteristics.

Finally, we note that although the number of geotagging Arabic named users declined, some users began posting more geotagged tweets after the 2016 election (see Figure A.6). However, these spikes in activity sharply declined with the January 2017 announcement that the administration would soon sign the executive order temporarily halting refugee immigration and from some Muslim-majority countries.16 These tweets were not obviously political. We show a text analysis in the appendix, where all dimensions appear to be related to location or leisure activities.

These aside notwithstanding, the results presented in this section together provide macro-level evidence that US-based Arabic-named Twitter users altered their privacy settings and reduced their visibility in response to salient events occurring throughout the 2016 presidential campaign and election; namely Donald Trump’s “Muslim ban” statement (along with other statements preceding it) and the election date itself. This decreased visibility and segregation from ordinary society, moreover, occurred quickly and lasted for months at each of the two timepoints examined.

**SURVEY OF MUSLIM AMERICANS**

Next, we turn to a survey on Muslim Americans to explore whether the macro-level phenomenon of Arabic named Twitter users reducing their visibility can be substantiated at the individual level. There are reasons to expect that experiences with societal discrimination would lead Muslim Americans to avoid or withdraw from public spaces. Oskooii (2016) emphasizes the need for scholars to contemplate that discrimination may result in divergent outcomes, depending on the type of discrimination being examined; when faced with direct societal, rather than political, discrimination, Oskooii (2016) finds that US Muslims participate in politics less. While we are not looking at reductions in political participation, Oskooii (2016) lays important groundwork for theory building.

Over the time period studied, important and discriminatory rhetoric arguably had fostered a hostile environment, where acts that openly targeted minorities became more commonplace. Scholarly evidence suggests that Trump’s racist speech normalized ordinary people adopting similar language; Schaffner (2018) finds that being exposed to Trump’s quotes causes individuals to say more offensive things, not only about the groups Trump targeted, but about other identity groups as well. There is also evidence that dehumanizing and anti-Muslim attitudes shaped Trump support in the 2016 election (Lajevardi and Abrajano 2018; Lajevardi and Oskooii 2018). Considering these reasons and the increasing rate of hate crimes against Muslims that manifested after the election (SPLC 2017), it is entirely conceivable that the environment made US Muslims concerned for their interactions with ordinary society, reduce their visibility, and less willing to publicly share their information online.

We briefly detail results from a survey on 208 Muslim Americans in February 2017 conducted through Survey Sampling International. We designed the survey to evaluate whether Muslim Americans reported avoidance and segregation behaviors during the 2016 campaign season. We note that there are two important downsides to an opt-in survey of this nature: (1) The survey does not allow for much inference because the sample is small and because it was only administered in...
one wave, and (2) respondents are not at all guaranteed to be representative of the US Muslim population. However, the survey serves to corroborate or dispel the findings presented so far.

We find that Muslim Americans reported having responded to discrimination in the public sphere during this time period by retreating. Reflecting on their behavior over the past 12 months, respondents across the board self-reported that they had avoided interactions with members of other groups, avoided interactions with members of other political parties, limited their posts on social media, and less frequently visited public places (such as restaurants, shopping malls, and parks) more than once in a while (see Table A.10). In line with the scholarship on foreign and American Muslims, we also explore how religiosity (Barreto and Bozonelos 2009; Barreto and Dana 2008; Dana, Barreto, and Oskooi 2011; Dana, Wilcox-Archuleta, and Barreto 2017; Jamal 2005; Oskooi and Dana 2018) and linked fate (Barreto and Bozonelos 2009; Barreto, Masuoka, and Sanchez 2008) affected self-reported avoidance shifts in behavior. Similar to other studies, we find that more religious respondents and those with high linked fate are more insulated; they were significantly more likely than their counterparts to report avoidance behaviors (see Figure A.7).

We triangulate the results from the Twitter and voter record analyses with the survey, which provides further corroborating individual-level evidence that US Muslims are retreating. Future research should unpack the mechanism behind this decline in visibility. While we posit that the withdrawal we observe may be due to feelings of threat that individuals in ordinary society are targeting them, we cannot be sure. Our results only speak to the fact that the avoidance behaviors reported in the survey extend to both the social and political contexts, and support the observed drops in Twitter geotags and tweets.

**IMPLICATIONS**

While these findings are far from the final say on how Arab and Muslim Americans have responded to the negative rhetoric and policies fostered in the 2016 presidential election, they are instructive. Our work makes several contributions to the existing literature on the macro-level measurement of Arab and Muslim American behavior. For the most part, studies have not evaluated macro-level Arab and Muslim American behavior because demographic and statistical data on this group does not readily exist and is very difficult to assemble (see Cho, Gimpel, and Wu 2006) for an important exception). By examining the universe of available Twitter accounts geolocating to the United States and subsetting to probable US “Arab” and “Muslim” accounts, we provide a unique way of identifying and tracing whether their ordinary social activity became more or less visible without relying on self-reported data. We note that scholars examining hard to reach populations—and especially those about whom information cannot be readily acquired—can be well served by testing hypotheses against findings from multiple data sources.

Our results provide insight into a central question surrounding the consequences of the 2016 election campaign: Did Arab and Muslim Americans respond to rampant discrimination by retreating from public life or by increasing their visibility? We utilize individual- and macro-level evidence to demonstrate that they at least temporarily altered their behavior and retreated, in light of the discrimination they faced throughout the 2016 presidential election season. This paper is the first to demonstrate that this discrimination may have resulted in isolating and restrictive behaviors; they reduced their online visibility and reported fading from the public sphere. While the prevailing wisdom in political science would lead us to expect members of stigmatized communities to take action rather than resign from the public sphere in light of political discrimination, this study provides further support for Oskooi’s theory that discrimination may result in divergent outcomes.

Our findings also demonstrate that retreat from public spaces can occur in a matter of days to weeks after a major political event and can be sustained for many months, perhaps even years, after the event. Nevertheless, the study of perceived discrimination is complex (Oskooi 2016), and we therefore need more research to better understand the conditions under which discrimination ignites activism or results in withdrawal from sociopolitical life. Future studies will also be well served by implementing survey experiments that manipulate direct and indirect exposure to varying levels of societal and political discrimination, which would only build a more robust scholarship on the findings presented here.

**SUPPLEMENTARY MATERIAL**

To view supplementary material for this article, please visit https://doi.org/10.1017/S0003055418000801.

Replication materials can be found on Dataverse at: https://doi.org/10.7910/DVN/SEOCQ0.

**REFERENCES**

