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**Uncivil Online Environments, Anger at Political Out-Groups, and Strengthened
Preferences for In-Groups**

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**Uncivil Online Environments, Anger at Political Out-Groups, and Strengthened
Preferences for In-Groups**

by

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Report

Presented to the Faculty of the Graduate School

of the University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

December 2018

**Uncivil Online Environments, Anger at Political Out-Groups, and Strengthened
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by

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The University of Texas at Austin, 2018

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How does the Internet shape relations between political factions within society? This paper argues that free use of the Internet by politicians, organizations and ordinary citizens for political discourse and activity contributes to the aggravation of hostility between political factions within society, and to the strengthening of citizen preferences for political in-groups over out-groups. Online political interactions lack the constraints against transgressive discourse that are present offline, affording participants wider latitude to engage in rhetoric ranging from impoliteness to calls for violence in the course of political debates. Citizens' exposure to such conduct from political opponents breeds anger towards out-group members and a stronger relative preference for the in-group. I utilize survey data from Tunisia 2016, finding evidence that use of the Internet increases the probability that Tunisian Islamists and secularists feel strong anger towards their political opponents and identify more strongly with their own faction.

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Introduction

The Internet, by offering functional anonymity and bringing together large numbers of strangers to discuss politics, has contributed to the inflammation of hostilities between politically opposed groups in societies where large numbers of people have Internet access and the legal freedom to engage in political discourse. Behavior encouraged by the Internet has led to increased anger on the part of citizens towards their opponents and a stronger preference for political in-groups over out-groups.

Naïve forecasters have celebrated many false dawns throughout political history; Kenneth Waltz (1959) criticized one such group for having prophesied that more contact and increasing cultural exchange between different nations would lead all peoples to gain sufficient understanding of each other to live in harmony and forgo international war entirely. As he pointed out, greater knowledge of a previously unknown person or group could just as easily lead to heightened dislike and even more violence. Interconnectivity has a dark and divisive side.

At the end of the Twentieth Century and the beginning of the Twenty-first, the Internet was the latest innovation that held out the prospect of Utopia. This technology promised, like others before it, to erase barriers and divisions between individuals and groups, increasing equality and harmony. It also appeared to display a certain propensity to make life harder for dictators along the way. The brand of interconnectedness brought by the Internet, however, has indeed shown its own dark side. Just years after trumpeting the Web as an unstoppable force for

democratization, commentators now discuss the challenges it poses for the survival of democracies whose stability had not been in question for many years. In the hands of governments and even private businesses, the Web is a tool of mass surveillance. In the United States, pundits and scholars claim there are numerous ways in the Internet threatens, or enables anyone from rival great powers to opportunistic advertisers, to threaten America and its institutions. The web offers state-backed hackers a highway into voting systems, raising the prospect of stolen elections. It provides a forum for the spread of fake news, written to take advantage of the gullible, damage the reputations of targets and advance the careers of allies, that undermines legitimate news media and collectively agreed-upon reality. Use of Internet platforms to spread hate has even given rise to vicious inter-communal violence against peoples such as Myanmar's Rohingya minority (New York Times, November 2018).

The Internet's most damaging contribution to the world's politics and culture lies in what it has allowed individual citizens to do to each other, en masse. In the last twenty years ordinary citizens' political interaction with both public figures and other ordinary private citizens, as well as their consumption of political news, has migrated onto platforms where, relative to the offline world, incentive structures favor aggressive and hostile speech. During political discourse, individuals routinely experience members of political and social out-groups denigrating and verbally attacking themselves or their in-group, in ways that violate expectations of appropriate conduct. These experiences alienate individuals from the out-groups whence the verbal attacks come, lowering assessments of those out-groups and of

the extent to which they deserve to be treated with respect and dignity. As more individuals in more groups come to endure out-group attacks, society as a whole and the norms that prevent group conflict are abandoned.

The major currents of political science and other academic research addressing the impact of Internet technologies have dealt with a number of related questions: whether and how these technologies facilitate collective action, how they might undermine the authority of repressive autocracies, and their role in aggravating political polarization (Farrell 2012). It is with the last thread that this theory is most tightly entwined, although it holds implications for state-society conflict and possibly lessons for authoritarians seeking survival as well.

Much of the literature on the Internet's political impact argues that new technologies allow individuals to form homogenous online communities that contrast with the heterogeneous ones they inhabit offline. Termed "homophilous sorting," this mechanism allows them to express beliefs without fear, safe in the knowledge that most of those observing them share their views. This can trigger a cascade of online self-expression overturning previous preference falsifications necessitated by fear of reprisals from government or society (Kuran 1997) and possibly engender collective action by populations who suddenly realize they share common goals. Such collective action may threaten unpopular authoritarian governments who rely on keeping citizens in the dark about their compatriots' preferences. I argue, however, that use of the Internet to express political views may actually further divide citizens from one another.

The dominant conventional wisdom about the Internet's impact on democracies also rests on a homophilous sorting mechanism. This conventional wisdom is perhaps best summed up by Sunstein (2002). Homophilous sorting and the Internet-enabled practice of surrounding one's self with identical, unchallenging viewpoints purportedly engender extreme beliefs and harden hearts to compromise and genuine debate, leading to polarization. Exposure to views universally situated on one end of the political spectrum leads Internet users to venture further out towards that end. The United States has been the archetypal case for this school of thought. Indeed, the bitterness of the American partisan divide has recently increased, and rhetorical abuse between factions has become more and more common (Iyengar and Westwood 2015). However, in reality the Internet brings people into contact with those who have different views as much as it separates them from those people. My rejoinder to this conception of the Internet as a refuge from diversity is to point out that the offline world is often characterized by homogeneity. For example, the physical United States features a great deal of geographical segregation by political identity (Johnston, Manley and Jones 2016); the Internet probably offers more frequent and also far more intensely charged encounters with social and political heterogeneity than many Americans experience offline. The Internet drives polarization not through totally separating different political groups, but through bringing them together in ways that are likely to ignite conflict.

Theory

The conditions under which political interactions between citizens take place on the one hand shape the extent to which they are hostile and transgressive of social norms of communication, and on the other hand shape the extent to which they are interpreted through lenses focused on individual or group characteristics. The more hostile and transgressive interactions between political opponents are, the more resentment and anger they will likely inspire in the participants; the more the participants perceive each other's animating characteristics as group-based rather than individual, the more likely it becomes that they will change their assessments of entire political groups based on the interactions. Relative to offline discourse, online discourse takes place under conditions that encourage greater aggression and transgression and more strongly lead participants to draw conclusions about political groups broadly rather than merely about individuals.

Public and scholarly discussion of the Internet's impact on polarization has focused on the creation of online "bubbles" through homophilous sorting, wherein citizens associate only with those who share their views and isolate themselves from competing viewpoints (Farrell 2012). While such digital echo chambers undoubtedly exist, they do not come close to encompassing the whole of the Internet, and in fact the average person's offline social environment likely approximates a political "bubble" far more strongly than does his or her online environment. Many people spend most of their lives physically surrounded by others with closely matching social identities and political views. This partly results from the nature of the sources of political identities and beliefs; people acquire central components of their sociopolitical personality from their families through

processes of socialization during childhood (Green, Palmquist and Schickler 2002). Members of the same family therefore overlap a great deal in terms of politically relevant characteristics. The cleavages that dominate politics, whether they are over material distribution and class-based, ethnic, urban/rural, or regional, often tend to track spatial divisions between population segments. From the United States (Sharkey 2014) to the Arab world (Joseph 1983) many people live in neighborhoods with a distinct class character, a distinct racial or ethnic character, or both. As these characteristics shape political identities and beliefs, citizens likely end up closely aligned with their neighbors. These spatial divisions may be exacerbated by the tendency of politically similar people to gravitate towards the same areas; this drives “spatial polarization” in the United States, for example (Johnston, Manley and Jones 2016). Within this broader environment, the typical person also tends to associate more intensely with those likely to be similar: Close friendships form and survive more readily between those with aligned values. Due to these factors, most people mostly interact with others who are politically similar to them.

When people do interact in the real world with political out-group members, political cleavages are rarely salient or stressed. As Greene et al (2002) note, it is entirely possible for long-term friends not to know each other’s partisan identities. When not among known co-partisans, people tend not to talk about divisive cultural issues, for obvious reasons. Doing so is uncomfortable and exposes participants to the risk of a full-fledged argument. Engaging in an argument entails a danger of losing and facing embarrassment, or damaging a relationship from which

individuals expect to gain value in the future. This rational reticence underlies bans on talk of politics at American Thanksgiving tables. If an offline discussion or argument does begin, strong constraints militate against its devolution into personal abuse, name-calling, or otherwise poor behavior. First, even in a confrontation between two strangers participants must confront each others' flesh-and-blood presence and see and hear their empathy-inspiring reactions. This makes dehumanization relatively difficult and inflicting emotional suffering on the opponent relatively less appealing. Experimental evidence indicates a greater willingness to inflict suffering on others when their physical presence is less immediate. In the infamous Milgram experiment, wherein participants were instructed to administer severe electrical shocks to others, compliance increased with the physical distance between the subject and the target (Milgram 1974). Second, those same two strangers each must consider that rhetorical aggression might be met with physical retaliation, so a concern for safety discourages violation of discursive norms. These incentives operate among non-strangers with more permanent and important relationships as well, with the added stipulation that the damage to the relationship done by engaging in rhetorical abuse would impose potentially significant and long-lasting costs. A co-worker once belittled during a political argument might be more difficult to work with in the future. Even if the speaker is willing to destroy their relationship with the target, reputational costs among other members of the shared social or professional circle discourage violations of discursive norms. Thus a purely offline social environment features political homogeneity. If it features heterogeneity, that heterogeneity is relatively

unlikely to be discussed. And if it is discussed, it will probably be discussed in a manner that adheres to discursive norms.

In comparison to the effective political homogeneity, or de-emphasis of heterogeneity, present offline, a citizen's online environment is likely to be politically heterogeneous and feature sharp, norm-transgressing disputes. While some people and subcultures succeed in creating isolated, homogenous online spaces for themselves, much Internet traffic takes place in public fora that host large numbers of people of all political persuasions. Citizens run websites and social media pages devoted to or touching on politics, politicians campaign and attempt to influence public opinion, and news media organizations publish digitally, providing material that prompts reactions and online locations to engage with others. Even material meant only for sympathizers often attracts aggressive oppositional intruders.

Particularly instructive is the comparison between the experience of consuming political news in the digital era and that of previous decades. Older forms of media like the newspaper were suited for solitary consumption, or perhaps simultaneous reading and discussion in small groups. Television and radio news had the propensity for more social news consumption, but online political news offers far greater opportunities for engagement, and adversarial engagement in particular, with strangers and political opponents. Each time people read, or even glance at, an article about a political subject, they may be exposed to the comments, considered or not, of others either on the web pages of the media organizations or the social networks and other sites where articles are shared. In recent years social

media and online publishing have rapidly gone from playing no role in the dissemination and discussion of political news to playing an overwhelming role (Roese 2018).

The citizen-to-citizen engagement happening in this realm is fundamentally different from that happening offline. Both the constraints that reduce the frequency of face-to-face political discussion and the constraints that discourage incivility are almost totally absent from much of the popularly frequented Internet. Functional anonymity is usually an option if not the default. People can talk mostly to and in front of audiences composed of strangers whom they will never meet in real life and who will never be able to impose significant costs on uncivil speakers. Confronting strangers through a computer screen rather than acquaintances face-to-face renders dehumanization relatively easier. A lack of costs associated with damaging relationships or losing reputation means that Internet users are essentially free to engage in whatever kind of speech they want, barring that effectively punished by governments, without repercussions. People can say things to or about opponents that would never be acceptable in “real life,” airing prejudices, insulting, and abusing as they wish. As such, it is common for an Internet-using citizen to see political discussion marred by abuse and behavior widely considered unacceptable, or to be the target of such abuse. Boundaries of appropriateness are crossed far more frequently online than off.

Such behavior inspires distaste, disgust, and reciprocal hostility. These reactions, however, attach at least in part to the groups to which the offenders belong. In an environment where a user knows no individuals on a personal level it

is natural and even necessary to think largely in terms of group characteristics. All factions contain members who behave badly, leading users to change their assessments of all groups except their own. Most users tend to have higher regard for their own social or partisan groups than for others, rendering them vulnerable to the fundamental attribution error (Pettigrew 1979) whereby they are likely to excuse bad behavior from their in-group while taking out-group bad behavior as evidence of deep-seated and possibly group-wide character flaws. A member of faction A who is subjected to hateful attacks online by a member of faction B, and who sees it happening to other A members, may come to feel that faction B is composed of hateful, aggressive individuals who are hostile to A and do not respect discourse norms. Seeing other members of faction A behave the same way does not shift his perception of his own group nearly so much—after all, he knows he is a good person and he is in faction A, so obviously they are not all bad. Meanwhile, the process operates exactly the same way among members of faction B. As time goes on, negative experiences with opponents accumulate, and each side becomes progressively more convinced of the other's collective villainy and animosity. Internet users will begin to feel more and more anger towards opponents and view them as less and less worthy of being treated in accordance with the norms they violate. The process is self-reinforcing: A greater mutual willingness to transgress only heightens the degree to which citizens are abused. Declining assessments of the other side's collective character and their intentions towards one's own group lead to a greater preference for one's own side vis-à-vis the other.

In sum, an individual's political views and identity within sociopolitical groups tend to arise from sources like class, ethnicity, region, and family. Individuals usually share these sources, and therefore political views and identity, with the bulk of the people they interact with in offline settings. The similarity is greater still with those they interact with more frequently and intensely. Interaction, particularly serious interaction, therefore mostly takes place with others in the political in-group. Politically charged discursive interaction, due to its fraught nature and the risks posed by engaging in it with those who hold opposing views, is especially likely to occur only with those who are known or, presumed very likely, to fall on the same political "side." When individuals do engage in politically charged interactions with out-group members offline, both parties usually face incentives to moderate their tone and adhere to accepted standards of conduct, avoiding overt aggression, hostility, and other bad behavior. Failure to do so poses reputational costs and endangerment of one's position in important social and professional networks and relationships. The polite, restrained, disagreements these incentives encourage are relatively unlikely to lead to stereotyping of opposing political groups as hostile or ill behaved. The Internet, however, offers a venue for discussing politics under conditions of anonymity or pseudo-anonymity with strangers and other people whose goodwill is unimportant. The online environment is characterized by a lack of restraining incentives, rendering it far more likely that political disagreements will occur and descend into aggression. Members of political identity and belief groups who go online witness opponents displaying hostility and bad behavior, commit the fundamental attribution error,

and develop an image of their opponents, as a whole, as hostile and unrestrained by norms of interaction. This leads to online citizens feeling greater anger toward opponents and stronger preferences toward allies than their offline compatriots.

This theory implies two hypotheses. First, use of the Internet leads individuals to feel increased anger towards politically opposed groups, as they come to identify opponents as hostile and socially transgressive. Second, use of the Internet leads individuals to support the politics of their own side and oppose the politics of the other side more strongly, as their opinion of the other side falls and their fear of the other side increases. Internet users should express stronger political preferences for their own faction than non-Internet users.

Case Selection: Tunisia, 2016

The nature of this theory suggests some possible difficulties in attempting to observe confirmatory or discrediting patterns. As online discourse breeds inter-group antipathy, offline conduct and relations begin to suffer as well. A buildup of anger at perceived unfair abuse by other groups on the Internet and a decline in estimation of those groups may reach such a height that citizens start directing abuse at each other in the real world as well. In addition to sheer strength of antipathy, citizens develop “bad habits” in the bitter, confrontational online world that then affect their behavior offline. Once a citizen has logged enough time denigrating members of specific groups online, doing the same thing offline may become closer to automatic than it once was.

The corrosive effects of interactions taking place in anarchic and anonymous or pseudo-anonymous computerized spaces over time seep into traditional society. Transgressing discursive norms becomes habitual for formerly upstanding citizens, and the weight of grievance from repetitively sustained insults and contempt generated for the out-group overwhelm social pressures for good conduct. The spread of online misbehavior into the physical world thus eventually affects the experience and attitudes even of individuals whose personal contact with the Internet is insignificant. If the Internet begins a process that destroys discursive norms and brings about a scenario where even in physical society, political opponents throw slurs and abuse at each other, then the entire process has been transplanted offline. A technological illiterate may be slurred in the street, leading him to downgrade his feelings towards opponents. In such a society both Internet users and non-users will be more hostile towards out-groups than they would have been if the Internet never existed. The entire culture becomes to some degree contaminated, rendering the apparently viable empirical strategy of comparing the attitudes of those who extensively use the Internet to the attitudes of those who do not potentially ineffective. The effect under study paradoxically attains such strength and breadth that it can no longer be seen.

The risk of the target phenomenon obscuring itself necessitates utilizing a sample from a society where the Internet is prevalent and established enough to have altered some people's sentiments, but not so prevalent or established that it has altered everyone's sentiments. Additionally, political speech on the Internet must be free enough from government censorship that individuals have the

opportunity to engage in the kind of unrestrained debate that leads to aggressive, politically tinged exchanges. 2016 Tunisia constitutes such a society; only in 2016 did its number of Internet users first come to make up more than half of its total population (World Bank 2018). Society had not spent years under the influence of an Internet-using majority that would change the discursive habits of non-users. At that time it was identified by Freedom House as “Free” (Freedom House 2017), meaning state restrictions on civil liberties and expression were minimal and political discussion could freely take place online. It did not have a long tradition of unrestricted online political discussion, however; as recently as 2010 it was rated “not free” and its authoritarian government censored online speech, routinely jailed online critics, and intermittently shut down social media websites (Freedom House 2011). Tunisians in 2016 had not had many years to damage online discourse and spread the damage to offline discourse; we should still be able to observe a difference between the feelings of Internet users and non-users.

In late 2010 and early 2011, Tunisia underwent a revolution in which mass protests inspired by frustration over repression, the lack of democracy, and economic hardship overthrew Zine El Abidine Ben Ali, a dictator who had ruled the country since 1987. Weeks of street demonstrations began after the Internet virally spread video of a fruit-seller’s self-immolation in protest against police abuse and corruption. Ben Ali fled the country after failing to suppress the uprising, and soon afterwards the rump government (which excluded major opposition movements) run by his lieutenants stepped down as well. Unrest rapidly spread to other Arab

countries, becoming known as the Arab Spring and causing the collapse of governments in Egypt, Libya, and Yemen.

The authoritarian regime had, throughout its lifetime, engaged in widespread repression, banning, imprisoning, and torturing members of leftist, liberal and Islamist opposition movements. The best organized of these was Ennahda, a decades-old Islamist party with a reputation as one of the most moderate such organizations in the region, which began its life as an offshoot of Egypt's Muslim Brotherhood. Ennahda won a plurality of votes in Tunisia's first free election, October 2011, taking control of the Constituent Assembly formed to draft a new constitution. Clashes between Ennahda and leftist and other secularist protestors occurred over the next several years, as many non-Islamist Tunisians feared that Ennahda would utilize its advantage to permanently Islamize the country. In 2013, the assassination of a left-wing activist as well as an uncontrolled spike in extremist violence carried out by militant Islamist groups led to the largest protests since the 2011 revolution. Ennahda stepped down and participated in new elections, in which a newly formed secularist party, Nidaa Tounes, won a plurality. Rather than refuse to accept the results as many had feared, or even join the opposition, Ennahda entered into a coalition government as a junior partner with the secularist Nidaa Tounes. This agreement was largely the work of the elderly leaders of the two parties and inspired fierce resentment among rank and file members. The parliament headed by this precarious alliance coalition remained in power for the next several years, with observers fearing that tensions between the two parties' memberships would end the agreement, spark open conflict or a unilateral seizure

of power by one side, and derail the nascent democracy. Many secularists feared the imposition of hardline Islamist policies by Ennahda, while many in Ennahda identified Nidaa Tounes with the former authoritarian regime that had so vigorously suppressed them, due to many of its key figures having served under Ben Ali. The alliance did ultimately end in September 2018 without immediate catastrophe, when Ennahda parted ways with a much diminished Nidaa Tounes to join a new bloc, also largely secularist and composed of Nidaa Tounes defectors.

Since the revolution, Tunisian politics have revolved around the Islamist-secularist cleavage, which is characterized by high passions and serious tension even under the umbrella of official cooperation. Tunisian online political forums feature vibrant discussion, unrestricted by the government. In this situation, I expect that secularists and Islamists will experience more hostile political interactions online than in their normal offline lives, leading secularists who use the Internet to feel angrier at Islamists and more solidly secularist than secularists who do not use the Internet, and I expect to see the same dynamic play out regarding Islamist sentiments vis-à-vis secularists. In Tunisia we should be able to observe the effects of Internet use on the intensity of hostility between antagonistic political forces, in a context where controlling that hostility may be the key to preserving the cooperation that sustains young democracy.

Research Design

I use data from the Arab Barometer's fourth wave of interviews, conducted with 1200 Tunisians in early 2016. I am theoretically interested in capturing

Internet technologies' effects in terms of two outcomes: feelings of hostility towards opposing political groups and actors, and the strength of preferences for in-groups over out-groups along society's dominant political cleavage.

My theory predicts that the more intensely a person utilizes the Internet, the more likely that person will be to feel strong anger toward politically opposing groups, and the more likely they will be to strongly prefer their political faction over the other. These dependent variables are measured with responses to survey questions from the Barometer. Measuring anger, respondents were asked if they felt "very angry, somewhat angry, not very angry, or not angry at all" towards secular leaders in one question and towards Islamist parties and movements in the other. I code a binary variable indicating whether the respondent felt very angry towards Islamist movements, a binary variable indicating whether the respondent felt very angry towards secular leaders, and a binary variable indicating whether the respondent felt very angry towards at least one of the two groups. I measure the second major outcome variable, the strength of respondents' political in-group versus out-group preferences, using answers to a question asking whether they prefer a religious to a non-religious political party and whether or not their preference is strong. I code a binary variable indicating whether respondents' preference was strong. These binary variables serve as outcome variables in logistic regression models with the same set of predictors.

Chief among the predictors is level of internet use, measured as an ordinal variable ranging from 1, which indicates that the respondent does not use the Internet at all, to 6, which indicates that the respondent is "online almost all day." If

online experiences produce effects on anger and political preference strength, then more exposure to these experiences should yield a greater effect. I expect this variable to have a positive effect on the likelihood of both expressing extreme anger at political opponents and of having a strong preference for the in-group over these opponents. I will reject the null hypothesis that there is no relationship between Internet use and the outcome variable if two-tailed logistic regression hypothesis tests on its coefficient yield p-values of .05 or less.

I perform logistic regression analysis on the Arab Barometer sample of Tunisians as a whole, and then restrict the sample to Islamists (those who indicated a preference for religious political parties) and secularists (those who indicated a preference for non-religious parties) separately in order to see whether any effects Internet use has on the outcomes of interest are symmetrical across groups. Regarding anger, the theoretical expectation in these divided results is for a positive association between Internet use and strong anger against Islamists on the part of secularists and for a positive association between Internet use and strong anger against secularists on the part of Islamists. A difference in results between the two sides may indicate different mechanisms at work in each group.

Among the full sample, 34% felt strong anger towards Islamists, 33% felt strong anger towards secularists, and 46% felt strong anger towards at least one of the two groups. Of those respondents who expressed a preference for one type of party over the other, 59% held a strong rather than a weak preference. The mean score for frequency of Internet use is 2.6 (between “less than once a week” and “once a week”). Among secularists, 46% were angry towards the Islamist side while

30% were angry towards the secularist side, and 54% were angry towards at least one of the two factions. 52% had a strong rather than weak preference for secular parties. The mean score for frequency of Internet use is 3.1 (3 indicates use once a week). Among Islamists, 36% were angry with secularists while 27% were angry towards the Islamist faction, and 43% were angry towards at least one of the two factions. 63% strongly preferred religious parties. The mean score for frequency of Internet use is 2.4 (again, between “less than once a week” and “once a week”). 394 respondents, 33% of the entire sample, preferred secularist parties, while 599, 50%, preferred religious parties.

I include a binary variable indicating whether the respondent has or participates in a Facebook page and a binary variable indicating whether the respondent is on Twitter. Facebook and Twitter have been the most widely used online social networks in Tunisia, constitute massive online communities through which many people are exposed to the majority of their news (Roese), are widely held to have played significant roles in Tunisian politics dating to the revolution, and may have their own particular “architectures” and social dynamics with politically relevant consequences. (Lessig 1999). I also interact these with the measure of frequency of Internet usage, as I expect any effect of Facebook or Twitter use to be magnified by spending more time on the Internet, which likely entails spending more time on these networks. Including indicators for use of these two sites enables us to see whether they in particular drive the outcomes of interest, and to disentangle any such effect from that of the Internet more generally. 36% of respondents use Facebook; 7% use Twitter.

I include several control variables to reduce the threat of confounders. I include respondents' age (mean 43.5) because youth is almost certainly associated with Internet and social media use, and age or factors closely associated with it likely influence ideology and emotions toward political actors as well. A binary variable for urban as opposed to rural residency enters the model as well, because cutting-edge technology is more often concentrated in urban areas—as are liberal and leftist politics. 68% of respondents are urbanites. A scalar variable indicating the sufficiency of a respondent's household income is included because the wealthy have greater access to Internet technologies, and their ideologies and group allegiances often differ greatly from the poorer within their society. This variable ranges from 1, indicating that the household's income is too low to meet its needs, to 4, indicating that the household's income is enough to cover needs and save. The mean response is 2.1 (2 means a household's income does not cover its expenses and the household faces difficulty meeting basic needs). A scalar variable indicating the level of a respondent's education is included because the educated are more likely to have proficiency with advanced technologies and more likely to have experiences, knowledge, or institutionally inculcated values that predispose them in certain directions ideologically—in this case, primarily against Islamism. This variable ranges from 1, indicating illiteracy and a total lack of formal education, to 6, indicating an MA or above. The mean response is 3.1 (3 means preparatory or basic education).

I include measures of how often a respondent uses television or newspapers to follow political news, because people who are well informed about politics may

both use the internet more and have stronger political feelings than others. These measures range from 1, indicating no use of the medium to follow political news, to 5, indicating daily use. The mean response for television is 3.9 (4 means television is used multiple times per week). The mean response for newspapers is 1.5 (1, as previously stated, means newspapers are not used at all and 2 means they are used rarely). I include a measure of interest in politics, as being interested in politics may lead to both stronger views and feelings towards political actors and heightened use of the Internet to engage in political organization, discourse or other activities. This measure is scalar and ranges from 1, indicating that the respondent is not at all interested in politics, to 4, indicating that the respondent is very interested in politics. The mean response is 2.2 (2 means the respondent is somewhat interested). Finally, a variable measuring the degree to which respondents are religious is included, as religious beliefs and membership in religious communities may influence both technological lifestyle and attitude towards Islamists. The measure is scalar and ranges from 1 to 3, with 1 indicating that the respondent is not religious, 2 indicating that the respondent is somewhat religious, and 3 indicating that the respondent is religious. The mean response is 2.0.

Results

Tables display all coefficients for Internet use and other coefficients only when significant.

Table 1: Internet Use Effects in the Population at Large

	Anti-Secular Anger	Anti-Islamist Anger	Anger at Either	Party Preference
Internet Use Level	.224* (.014)	.222* (.014)	.281** (.002)	.199* (.043)
Facebook	x	x	x	x
Twitter	x	x	x	x
Internet Use Level*Facebook	x	x	x	x
Internet Use Level*Twitter	x	x	x	x
Age	x	.014* (.013)	x	.012* (.026)
Urban	x	x	x	x
Income	x	x	x	x
Education	x	x	x	x
Television	x	x	x	x
Newspaper	x	x	x	x
Interest in Politics	x	x	x	.170* (.018)
Religious	.317* (.009)	x	x	x

significant at: .05 (*) .01 (**)

Table 2: Internet Use Effects Among Islamists

	Anti-Secular Anger	Anti-Islamist Anger	Anger at Either	Party Preference
Internet Use Level	.282* (.024)	.175 (.165)	.265* (.033)	.105 (.408)
Facebook	x	x	x	x
Twitter	x	x	x	x
Internet Use Level*Facebook	x	x	x	x
Internet Use Level*Twitter	x	x	x	x
Age	x	.022* (.012)	.020** (.009)	x
Urban	x	x	x	x
Income	x	x	x	x
Education	x	.191 (.090)	.182* (.026)	x
Television	x	x	x	x
Newspaper	x	x	x	-.241* (.018)
Interest in Politics	x	x	x	x
Religious	x	x	x	x

significant at: .05 (*) .01 (**)

Table 3: Internet Use Effects Among Secularists

	Anti-Secular Anger	Anti-Islamist Anger	Anger at Either	Party Preference
Internet Use Level	.157 (.323)	.343* (.029)	.324 (.050)	.398* (.017)
Facebook	x	x	x	x
Twitter	x	x	x	x
Internet Use Level*Facebook	x	-.500* (.023)	x	x
Internet Use Level*Twitter	x	x	x	x
Age	x	x	x	.019* (.046)
Urban	x	x	x	x
Income	x	x	x	x
Education	x	x	x	x
Television	x	x	x	x
Newspaper	x	x	x	x
Interest in Politics	x	.363** (.001)	.337** (.003)	x
Religious	x	x	x	-.460* (.014)

significant at: .05 (*) .01 (**)

Based on the regression results derived from the sample as a whole, it appears that Tunisian use of the Internet does drive both heightened political anger and stronger preferences for the positions associated with one’s own “side.” The coefficient of Internet use on the odds of expressing strong anger against at least one of the two political targets, secular leaders or Islamist parties, is positive and significant with a p-value of .002. Internet use’s coefficient on the odds of preferences for either secular or Islamist parties being strong rather than weak, similarly, is positive and significant with a p-value of .043. Among this sample, including both Islamists and secularists, the coefficient on the odds of feeling strong

anger towards each individual target is positive and significant. We must look to the regressions conducted on the Islamist and secularist subsamples to determine if these effects are bilateral and symmetrical, driven by each faction's anger against the other and each faction's partisanship.

In terms of anger, subsample regression results indicate that exposure to the online environment does in fact aggravate anger bilaterally and symmetrically. As expected, Internet use has a positive and statistically significant relationship with Islamist anger against secularists and with secularist anger against Islamists. The Internet does not, however, have a significant effect on either group's anger against the leaders or organizations of its own side. This suggests that each side is angered by the other's bad online conduct but willing to excuse bad online conduct by its own members. The more Islamists use the Internet, the angrier they are at secularists, and the more secularists use the Internet, the angrier they are at Islamists. These subsample regression results provide strong support for this paper's argument regarding the Internet's impact on political anger.

A clear relationship between Internet use and party preference strength, on the other hand, is present only among secularists. For secularists, the coefficient of Internet use on the odds of strongly preferring a secularist party is, as expected, positive and statistically significant. We cannot conclude, however, that Internet use is associated with stronger preferences for Islamist parties among their supporters; the coefficient on Islamist party preference strength is only positive and statistically *insignificant*.

Why might Internet use have different effects on the two groups in terms of group identification and the expression of partisan views? The difference between the political composition of Tunisia's online population and its offline population may lead the two sides to have different experiences associated with political discourse on the Internet. Among respondents with an expressed preference for one type of party over the other, Islamists constitute a large majority—greater than 60 percent. By contrast, the population of Internet users is almost evenly divided, with secularists making up over 49 percent of respondents. Examining only the population of those who use the Internet frequently reveals the same pattern. Over half of daily Internet users with a party preference are secularists. Taking these dynamics into consideration, the two group's different regression results indicate that the conventional wisdom regarding polarization, which claims that people use the Internet to homophilously sort into homogenous online communities where they dispense with preference falsification and reinforce their own views, may better explain why the Internet might strengthen partisanship.

The effects of the offline tendency for politically similar people to cluster geographically, arise from the same families, and engage in political discourse primarily among others with sympathetic views may be exacerbated among Tunisian Islamists simply due to the fact that they are the majority of the country's political activated population. Particularly now that the old regime, which repressed political Islam, has fallen and Ennahda has a prominent place in the new government, Islamists can be relatively comfortable in expressing and discussing their beliefs offline, where most of the people around them are likely to share these

views. They are not very likely to encounter outspoken secularists among close acquaintances. Secularists are a minority in offline Tunisia, and likely exposed to some degree to the views of the Islamist majority and less surrounded by discourse that constantly reinforces their secular views. However, they have a disproportionate membership in online Tunisia, where they are freed from the constraints which are always present during flesh-and-blood interaction, particularly for the outnumbered side. Secularist Tunisian Internet users have a much greater opportunity than secularist Tunisian non-Internet users to engage in vibrant discussion among their co-partisans. This may powerfully strengthen their secularist beliefs. The advantage the Internet offers to Tunisian Islamists over the offline world in terms of constructing sympathetic communities for political discussion is less pronounced.

In terms of Internet use's impact on the strength of partisan preferences, the subsample results suggest that the conventional wisdom's concern with homophilous sorting and "ideological bubbles" is well placed. Islamists, who are a clear majority offline but not online, display no clear relationship between Internet use and partisan preference strength. Secularists, who are a minority offline but make up an equal share of the online population, do. The difference in on- and off-line opportunities to share beliefs with like-minded individuals is greater for secularists. Thus, a mechanism whereby the Internet exposes secularists to much more preference-confirming discourse than they experience in the real world but does not present Islamists with much more opportunities for preference

confirmation than they experience offline would account for why the Internet appears to make secularists, but not Islamists, stronger partisans.

Taken together, these results constitute strong evidence that my theory gives new insight into the relationship between the Internet and political animosity—exposure to greater heterogeneity of belief than is experienced offline, under less socially constrained conditions, encourages the alienation of enemies and the nursing of grudges. On the other hand, they also suggest that conventional wisdom has the upper hand in explaining preference strength. Among groups to which the Internet provides greater access to politically charged homogenous environments than the flesh-and-blood world does, use of the Internet may lead more strongly to heightened partisan preference strength.

Conclusion

In the last two decades, political discourse among the general population has shifted into a new online environment. While conventional wisdom holds that the Internet polarizes through encouraging online homogeneity, I have argued that it actually polarizes through exposure to higher levels of politically charged heterogeneity. This environment, absent many of the constraints of the offline world and physical society, has encouraged aggressive rhetoric and behavior towards political out-group members. Exposure to this behavior from out-groups leads citizens to feel anger towards these out-groups and prefer their own in-group more strongly by comparison. Evidence from Tunisia strongly confirms this analysis in relation to inter-group anger, but is more equivocal regarding partisan preference strength. Overall, Tunisians who use the Internet more are more likely

to feel strong anger towards political factions and more likely to express a stronger preference for their own factions' political organizations. At a more detailed level of analysis, members of each group become more likely to feel anger towards members of the other the more they use the Internet, exactly as my theory predicts. It appears that the conventional wisdom may play a partial role in explaining political views as well. While secularists who use the Internet are indeed more likely than secularists who do not to strongly prefer secular parties, Internet-going Islamists are no more likely than non-Internet going co-partisans to strongly prefer Islamist parties. Due to the two factions' relative preponderance in online and offline Tunisia, online Islamists may not have much more opportunity than offline Islamists to surround themselves with sympathizers in politically vibrant environments. The Internet may conversely provide secularists a haven of likeminded people they do not have in real life, leading them to become more staunchly secularist in accordance with the conventional wisdom and Sunstein's argument that online homogeneity causes political views to harden. Thus, the Internet may expose members of all groups to more politically charged interaction with opponents under conditions that encourage hostility, while simultaneously affording some groups a greater opportunity to construct homogenous political communities. All groups are made angrier by the Internet's heterogeneity; some groups are made into stronger partisans by the homogeneity of communities they build there.

We may already be witnessing large-scale breakdowns in norms, institutions, and democratic procedure that result from the ways populations are using, or

abusing, modern communications infrastructure. Future consequences could be still more severe. Samuel P. Huntington's 1965 warning of the dangers accompanying sociopolitical change in the developing world perhaps rings truer for many "advanced" countries today than it ever did for its intended subjects: "political participation is growing much more rapidly than is the 'art of associating together'" (pp. 386). Any person—or foreign intelligence service—can easily reach out across any distance and enrage millions; formal and informal institutions might not have the capacity to withstand these aggravations and the backlash they inspire. Demagogues need no longer clear even the minimal moral hurdles erected by yesterday's gatekeepers to gain a platform from where they can set groups at each other's throats. And if Tunisia follows the route other countries have taken to a higher degree of reliance on the Internet without somehow breaking the relationship between that technology and intergroup hostility, will the precarious Islamist-secularist cooperation and toleration on which its democracy depends survive? If this trend holds globally, and freely used Internet technologies continue to spread, Lijphart's prescription for elite-managed, consensual and inclusive democracy (1977) may no longer be a viable pathway for divided societies emerging from authoritarianism.

Another disturbing implication of these findings is that rather than facilitating the possibility of collective action against dictatorship, the Internet may undermine it by sharpening divisions between segments of a population. The Arab Spring revolutions, for example, owed much of the success they achieved to simultaneous, cooperative action by Islamist and secular opposition movements.

Increased animosity between such factions within society might threaten the prospect of future cooperation, making dictators more secure. This suggests that, paradoxically, relaxing controls on opposition use of the Internet might in some divided societies weaken oppositions' ability to collectively challenge the government. Future research should seek to determine in which contexts tightly controlling online opposition speech is a counter-productive strategy for autocrats, in addition to further examining the differential effects on groups of being over-represented and under-represented online.

This paper offers only limited policy lessons. While disturbed or amoral individuals who advocate violence from the shadowed corners of the World Wide Web obviously merit some disciplinary or medical intervention, the more mundane forms of viciousness ordinary citizens perpetrate against one another online admit of no morally acceptable remedy from the liberal democratic state. Any solution to the problems that new information technologies present must emerge from voluntary behavioral change by hundreds of millions of individuals. The real world has never been capable of forcing citizens to be good people, and the virtual world is even less so. Preventing the aggravation of animosity between political factions in society requires the practice of self-restraint, adherence to standards higher than those imposed by the immediate effort, and refusal to succumb to the temptation to vilify others while excusing the transgressions of those with whom we identify. It is my hope that research along the lines of this paper might bring awareness to the larger societal costs of thoughtless callousness in everyday political interactions. Armed with these findings, governments and civil society organizations can at least

issue calls for more civil discourse, and spread the knowledge that even online incivility has important political, if not personal, consequences.

References

- Arab Barometer. "Arab Barometer Wave IV."
<http://www.arabbarometer.org/survey-data/data-downloads/> 1 April 2018.
- Farrell, Henry. "The Consequences of the Internet for Politics." *Annual Review of Political Science* 15 (2012), pp. 35-52.
- Freedom House, "Freedom in the World 2011: Tunisia."
<https://freedomhouse.org/report/freedom-world/2011/tunisia>
- Freedom House, "Freedom in the World 2017: Tunisia."
<https://freedomhouse.org/report/freedom-world/2017/tunisia>
- Green, Donald, Bradley Palmquist, and Eric Shickler. *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. New Haven: Yale University Press, 2002.
- Huntington, Samuel P. "Political Development and Political Decay." *World Politics* 17, no. 3 (1965): 386-430.
- Iyengar, Shanto, and Sean J. Westwood. "Fear and Loathing across Party Lines: New Evidence on Group Polarization." *American Journal of Political Science* 59, no. 3 (2015): 690-707.
- Johnston, Ron, David Manley, and Kelvyn Jones. "Spatial Polarization of Presidential Voting in the United States, 1992-2012: The 'Big Sort' Revisited." *Annals of the American Association of Geographers* 5, no. 106 (2016): 1047-1062.
- Joseph, Suad. "Working-Class Women's Networks in a Sectarian State: A Political Paradox." *American Ethnologist*, vol. 10, no. 1, 1983, pp. 1-22.
- Kuran T. *Private Truths, Public Lies: The Social Consequences of Preference*

- Falsification*. Cambridge, Massachusetts: Harvard University Press, 1997
- Lessig L. 1999. *Code and Other Laws of Cyberspace*. New York: Basic Books
- Lijphart, Arend. "Majority Rule versus Democracy in Deeply Divided Societies."
South African Journal of Political Studies 2, no. 4 (1977): 113-126.
- Milgram, S. (1974), *Obedience to Authority: An Experimental View*, London: Tavistock Publications.
- Pettigrew, Thomas F. "The Ultimate Attribution Error: Extending Allport's Cognitive Analysis of Prejudice." *Personality and Social Psychology Bulletin* 5, no. 4 (1979): 461-476.
- Roese, Vivian. "You Won't Believe How Co-dependent They Are: Or: Media Hype and the Interaction of News Media, Social Media, and the User." In *From Media Hype to Twitter Storm: News Explosions and Their Impact on Issues, Crises, and Public Opinion*, edited by Vasterman Peter, 313-32. Amsterdam: Amsterdam University Press, 2018.
- Sharkey, Patrick. "Spatial Segmentation and the Black Middle Class." *American Journal of Sociology*, vol. 119, no. 4, 2014, pp. 903-954.
- Stevenson, Alexandra. "Facebook Admits It Was Used to Incite Violence in Myanmar." *The New York Times* 8 November 2018. Web. 20 November 2018.
- Sunstein CR. *Republic.com*. Princeton, NJ: Princeton University Press, 2002.
- Waltz, Kenneth. *Man, the State and War: A Theoretical Analysis*. New York, New York: Columbia University Press, 1959.

World Bank, *World Development Indicators* (Washington, D.C., 2018)

<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>