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### **OUR MISSION**

The Middle East and North Africa Politics Section of the American Political Science Association (APSA) was established in 2018 to support, develop and publish research on the politics of the MENA region utilizing interdisciplinary methodological, theoretical and empirical tools. It seeks to fully integrate the rigorous study of the politics of the Middle East with the broader discipline of Political Science, to serve as an institutional home for the community of political scientists dedicated to the Middle East. This Newsletter is a forum for discussion of research and issues of interest to the community.

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### MESSAGE FROM THE EDITORS

#### A Note from the Section Chair

Welcome to the second issue of the APSA MENA POLITICS NEWSLETTER. The Section's first year has been an exciting and productive one, marked by rapid growth and a number of key milestones. Since being formally established at the 2018 Annual Conference, the Section published the first volume of this Newsletter, created a website, selected three well-attended panels for the annual conference, ran a Research Development Group short course for junior scholars from the MENA region and sponsored a Teaching MENA Politics short course ahead of the Annual Conference, and held a reception for the Annual Meeting. In mid-September 2019, Section membership passed the 400 mark, while the <a href="mailto:aPSAMENA">aPSAMENA</a> Twitter feed has acquired more than 1100 followers. At the Section Reception (held in conjunction with the Project on Middle East Political Science), awards were announced for Best Dissertation (José Ciro Martínez, "The Politics of Bread: State Power, Food Subsidies and Neoliberalization in Hashemite Jordan") and Best APSA Paper (Diana Greenwald, "Coercive and Fiscal Capacity Development in Palestine").

There will be many more exciting opportunities in the coming year. Elections will be held to replace Vice-Chair Lindsay Benstead and At-Large Member Bassel Salloukh. A third annual Research Development Group workshop for junior scholars from the MENA region will be held at the 2020 Annual Conference. A third Section Award has been added to the existing awards for Best Dissertation and Best APSA Paper: "Best Book in MENA Politics," for books published in 2018 or 2019. We are especially excited that we will be selecting an inaugural POMEPS-APSAMENA Fellow, an early career scholar from the MENA region who will participate in Section activities, spearhead engagement with scholars from the region, and work on translations of political science research to and from regional languages.

What about the Newsletter? I will continue to serve as the editor of the MENA POLITICS NEWSLETTER for the next two years, and Lauren Baker will continue to be the assistant editor. We will be inviting special sections and guest editors for each issue, so please contact me with your ideas—workshop symposia are especially encouraged. The second issue of the MENA POLITICS NEWSLETTER features two special sections on methodological issues relevant to scholars in our network, each organized by one of our editorial board members.

The first section, "New Approaches to Survey Research in MENA," is based on a workshop organized by Newsletter Editorial Board member Holger Albrecht and hosted by the University of Alabama. It brings together a diverse group of scholars who have developed and employed novel forms of survey data collection or analysis. Justin Gengler explores how Qataris understand and relate to surveys to unpack the meaning of the explosion of such research in the region. Nadine Sika uses surveys to explore the drivers of political trust among Arab youth. Yael Zeira explains how a self-administered life history calendar survey allowed her to get around issues of social desirability bias and recall bias in her study of Palestinian participation in contentious politics. Lindsay Benstead examined theories of clientelism and constituent service through surveys designed to test the effects of contact between Tunisian politicians and their constituents, using this to provide alternative explanations for the relative success of the Islamist Ennahda Party. And Sharan Grewal uses an innovative Facebook survey to explore the resilience of the Algerian protest movement. Matt Buehler employed a unique survey to examine how Moroccans think about nuclear

energy, turning up surprising findings which challenge us to rethink assumptions about public attitudes towards foreign policy issues.

"Text as Data," the second special section organized by Newsletter Editorial Board member Alexandra Blackman, features cutting-edge research from scholars working with large textual data sets across diverse realms. Blackman introduces the section with a sharply drawn overview of the opportunities for political science research offered by the computational analysis of Arabic texts, as well as critical challenges. Alexandra Siegel focuses on the analysis of social media data to explain Arab politics, highlighting a range of new methodologies and data collection tools. Ala'a Alrababa'h describes new trends in the quantitative text analysis, showing how new tools can reshape the study of Arab media sources. Nate Grubman uses textual analysis of party platforms to develop measures for ideological scaling. Finally, Richard Nielsen shows how statistical text analysis allowed for the rigorous study of a vast body of online Islamic religious production.

The engaging, thoughtful essays in this Newsletter offer both important individual contributions and a collective mapping of two exciting new areas for political science research on the Middle East. We hope that you find them useful, and we look forward to hearing your ideas for future symposia or standalone essays.

Marc Lynch, Section Chair and Newsletter Editor Lauren Baker, Newsletter Assistant Editor

### **NOTE FROM APSA**

Hello from APSA's Department of International Programs.

First, we want to congratulate the MENA Politics Organized Section on an impressive first year of activity! This is a great time for MENA Politics at APSA—we are excited to announce that APSA's grant from CCNY has been renewed for two more years, which will enable us to continue our MENA Programing with a growing community of MENA scholars in and outside the region. Over the past summer, the APSA held the first part of the 2019 MENA Workshop in Abu Dhabi; extended our partnerships with political science departments at Cairo University and the American University of Cairo to support graduate students and faculty; and collaborated with the MENA Politics section and POMEPS to organize a Research Development Group at the APSA Annual Meeting in Washington DC. In addition, we have open calls for exciting opportunities that we hope you can disseminate among your contacts and networks.

**APSA** MENA This year's Workshops, which are the 6th in our series of annual workshops in the Arab Middle East and North Africa, focused on "Women and Politics: MENA Experiences." The program began with a one-week program at the New University-Abu Dhabi, UAE from June 9-13, and culminated with a second week in Rabat, Morocco from October 14-18. Across both weeks, fellows discussed readings and shared experiences connected with the workshop



themes. They also received feedback on research manuscripts, attended professional development sessions, and heard from guest speakers from government and civil society. Following this workshop, alumni received 3 years membership to APSA and the MENA Politics Organized Section.

Starting in 2020, the MENA workshops will run as a single 7-day workshop with follow up programming at the APSA annual meeting. We are currently reviewing the final applications and the selected team will be announced before end of November.

Over the next two years APSA will continue its collaboration with CQMR and ICPSR to support scholars based in Arab MENA countries in undertaking rigorous training in qualitative and quantitative methods. Currently, we have an open call for applications for the IQMR summer program taking place in June 2020 in Syracuse, NY. The deadline is December 12, 2019. Similarly, we are finalizing a call for participation at the Inter-University Consortium for Political and Social Research (ICPSR) summer program, taking place in June and July 2020 at Michigan University.

The departmental collaboration initiative continues to attract interest from faculty members and departments at Arab Universities. APSA is renewing its collaboration with departments at Cairo University and the American University in Cairo (AUC) to offer graduate students and faculty members advanced methodological training in areas such as using R, conducting interviews, doing archival research, as well as organizing dissertation writing workshops and seminars on creative teaching techniques for early career faculty. We are also in discussions with Alexandria University and Birzeit University for new programming.

The Arab Political Science Network (APSN) organized a roundtable at APSA's annual meeting to discuss the interests, challenges and priorities of MENA-based scholars of political science. APSN will be hosting an information session and a panel at MESA in New Orleans on Friday November 15. All MESA attendees are welcome to attend both events. In addition, APSN is soliciting applications from PhD students and junior faculty in the Arab world for the 2020 Research Development Workshop on Citizenship, Legal Status and the State in the MENA. Deadline for applications is January 10, 2020. The Network is also offering conference travel grants for individual paper and full panels. Deadlines are January 16, 2020 and June 18, 2020 respectively.

Finally, the call for papers and panels for the 2020 APSA annual meeting in San Francisco is currently open. We look forward to collaborating with the MENA Politics section to offer travel grants for up to 6 early-career Arab scholars attending the MENA Research Development Group (RDG). The RDG is an annual event organized by the MENA Politics organized section featuring a full day of research feedback and professional development discussions that take place the day before the APSA annual meeting.

If you are interested in the learning more or getting involved with the APSA MENA Project, please contact us at menaworkshops@apsanet.org.

Best to all in the coming months and stay well!

Ahmed Morsy and Andrew Stinson APSA MENA Project menaworkshops@apsanet.org

### **AWARDS**

Congratulations to the winners of the inaugural MENA Politics Section Awards for 2019!

Best Dissertation: José Ciro Martínez, 'The Politics of Bread: State Power, Food Subsidies and Neoliberalization in Hashemite Jordan' (Cambridge University).

The committee was impressed by this highly innovative study of welfare politics in Jordan, presenting the Jordanian state as engaged in a process of demonstrating its authority through the distribution of flour, the regulation of bread prices and the indirect management of the bakery. Combining theoretical fluency with empirical richness, the dissertation is based on a mix of detailed archival work, extensive interviews with policy- makers and other officials, and a multi-site ethnography conducted in bakeries over an eighteen month period of fieldwork. The fieldwork was conducted in Ma'an, 'Aqaba and across diverse neighborhoods in Amman, to bring out the differentiated practices and geographies of welfare.

(Selection Committee: Sean Yom, Lindsay Benstead, Michaelle Browers, and Yael Zeira).

Best Paper Presented at 2018 APSA Annual Meeting: Diana Greenwald, "Coercion and Extraction Amid Constraints: Theorizing the Functional Coherence of Aspiring States."

This innovative paper is drawn from Greenwald's dissertation on the development of Palestinian state capacity. The committee was impressed with the theoretical sophistication and empirical richness of the paper, and for its significant contributions to our knowledge of the area.

(Selection Committee: Quinn Mecham, Dan Corstange, David Walder, and Lindsay Benstead).

#### Call for Proposals

Be sure to <u>submit your nominations</u> for the 2020 Awards for Best Dissertation, Best Paper Presented at the 2019 Annual Meeting, and Best Book (a new award including books published in 2018 and 2019).

# SURVEY RESEARCH IN THE MIDDLE EAST AND NORTH AFRICA

#### SECTION INTRODUCTION

Social science scholarship on the Middle East and North Africa has witnessed a dramatic expansion of public opinion polls and survey research over the past twenty years. For one, the sheer number of scholars engaged in this type of research has grown remarkably. These scholars come from a growing number of research institutions across the United States and the Middle East, building on the works of scholars associated with the University of Michigan who have dominated public opinion research in the past. We have also seen a significant thematic expansion of systematic individual-level scholarship, reaching beyond traditional research topics. Middle East area specialists will notice the opportunities arising from survey research complementing qualitative, elite-level interviews, while political scientists with greater interest in methodological concerns will recognize the innovative strategies employed by scholars to tackle significant challenges posed to survey research in the region. This special section presents contributions that introduce some of the pertinent topics and show trends, opportunities, and challenges in this emerging research program.

One important trend in current research using survey material is the increasing number of country-level projects that have gained in importance compared to research using cross-country data, such as the World Value Surveys, the Pew Research Center, and the Arab Barometer Project. In this special section, five papers present research using original material from country-level surveys, while Nadine Sika's contribution on the interplay of contentious activism and popular trust in political institutions stands alone as a project drawing on a range of countries. This focus on smaller samples in survey research comes with opportunities and challenges. On the positive side, country-level projects typically generate comparatively low costs and hence remain feasible for a large number of scholars. Moreover, scholars have added to a thematic expansion of the research program. While broad regional or global projects have contributed to the conventional topics prominent in survey research—including popular perceptions of democracy, electoral behavior, ethnic diversity, and the role of religion in society—smaller-scope survey research has advanced to designing more specific surveys and questionnaires that speak to discreet theoretical debates.

Apart from methodological accounts, contributors to this special issue have explored specific issue areas in comparative politics and security studies. Lindsay Benstead, for instance, explains electoral voter preferences during Tunisia's democratic transition, arguing that the Islamist Ennahda Party has deployed social service provision for political gains more effectively than its political competitors. Nadine Sika finds that participants in contentious activism harbor trust in specific political institutions, but not in others. Matt Buehler explores popular support for a nuclear power program in Morocco. Yael Zeira studies the participation of Palestinians in protest activities against Israeli occupation. And Sharan Grewal tracks protest participation in Algeria over time and explains why protesters remained in the streets even after President Abdelaziz Bouteflika's resignation.

Thematic expansion and the focus on individual countries certainly come at a price. On the one hand, individual country-level survey projects are hardly ever designed as longitudinal studies and—unlike works based on data by the Arab Barometer or the World Value Surveys—typically cannot provide any insights on developments over a longer period of time. Additionally, as of now, the growing number of individual projects do not appear to generate substantial cumulative knowledge—perhaps in part for the lack of a centralized data repository for survey research in the Middle East—raising questions about the comparability and external validity of findings.

In general, the Middle East and North Africa remains a challenging region to conduct empirical research on the ground generally and survey research in particular. High levels of authoritarianism, restrictive state-society relations, and violence in political conflicts constitute an important context factor, raise ethical concerns, and possibly generate respondents' preference falsification emanating from question sensitivities and interviewer effects. The region's lack of political openness and stability in conjunction with significant variation in the availability of a professional research infrastructure has prompted a clustering of survey research across a select number of countries that have remained more survey-friendly than others, including Tunisia, Morocco, Palestine, Lebanon, Turkey, and Qatar. And yet scholars have found ways to conduct systematic individual-level research in more difficult settings including Algeria, Yemen, the conflict environment of Iraq, and the refugee population in Syria's neighboring countries.

These obvious challenges have also inspired methodological innovation—and it is in this area where the contemporary research program on the Middle East promises to make a noteworthy contribution to social science survey research more broadly. As Sharan Grewal shows, social media networks appear to be an appealing strategy to reach out to populations in closed authoritarian regimes. Yael Zeira, in her study of protests against Israeli occupation, developed a research design aimed at mitigating social-desirability bias and recall bias among respondents. And finally, Justin Gengler invites us to reflect more generally on the impact of survey research on society. He presents findings from an opinion poll among Qataris, asking about their attitudes toward such opinion polls.

- Holger Albrecht, The University of Alabama

## THE MEANING OF PUBLIC OPINION RESEARCH IN THE ARAB WORLD

# By Justin Gengler, Social and Economic Survey Research Institute, Qatar University

#### Introduction

The previous decade has seen a marked expansion in the number and sophistication of scientific opinion surveys being used to study society and politics in Arab countries. This expansion has shifted focus from merely procuring public opinion data in a region that is often difficult to penetrate, to assessing and addressing concerns about the quality of Arab survey data and the substantive inferences based on them. Such methodological work continues, and includes studies of how the survey sponsor impacts participation; the effect on responses when third parties are present during the interview; and especially the influence of observable interviewer attributes on the responses given in surveys effects). Underlying (interviewer methodological agenda is a lingering concern that certain aspects of the survey-taking climate in the Arab world and in other parts of the Middle East and North Africa-in particular, a lack of political freedom and conservative social norms-may and/or undermine the representativeness reliability of surveys, either by biasing samples in favor of certain types of respondents or by causing respondents to edit their answers to sensitive or even nonsensitive survey questions.

Yet these same contextual concerns should also prompt wider reflection about the *meaning* of public opinion research in the Arab world and in other settings where social or political factors may create a potentially inhospitable survey climate. How do men and women in Arab countries perceive surveys and participation in survey research? More fundamentally, how do they understand and define the concept "public opinion" in an environment far removed from its Western origins? Finally, are Arab views of surveys and conceptualizations of public opinion unique, or are they shared by people in other regions with political and/or cultural similarities? These are

questions that colleagues and I have sought to better understand over the course of a three-year project on survey attitudes in the Arab world supported by the Qatar National Research Fund. Our findings so far, recently <u>published</u> in the *British Journal of Political Science*, have important implications for consumers and producers of public opinion data from the Middle East and North Africa.

### Doubts about Arab Survey Research

As a political scientist living and collecting survey data in the Arab Gulf states for more than a decade, meta-questions surrounding the meaning of public opinion in the MENA region emerged early in my work and have remained a constant backdrop to substantive research into political behavior, group conflict and identity politics, and authoritarianism. This is due, perhaps in the first place, to my experience presenting results from Gulf surveys at international survey research conferences since around 2010. Consistently, such presentations elicit some or all of the following, mostly rhetorical questions from audience members accustomed to hearing about polls conducted in the Netherlands or Quebec:

- "Do people in Arab countries understand surveys well enough to participate and give proper responses?"
- "Will a person even open the door for a stranger (interviewer) in those countries?"
- "How can you expect citizens in a nondemocratic society to give honest answers to political or other sensitive questions in a survey?"
- "There is no such thing as public opinion in authoritarian Arab countries, so aren't these survey data mostly meaningless?"

Even if overly exaggerated and sweeping, these reactions represent valid concerns about how specific aspects of the Arab survey climate might introduce nonresponse and response error—the same sort of doubts that have prompted extant methodological studies. Lack of public familiarity with surveys may depress response rates or make

respondents less likely to follow survey instructions. Concerns the over privacy implications of surveys, including worry about possible government surveillance, may also lead to unit or item nonresponse error as well as socially desirable reporting. Additionally, it is possible that the nature of responses given in Arab opinion surveys is influenced by the way that individuals understand the idea of public opinion and that the modal Arab understanding is not equivalent to the conceptualization prevailing in the West.

Still. mν anecdotal experience conducting interviews non-democratic and socially conservative Arab Gulf states, particularly Bahrain and Qatar, gave a quite different impression. Not only do Gulf citizens, including residents of outlying rural villages, overwhelmingly recognize the purpose and modalities of surveys, but they often appear pleased to be asked their opinion on important issues and policies precisely because they are infrequently the subject of public debate. This includes during times of significant political tension in which concerns over possible state surveillance were very justified, as in Bahrain just prior to the country's 2011 Shi'a-led uprising. Observing my own family members' complaints about telephone polls during U.S. election cycles, and brusque hang-ups on interviewers, I found it hard to believe that men and women in Arab countries were any more negatively disposed toward opinion surveys than people anywhere else.

#### Surveys about Surveys

In 2017, these ideas crystallized into a successful grant proposal for a study of public attitudes toward survey research in Qatar-a survey on surveys—with co-investigators Russell Lucas (Michigan State University), Mark Tessler (University of Michigan), and Jonathan Forney (Forcier Consulting). Improbably, perhaps, the use of questionnaires to assess views toward opinion polls, commonly referred to as survey attitudes, dates to the 1950s<sup>2</sup> and has produced a sizable literature. But, prior to our study, existing research on survey attitudes had been advanced solely on the basis of data collected in Western Europe and, despite many decades of investigation, still had produced no theoretical consensus regarding the number and character of the specific attitudinal dimensions that comprise views toward surveys. Nonetheless, results of previous studies broadly agreed in showing that more positive attitudes toward surveys are associated with more cooperative respondent behavior and thus to better survey data.

Extension of this work to Qatar was significant not only in gauging survey attitudes in a very different context—one representing exactly those social and political factors said to undermine the quality of Arab opinion data-but also because Qatar's extreme demographic diversity allows comparison of survey attitudes across the various culturalgeographical groupings represented in the Qatar population. Our survey sample contains respondents from more than 50 countries residing in Qatar, including more than three-quarters of Arab League states. This diversity allows a direct test of the idea that Arabs as a broad category possess more negative perceptions of surveys than other people from national or regional backgrounds. The data also offer insight into the origins of potential negativity toward survey research. To the extent that Arabs do hold more skeptical views of surveys, is that because surveys are viewed as irrelevant to policymaking, because they are seen as invasions of privacy, because their results are considered unreliable, because they are too cognitively burdensome, or for some other reason that the survey attitudes literature has identified?

As it turns out, these were the wrong questions to be asking. Or, rather, they erred in their premise. Results from our study of survey attitudes in Qatar show not only that Arabs tend to hold positive attitudes toward surveys on all measured dimensions, but that their attitudes are more positive than those held by individuals from other cultural-geographical regions represented in Qatar, including South Asia, Southeast Asia, and—ironically—the West. The findings also revealed a second surprise: a new dimension of survey attitudes not observed in previous studies

conducted in Europe. This dimension captures perceptions of the potential positive or negative purposes of surveys: the use of surveys for purposes of political manipulation or surveillance, rather than political voice and participation. On this aspect of surveys as well, the data show that Arabs in Qatar tend to hold more positive views on average than non-Arabs.

However, two experiments embedded in our survey demonstrate an important divergence between Arabs and non-Arabs in the effects of survey attitudes on their actual response and nonresponse behavior in surveys. A conjoint presented respondents with experiment hypothetical survey of randomized mode, length, topic, and sponsor and asked them to rate their likelihood of agreeing to participate. Results show that, while both Arabs and non-Arabs are sensitive to the mode and length of a survey, only Arabs are influenced in their decision to participate by the survey sponsor, being less likely to participate when a poll is conducted by an international organization or private company. (Notably, state sponsorship did not depress participation.) In addition, Arabs are influenced in their decision by latent attitudes toward surveys generally, irrespective of the parameters of a particular survey request. Regardless of the specific characteristics of a survey, Arab respondents are less likely to participate when they possess more negative views about enjoyment of surveys, the reliability of surveys, the time and cognitive costs of surveys, and the political purposes of surveys. The participation decision among non-Arabs, by contrast, is impacted only by their overall views about the enjoyableness of surveys.

An analogous result obtains in the case of the second experiment embedded in our study, which examines how survey attitudes influence respondents' willingness to complete the full interview schedule when presented with an easy opportunity to cut short the survey. We call this the "birthday experiment." Respondents are informed that, due to the length of the final section of the survey, only one-half of respondents will be asked to continue: those whose birthdays fell in the previous six months. We expected that

some individuals who wanted to terminate the interview would lie about the timing of their birthday, and that respondents with negative views about the cognitive and time costs of surveys might be especially likely to drop-out. In fact, this turned out to be true only for non-Arab respondents. Among Qatari and non-Qatari Arabs, the likelihood of early termination was determined instead once again by overall views of the reliability and purposes of surveys, rather than negative impressions about the time and effort it takes to complete surveys.

Our study of survey attitudes in Qatar thus gives reason for optimism while also identifying some challenges to ensuring high-quality opinion data from the Arab region. On the one hand, it helps to dispel persistent worries that authoritarian institutions, traditional social norms, and public unfamiliarity with surveys instill negative views of the entire survey research enterprise among ordinary Arabs. At the same time, however, our findings show that the Arab context gives rise to specific concerns about surveys that may not exist elsewhere, namely the use or manipulation of survey research for political purposes. Equally significant, it shows that Arabs' response and nonresponse behavior in surveys sensitive disproportionately to subjective impressions about the general reliability and intentions of surveys-concerns that are not seen to impact the survey-taking behavior of non-Arabs in Qatar. Arabs on average are more positively inclined toward surveys than other groups, yes, but their participation in survey research is also mediated by a different and wider range of generalized survey attitudes.

#### Some Practical Implications for Researchers

This article has highlighted recent collaborative work exploring how people in the Middle East and North Africa view survey research, and the ways in which their attitudes differ from those of other cultural-geographical groups around the world. Equally important, this research is interested in understanding the practical *impact* of these orientations on actual survey behavior. To date, these topics have not been widely studied in the MENA context, although they are motivated by the

same basic concerns surrounding the region's survey-taking climate that have prompted other methodological work into sponsorship effects, third-party effects, and interviewer effects in Arab opinion data.

Our substantive findings serve to dispel certain stereotypes about the unique aversion and even hostility of Arab men and women toward survey research, whether in general or compared to Western or other populations. Yet our results do also give reason for further reflection and empirical investigation about the particular ways that survey research is experienced, perceived, and understood in MENA countries, and what, if anything, these context-driven concerns and conceptualizations imply about the nature and quality of data reported in public opinion surveys. The foregoing discussion suggests some practical lessons for survey researchers working in the Arab region.

Reorienting survey design concerns. Survey practitioners everywhere spend significant time deliberating basic survey design questions, including the mode and target length of an interview. A common concern, for instance, is that an interview schedule is "too long" and may increase respondent fatigue and therefore survey error via nonresponse, satisficing (providing quick answers without consideration or comprehension of the question), or early termination of the interview. Often many a tear is shed in cutting questions to shorten the instrument below an acceptable, though usually arbitrary, limit. Survey researchers working in Arab countries also frequently debate whether a certain topic is better suited for telephone (or Internet) versus face-to-face administration, based on the assumption that some topics may be difficult to probe in an in-person interview because they place too high a burden on respondent privacy.

researchers should be less concerned about survey design features that may increase perceived survey burden and focus on aspects that may instill negative impressions about a survey's reliability or purpose.

But the results of our study show that these two basic survey attributes—length and mode—are less influential in shaping Arab (and indeed non-Arab) survey-taking behavior than the survey's topic and sponsor. More generally, our experimental findings suggest that MENA survey researchers should be less concerned about survey design features that may increase perceived survey burden—whether from a cognitive, time, or privacy standpoint—and focus instead on aspects that may instill negative impressions about a survey's reliability or purpose.

Signaling survey reliability and intentions. Impressions about the reliability or purpose of a survey may be formed from overt attributes, such as the stated sponsor of a survey, and some experimental work has sought to understand the impact of sponsorship on nonresponse.3 Yet positive or negative views about a survey's integrity and purpose may also arise from more subtle cues accumulated over the course of an interview, including from the topics included in a questionnaire, the ordering of questions, response options, the names of survey sections, and myriad others. For example, a survey module on international affairs that asks only about attitudes toward the United States is likely to signal, correctly or incorrectly, American involvement or interest in the survey. A battery measuring religious values and practice embedded in a section on gender stereotypes is likely to signal a researcher's belief that Islam encourages negative views of women.

Such concerns about question wording and ordering are typically conceived as pertaining to socio-political "sensitivity" questionnaire-reluctance to respond or give accurate answers due to social desirability pressures or doubts about anonymity in an authoritarian survey environment. However, the effects of negative views of survey reliability and purpose operate differently and more fundamentally, by raising questions about the motivations of the very survey itself. They are also potentially more insidious than sponsorship effects, because negative judgments about the integrity or reliability of a survey may form only once an interview has begun, introducing survey error not only through systematic nonresponse but also response bias and motivated underreporting.

Encouraging public confidence in surveys. Another way that negative views of survey reliability and intentions may form in MENA populations is through exposure to unscientific polls and/or surveys designed to support a particular political agenda. Such unscientific or politicized surveys are unfortunately a common occurrence in the Arab world, enabled by a lack of institutional capacity and monetary incentives to carry out high-quality surveys. As a result, survey research is too often exploited to promote the domestic and foreign policy aims of MENA governments and outside political actors, with the aim of creating the false impression of public support for or opposition to an actor or policy position.

Our finding that Arabs in Qatar are especially reluctant to participate in surveys conducted by commercial polling firms and international organizations, compared with a university or government institution, suggests that these types of sponsors are associated with negative survey purposes. In this way, hesitation to participate in surveys in the MENA region may stem from generalized worry that survey results will be manipulated or used for nefarious purposes, rather than a survey's sponsor or topic itself. While much work remains to be done to understand the root causes of attitudes toward surveys in the Arab world, it is hoped that this research can set the agenda for the next wave of studies.

### TRUST AND ACTIVISM IN THE MENA

### By Nadine Sika, American University in Cairo

Political trust is essential for stability in authoritarian regimes. It is an individual's evaluation of how well the government operates, according to their expectations. Political trust includes confidence in state institutions like the

executive, the legislature, the judiciary, the bureaucracy, and the police and can respond to short-term evaluations of social and economic life, changing across time and space. When political institutions do not meet their citizens' expectations, trust is likely to decline. Political trust is also an indicator of political stability. During the past decade, political trust has been decreasing in all regime types, while contentious activities like participation in demonstrations, strikes, boycotts, and online activism has been increasing.

Within a context of rising authoritarianism, repression, censorship, and self-censorship, finding empirical evidence for state-society relations becomes a challenge. Working in conditions with such increasing restrictions for fieldwork, I have found that surveys can be a valuable tool. Below, I will review some methodological opportunities and challenges from my years of conducting surveys in the Middle East and North Africa, then highlight the results of one survey that changes our understanding of how increasing state repression affects political trust and participation in contentious events.

# Trust and contentious politics in changing regimes

Top-down approaches understanding to authoritarian politics demonstrates that a regime's capacity to repress its opposition is essential for its survival. 10 However, during my past seven years of fieldwork in the region, it seems that repression helps regimes maintaining their power only in the short term. In the long term, the excessive use of violence might be adding to their volatility. A major puzzle for me as a scholar is whether the excessive use of force against political opposition and activists impacts citizens' trust in their political institutions and whether political trust is related to contentious politics in regimes undergoing political transitions. The literature on political trust and participation is primarily on democratic regimes. Some scholars have analyzed the relationship between trust and participation in formal institutions like political parties and civil society organizations in authoritarian regimes. 11 However, the relation between trust and participation in contentious activities in regimes that are democratizing or reverting back to authoritarianism needs further analysis.

In this article, I explore political trust and contentious participation in Turkey and Tunisia. Do citizens' political trust levels impact their participation in contentious activities? Turkey and Tunisia are both undergoing political change: the former has been gradually sliding back to an authoritarian political system, while the latter has been gradually transitioning to democracy. However, in each case, I demonstrate that the increased reliance on the security apparatusespecially the police force repressing opposition -leads to more street demonstrations and activism against the regime. Preliminary analysis of survey data suggests that activists are motivated to participate through unconventional means, like demonstrations, as a result of their low levels of trust in the police force.

## How can we measure and analyze trust in Arab regimes?

The Arab uprisings of 2010 to 2011were followed by an surge of field research in the region. Scholars who have been working for years on authoritarian resilience and politics from above, revisited their analysis and started developing new lines of inquiries on state-society relations. <sup>12</sup>

During this period, I was involved in two major research projects on young people in the region, which required much quantitative and qualitative fieldwork. For the first project, "Arab Youth: From Engagement to Inclusion?" sponsored by the Volkswagen Foundation, I conducted fieldwork in Egypt and Morocco during 2012 to 2013. To the second project, Power2Youth, sponsored by the European Commission I was part of a research team that conducted fieldwork in Egypt, Lebanon, Morocco, Turkey, Palestine, and Tunisia from 2014 until 2016.

The difference between the fieldwork experience for both projects is stark, especially for a scholar living in and working on the region. Fieldwork for the first project, especially semi-structured interviews and surveys, was smooth and enjoyable. The majority of our respondents were enthusiastic to participate and were eager to provide our research teams with substantial information on their perceptions of the Arab uprisings, their role as youth in socio-political change, and their main challenges as young people during the transitional phase. Conducting survey analysis in universities was also a positive experience, with many students eager to participate in the survey analysis and with no security intervention in the content of the survey questions.

The second project, on the other hand, was implemented almost three years after the "Spring," as the countries under analysis had already started to revert back to authoritarianism (Egypt), autocratize (Turkey), democratize with institutional difficulties (Tunisia), remain autocratic (Morocco and Palestine), or experience large episodes of contentious events (Lebanon). Doing fieldwork for the second project was not an easy task, especially for the research teams in Turkey, Palestine, and Egypt. For instance, convincing participants to take part in focus groups was complicated, as many young people felt uncomfortable discussing their attitudes toward the ruling elite. Some did not refer to the political opposition groups in name, they would just describe the work of "the opposition" generally. Finding interview partners was also complicated, especially in Palestine and Egypt. In Egypt, only 50 percent of young people who were approached to be interviewed agreed to take part in the research. The survey study was another hurdle in Egypt and Palestine. The problem was not conducting the survey project itself, but in being granted permission to implement it in the first place. Questions on trust in institutions were not permitted in the Gaza Strip or in Egypt.

### Methodology

I test the relationship between participation in contentious activities and political trust by analyzing the results of the survey study that was conducted in Turkey and Tunisia as part of the Power2Youth research project. 15 In Turkey, the

survey was carried out from January 2 through February 10, 2016. The sample size was 1804 young people ages 18 to 29. The survey included 226 clusters, which represented all regions in addition to all metropolitan, non-metropolitan, and rural districts. In Tunisia, the sample size was 1022 young people ages 18 to 29, and the survey was conducted from July23 to August 29, 2016. The sample was drawn from the 2014 population sample frame in which enumeration areas served as clusters.

We selected these cases because both have been undergoing political change. Tunisia has been democratizing since the Arab uprisings, while Turkey has been undergoing an autocratic reverse wave since the 2013 Gezi Park protests and the 2016 coup attempt.

My main hypothesis is that low political trust levels lead to participation in contentious activities in authoritarian regimes and in regimes that are undergoing political transitions. To test for this hypothesis, I constructed a "contentious activism" index in which the different modes of contentious activities were tested. The questions were dichotomous variables for which the interviewees were asked whether they ever participated in peaceful demonstrations, protest movements, strikes, boycott activities, or online activism. The answers are coded either "yes" or "no." The index is composed of these six variables. In Tunisia the Cronbach alpha is at 0.79 and in Turkey it is 0.69. An OLS regression model for each country was constructed, where the dependent variable is the contentious activism index, and the independent variables are the political trust variables, i.e. trust in the army, police force, courts, parliament, central and local government, and political parties. We controlled for gender, unemployment, and education level. 16

### Survey results

The survey results demonstrate that political trust levels vary in these two countries and according to the political institutions. For instance, trust in the army is very high in Tunisia at 84 percent and in Turkey with 68 percent. Trust in the police

force is also somewhat high in both at 58 percent in Tunisia and 62 percent in Turkey. On the other hand, trust in the parliament and political parties is much lower, with almost 8 percent trust in the parliament in Tunisia and 38 percent in Turkey. Trust in the central government is also very low in Tunisia, with almost 11 percent, while it is at 50 percent in Turkey.

activists are motivated to participate as a result of their low levels of trust in the police force.

The results of the OLS regression models demonstrate that there is a strong negative correlation between contentious activism and trust in the police force, the political institution which mostly directly represses citizens. These results are partial confirmation of the hypothesis that activism is a result of low political trust levels. The results only confirm that low trust levels in the police force cause participation in contentious activities. Hence, in regimes where the police force is either known to have repressed political activists in the past (Tunisia) or in which police force is increasing its repression in the present (Turkey), there is a negative relation between contentious activism and trust in the police. This implies that even if trust levels in a certain political institution is high amongst citizens at large, activists are motivated to participate in contentious activities as a result of their specific distrust of the repressive apparatus.

#### Conclusion

The preliminary results for this survey analysis demonstrate that low trust levels in the police force motivate individuals to participate in contentious activities. This finding needs to be further explored by scholars studying authoritarian institutions, democratization, and autocratic reversals, since one of the main assertions in this line of analysis is that regime repression is one of the tools for authoritarian resilience. 17 While authoritarian regimes increase repression to promote stability and survival, this study shows that the more a regime uses repression against activists, the more likely they distrust the police force and that contentious activities will ensue. The preliminary results also demonstrate that scholars should not only focus on the socio-economic grievances faced by citizens as a main cause for instability and contentious activities, but should also analyze other political and trust variables, which have an important impact on contentious participation. Regimes that are undergoing authoritarian reversals need further investigations, especially in regards to the rise of contentious activism and its relation to political trust. The case of Turkey here begins to sheds light on this relation, but more analyses should be conducted in other regimes for more generalizations.

## "THEY MAY REVEAL THE SHORTCOMINGS OF THE GOVERNMENT"

## STUDYING POLITICAL BEHAVIOR IN AN INCREASINGLY CLOSED REGION

### By Yael Zeira, University of Mississippi

In 2011, ordinary citizens across the Middle East and North Africa took to the streets to demand greater freedom and accountability from their governments. Yet, even in the countries that saw the largest protests, most citizens did not What explains individual participate. participation in risky anti-regime resistance? conditions will which anti-regime movements achieve the wide participation necessary for their success? Answering these questions requires individual-level survey data on citizens' political behavior. Yet, due to the difficulties of data collection, few such surveys have been conducted. As a result, we know little about the drivers of mass participation-and, therefore, also about why unarmed protest occurs and succeeds-even in key cases like the first Palestinian intifadah. My recently released book, The Revolution Within: State Institutions and Unarmed Resistance in Palestine (2019), helps fill this gap by drawing on a unique survey of Palestinian participants and nonparticipants in unarmed resistance against Israeli occupation. 18 With an innovative design developed to mitigate common pitfalls of survey research in difficult environments, the survey suggests

methodological directions for MENA researchers working in an increasingly closed region.

### Using surveys to study mass political behavior

The Arab uprisings brought questions regarding mass political behavior and attitudes to the forefront of comparative politics research on the Middle East. Long used to study political participation in advanced industrialized democracies, survey research offers several advantages for studying such questions. First, while surveys vary in their sample size, wellpowered surveys typically include sample sizes of hundreds or thousands of citizens. Second, these surveys also typically include both participants and nonparticipants in anti-regime resistance or other political behaviors of interest-key to comparing the two groups and determining why their behavior differs. Third, and perhaps most critically, survey respondents are randomly selected from-and therefore reflect-a country's overall population. As a result, if properly designed, the inferences drawn from survey research can be generalized from the survey sample to the broader population of a country. Finally—as evidenced by the recent explosion in survey experiments in the MENA (see e.g. Corstange and Marinov 2012; Benstead, Jamal, and Lust 2015; Bush and Jamal 2015; Masoud, Jamal, and Nugent 2016; Shelef and Zeira 2017) and beyond-surveys can be easily combined with experiments, in-depth interviews, and other methods, complementing their traditional strengths. 19

At the same time, survey researchers working in the MENA region face a number of challenges even when compared to researchers working in other developing regions. Due to the shrinking of civic and political space across much of the region, questions regarding the protection of survey respondents and the reliability of their answers have grown ever more acute. Survey researchers working in the MENA region typically require official approval from government actors (including, often informally, intelligence services), which is increasingly difficult to obtain. Even when granted, approval often comes at the cost of near-debilitating restrictions on the scope of a research project. To share a personal anecdote from my early fieldwork in Jordan, my application to conduct a survey on the Palestinian national movement in Jordan-although strongly supported and aided by a local NGO-was returned saying I could not ask any questions about "Palestinian organizations": the main focus of my research. In a refreshingly forthright comment, the response also added that I would have to modify some of my questions about social services "as they may reveal the shortcomings of the government." Given the impossibility conducting my research in Jordan, I narrowed the scope of my study to Palestine alone. As other scholars of the region well know, government restrictions and lack of access shape what we study, where we study, and how we study it.

Even when survey researchers receive official permission for their work or do not require it to conduct social science research, they-along with their research teams and subjects-are still vulnerable to repression and harassment. Surveys may be seized by state and nonstate actors alike, requiring special attention to the protection of subjects. As a result, survey respondents may be justifiably wary and even fearful of participating in even the most carefully designed survey research, resulting in survey non-response and potentially also causing social desirability bias (as subjects misreport illegal, unsanctioned, or officially disapproved behavior). These ethical and methodological challenges are particularly acute for MENA researchers working on sensitive topics, such as political conflict and violence or inter-group relations. In this case, researchers can often only gain access to subjects well after the conflict or events of interest are over, potentially resulting in recall bias. While these challenges are not unique to survey researchers alonequalitative and other quantitative scholars also face them-the large scale and scope of survey research make it particularly visible and, therefore, vulnerable.

### Surveying Palestinians and recalling the past

The survey that provides the main evidence for my book, *The Revolution Within*, was designed to mitigate and address these challenges. In order to

explain the puzzle of participation in unarmed protest against repressive regimes—in this case, Palestinian protest against the Israeli occupation the book drew on a randomized survey of nearly 650 participants and nonparticipants Palestinian resistance in the Occupied Territories. This survey—the first large-scale survey of participants in Palestinian resistance and one of only a few such surveys carried out worldwidewas conducted in 68 localities across the West Bank, including Palestinian cities, towns, villages, and refugee camps. The response rate for the survey was 68 percent. A local Palestinian NGO, Al-Magdese for Society Development, assisted with hiring survey enumerators and other logistics, and I trained survey enumerators mostly newly minted Palestinian graduates—in survey administration and ethics. 20

My survey was carefully designed in order to protect respondents and mitigate two key methodological challenges—social desirability bias and recall bias-that I faced in my survey and other survey researchers working in the MENA also commonly confront. Social desirability bias refers to the common desire to present oneself in a favorable light, which may lead respondents to overreport socially approved behaviors and underreport disapproved ones. In the case of my survey, social desirability concerns could lead respondents falsely Palestinian to report participation in anti-occupation protests-a strongly socially-approved behavior. At the same time, because such behavior is officially illegal under Israeli law, other respondents may have feared reporting even long-past participation. Recall bias, in turn, refers to the inability to accurately and completely remember past events and behaviors. Reducing the possibility of such bias was also an important concern for my study, a quasi-historical study focusing on the first Palestinian intifadah and the decade leading up to the uprising (1978 to 1989). However, because recall bias increases sharply as little as two years after an event of interest and subsequently levels off (Groves et al. 2011, 213-18),<sup>21</sup> it potentially affects a much wider number of studies and is an underappreciated problem in survey research both in and out of the MENA.

### Self-administration and life-history calendars

To protect respondents and guard against these concerns, all political participation questions on the survey were thus self-administered by respondents. Self-administration is the gold standard for collecting sensitive individual-level data that cannot be collected using group-level methods like list experiments (Corstange2009, Groves et al. 2011).<sup>22</sup> Using techniques first developed by Alexandra Scacco (2012) in her innovative study of riot participation, <sup>23</sup> the survey was administered in such a way that interviewers outside parties could not respondents' answers to sensitive questions or link them to other characteristics of respondents. Specifically, the survey questions were divided into two questionnaires-the main questionnaire and a separate questionnaire containing all sensitive questions about participation-which were linked by a random number known to me alone. The respondent completed the "sensitive" questionnaire by himself while the survey enumerator waited in a separate room and then placed it into a separate envelope from the main questionnaire, which also contained other respondents' sensitive questionnaires. All answer choices were also numbered in such a way to allow any illiterate respondents to complete the survey independently in response to the enumerator's verbal instructions. Thus, for all respondents, the enumerator did not view the respondent's answers to sensitive questions and could not link these answers to other characteristics of the respondent recorded in the main survey questionnaire. Importantly, this approach also prevents any third parties from linking sensitive survey responses to particular respondents. Thus, even if state security forces or other actors detain survey enumerators—as when the Palestinian police briefly detained one of my survey teams-they are unable to link sensitive political information to respondents either directly or indirectly.

Life history calendars improve recall by better reflecting the processes that people use to retrieve autobiographical memory.

To alleviate the possibility of recall bias, my survey also used an innovative design called a life history calendar or event history calendar (LHC). LHCs improve recall by better reflecting the processes that people use to autobiographical memory. For example, many tend to remember people past events chronologically, working forward in time from less recent events to more recent ones. LHCs have a calendar-like design that better reflects this chronological process: for each survey question, the years (or other time periods) are listed horizontally across the page. This encourages respondents to recall events chronologically as well as to remember how different events during the same time period relate to one another ("parallel retrieval"), increasing the chance that they will accurately and completely remember them. For example, for a question about income, respondents can remember their yearly income by working forward in time from their starting income at their job, as well as by relating their income to contemporaneous changes in their occupational status (e.g. becoming a manager). This life history calendar design out-performed a standard survey questionnaire in an experimental comparison of the two (Belli et al., 2001), and it has been widely used in public health and other fields (although not, to my knowledge, in political science until now). 24 At the same time, like any other tool, it has some important tradeoffs. Namely, LHCs increase the length of the survey and so also increase the risk of respondent fatigue, survey non-completion, and/or survey non-response. For this reason, they are probably best used in surveys where past recall is more likely to be compromised, whether due to the recency of the events studied or their salience, as well as for shorter instruments. Similarly, they are also more appropriate for studying past events and behaviors rather than attitudes, which are more strongly shaped by present-day considerations. Despite these tradeoffs, the use of LHCs offers survey researchers in the MENA-who are often unable to conduct contemporaneous surveys due to access restrictions—with a promising new tool for improving the reliability of their research.

Integrating into and resisting the state

Drawing on these methodological advances, The Revolution Within systematically analyzes the drivers of Palestinian participation in unarmed resistance to Israeli occupation. The book's main finding is that, among groups with high antiregime grievances and low internal organizational strength, integration into state institutionsschools, prisons, and courts-paradoxically makes individuals more likely to resist the state. Integration into state-controlled schools increased the probability of participation in unarmed resistance to Israeli occupation by as much as 13 percentage points-larger than the within-sample effects of socioeconomic status and other key predictors in the literature-and exposure to prisons and courts also significantly increased this probability. Importantly, integration into these institutions was also associated with larger and more diverse social networks, which provide individuals with greater access to political information. In contrast, it was not consistently associated with exposure to nationalist media or other indicators of antioccupation grievances. These results suggest that, in contexts where anti-regime grievances already run high, integration into state institutions promotes participation through informational and organizational advantages that make people better able, rather than more willing, to protest. In pointing to these unintended advantages of state institutions for collective action, the book thus helps to explain the onset of mass mobilization in organizationally underdeveloped, and therefore under-predicted, cases.

The Revolution Within provides fine-grained survey data on high-risk political participation that are not usually available to scholars. Like most survey-based research in the region, however, the bulk of its evidence is drawn from a single case, the Palestinian Territories, and its findings have not yet been systematically tested in other contexts. Yet if we want to develop general explanations and learn general lessons about phenomena that we care about, we need comparative survey data. The Arab Barometer initiative co-founded by Amaney Jamal and Mark Tessler has made great strides towards this goal, providing researchers with high-quality

longitudinal survey data on Arab public opinion across the region, including some countries previously closed off to survey research. Yet the vast majority of survey work, including much of the cutting-edge research being done by Ph.D. students and junior scholars, is still done in a single country and not subsequently replicated. As a result, it is difficult to assess how the context of a particular study may affect its findings, make sense of contradictory findings when they do exist, and draw reliable inferences about the conditions under which our theories will or will not hold. These challenges are not unique to the Middle East and are being recognized and addressed by scholars in other regions, most explicitly through the Evidence in Governance and Politics (EGAP) network's Metaketa Initiative, which seeks to create more generalizable knowledge by funding and coordinating multiple studies on the same theme across countries. While survey researchers in the Middle East may ultimately arrive at a different model for doing so than this one, improving the external validity of survey research in the MENA represents perhaps the biggest opportunity and challenge for such research going forward.

In conclusion, the Arab uprisings, as well as the more recent protests in Algeria, Lebanon, and Sudan, have brought questions regarding mass attitudes and behavior and survey techniques designed to answer them to the forefront of research in Middle East politics. Yet, despite the flourishing of survey research on the Middle East and an increasingly mature survey infrastructure in the region, survey researchers within the MENA face arguably greater challenges than ever before. Drawing on The Revolution Within, this essay has proposed novel tools to meet two of the main challenges, social desirability bias and recall bias. In doing so, it hopes to provide new ways forward for researchers asking sensitive questions in an increasingly closed and difficult environment.

## RELIGIOUS IDEOLOGY OR PARTICULARISTIC BENEFITS?

### EXPLAINING ENNAHDA'S ELECTORAL SUCCESS IN TUNISIA

# By Lindsay J. Benstead, Portland State University

Scholars are interested in understanding why parties develop constituencies during transitional what role ideology elections and particularistic benefits play in attracting and maintaining voters. In the case of Arab and Muslim countries, researchers seek to explain why citizens support Islamist parties. Yet, while some scholarly research finds that supporters are more observant and religiously conservative than those who vote for other parties, many studies also suggest that electoral behavior is shaped by complex political, social, and economic factors, including the constraints on access to public services created by authoritarian regimes (Wegner 2017; Brumberg 2002; Catusse and Zaki 2005; Elsayyad and Hanafy 2014; Fourati, Gratton, and Grosjean 2016; Robbins 2014; Tessler 1997; Pellicer and Wegner 2014; Garcia-Rivero and Kotzé 2007; Masoud 2014). Importantly, Islamist parties' social embeddedness and organizational capacity allows them to reach citizens outside existing clientelistic networks with high-quality services and charity to attract voters (Gidengil and Karakoc 2016; Clark 2004a, b; Brooke 2019; Cammett and Jones Luong 2014).

Yet existing literature explaining Islamist parties' support has so far drawn largely, though not exclusively, from qualitative evidence. Those studies that utilize survey research typically lack the items needed to test a clientelistic explanation of Islamist parties' electoral success.

My work seeks to address this gap. Drawing on a unique method I adapted from classic studies of constituency service in the United States and Great Britain (Cain, Ferejohn, and Morris 1987) as part of my dissertation research in Morocco and Algeria, I tested the role that constituency service by parliamentarians plays in explaining the

electoral success of Ennahda in Tunisia's transitional elections. Through this application of survey research after the Arab uprisings, I find that, more than other parties, Ennahda reaches out with constituency service to citizens who are relatively marginalized from formal political networks, including women and more religious Tunisians (Abdel-Samad and Benstead 2016; Arat 2005; Ayata 1996; Benstead 2016; Clark and Schwedler 2003; Philbrick Yadav 2014; White 2002). Moreover, Ennahda's strategyalong with its better developed organizational capacity-enabled Ennahda to translate its constituency service into electoral gains more effectively than other parties, even if it ultimately did not prevail against the new party, Nida Tounes, in 2014.

My research challenges the conventional wisdom that religious ideology alone explains Ennahda's electoral success and supports the claim that its success stems from its distinct organizational features, social embeddedness, and cohesiveness. By focusing on the individual constituent as the unit of analysis and using classic questionnaire batteries from studies of legislative behavior in the United States, I capture the universe of citizen-parliamentarian interactions and bring it to bear on an important research question in Middle East political science. This technique provides a comparable measure of how and why Islamist and non-Islamist parties differ in their capacity and strategy and thus sheds light on why are more or less electorally successful in particular contexts. This new stream of evidence, triangulated with quantitative quantitative data gathered by other researchers, is invaluable for answering important theoretical questions in Middle East political science and integrating it into comparative politics crossregionally.

#### Tunisia's first democratic elections

In the run-up to the Constituent Assembly on October 23, 2011 in Tunisia—the first free and fair elections ever held in the country—voters were faced with the choice between more than a hundred parties. These parties fell on a spectrum of ideological views on the role of religion in

political life, but there were perceived organizational differences across the parties as well. On one end of the spectrum was the relatively more cohesive and organized Islamist party, Ennahda, and on the other were hundreds of new, more personalistic non-Islamist parties. Ennahda was distinct in the minds of voters, who saw it as unique from other parties based not only on its religious platform but also its more robust organizational capabilities (Benstead, Lust, Malouche, and Wichmann 2014). Although it was not legally allowed to compete in elections until 2011, Ennahda developed deep social roots since its founding in 1981, allowing it to quickly develop a national grassroots organization following the 2010 to 2011 uprising that ousted the Ben Ali regime. As Wolf (2017) writes:

"although the Ennahda had been out of the public eye for two decades, it still enjoyed a vast network of supporters who had never identified with the country's supposed secular legacy...in a period of less than six weeks they established 2,064 Ennahda offices, including twenty-four bureaus representing different governorates...Such elaborate electoral combined with Ennahda's strategies, institutional and organisational leverage, gave the party an immense advantage over its secular counterparts, whose structures were mainly limited to the coastal areas and the capital" (pp. 131-133).

Ennahda would win a plurality (37 percent of seats) in the Constituent Assembly elections on October 23, 2011. Two years later in 2014, Ennahda again contested the parliamentary elections. While it lost some vote share to a new big-tent party representing some element of the old-guard, Ennahda was still able to capture 28 percent of the seats in parliament.

#### The Tunisian Post-Election Survey (TPES)

In 2012, between Tunisia's two transitional elections held in 2011 and 2014, Ellen Lust, Dhafer Malouche, and I conducted a nationally-representative survey of 1,202 Tunisians that we hoped would provide a better understanding of voter behavior. Embedded in the survey were questions about citizen interactions with Tunisian parliamentarians. I developed this novel approach part of my dissertation research in Morocco and

Algeria by adapting classic questionnaires on constituency service and voting behavior in the US and the UK (Cain, Ferejohn, and Morris 1987). I found that 15 percent of Moroccans and 10 percent of Algerians requested constituency services from a parliamentarian in the preceding four years. Yet relatively few—only about 5 percent—of Tunisians reported having asked a member of the Constituent Assembly elected in 2011 for help during the previous year. While this was not a small proportion when comparing Tunisia with a developed democracy, it was lower than in neighboring authoritarian regimes, Morocco and Algeria (albeit over a longer time period).

### Explaining Ennahda's Electoral Success

The survey also asked which party the respondent voted for in 2011. Among respondents, 31 percent did not vote, 40 percent voted for a non-Islamist party, and 29 percent voted for Ennahda. Since the official turnout was 54 percent in the 2011 Constituent Assembly elections, this question slightly overestimates voting, which is a common problem in election surveys as a result of social desirability bias. But the survey estimates were very close to the actual election results. When asked about which party they would vote for tomorrow, 70 percent said they did not plan to vote or did not know for which party, 16 percent said they would vote for a non-Islamist party, and 14 percent said they would vote for an Islamist party. This reveals that one year after the first transitional elections—and two years before the next elections would be held in 2014—a majority were unengaged or undecided.

The survey revealed that Ennahda's parliamentarians were much more active than other parties in reaching citizens and that their service interactions yielded greater fruit in terms attracting undecided voters. Twenty respondents reported accessing help from Ennahda, while only six respondents contacted another party. Thus, while Ennadha held 37 percent of the seats in the Constituent Assembly, according to the survey, it was responsible for 77 percent of constituent service interactions reported in the country as a whole. Further, respondents who interacted with Ennahda always mentioned the party name, while those who interacted with other parties sometimes named a candidate instead of a party, indicative of the Ennahda's stronger party institutionalization.

Clientelistic linkages also strengthened electoral support for Ennahda more effectively than similar interactions between citizens and members of other parties. In 2011, Ennahda voters were more likely to be male, religious, poorer, less educated, less affluent, and urban than those who voted for other parties or no party at all. By 2012, Ennahda's voter base was made up to a larger extent by citizens who supported a strong role of religion in politics. Decided Ennahda voters were also disproportionately those citizens whom the party had reached through constituency service by Ennahda parliamentarians. Importantly, relatively few of those who were served by an Ennahda member had voted for the party in 2011. But those who reported a constituency service interaction with Ennahda were more likely to continue to support the party in 2014 than those who had no such interaction. This indicates that both religious ideology as well as particularistic benefits in the form of constituency service contributed to the development of Ennahda's voter based by 2014.

# Conclusions: The importance of comparisons between Islamist and non-Islamist parties

This research challenges the conventional wisdom that religious ideology alone explains Ennahda's electoral success. It also allows for a direct test of the role that Ennahda's organizational capacity and constituency service plays in explaining its electoral success. More often than other parties, Ennahda reached out to citizens who are relatively more marginalized from power, including coreligionists and women (Abdel-Samad and Benstead 2016; Arat 2005; Ayata 1996; Benstead 2016; Clark and Schwedler 2003; Philbrick Yadav 2014; White 2002). And this strategy-along with its better developed organizational capacity and party cohesiveness-enabled Ennahda to translate its constituency service into electoral gains more effectively than other parties, even it if ultimately did not prevail against the new party, Nida Tounes, in 2014.

Scholars can gain new insights by focusing on a particular political process as the unit of analysis and comparing the frequency and success of such interactions across political actors.

This paper—and the larger project of which it is a part-illustrates an important methodological insight about the value of survey research in general and the use of classic questionnaires from studies of legislative behavior in the United States to study electoral politics in transitional regimes. Many scholars who study Islamist parties or politicians from particular groups-such as female or Islamist female parliamentarians—focus their research on these groups themselves while paying less attention to members of other political parties or social groups (e.g., non-Islamist parties or male parliamentarians). Yet scholars can gain new insights by focusing on a particular political process as the unit of analysis—in this case the constituency service interaction-and comparing the frequency and success of such interactions across political actors (i.e., comparing Islamist and non-Islamist parties, male and female citizens). By doing so, it is possible to capture the universe of citizen-parliamentarian interactions for all political parties and to utilize it as a reliable measure of the extent to which ideology and constituency service explains electoral success. This new stream of evidence, when triangulated with other guantitative quantitative data collection, can be invaluable for answering important theoretical questions in Middle East political science and integrating it into comparative politics cross-regionally.

## THE RESILIENCE OF ALGERIA'S PROTEST MOVEMENT

### By Sharan Grewal, College of William & Mary

Seven months after overthrowing President Abdelaziz Bouteflika, Algerians are still in the streets. Mass protests have continued every Friday since Bouteflika's ouster in April, urging authorities to not just reshuffle the leadership but

initiate a complete change of the political system.

Most scholars and observers agree that continued protests after the ouster of a dictator can put pressure on elites to follow through on commitments to democratize. 25 However, seven months in, the Algerian regime has yet to budge, seemingly hoping for the protests to fizzle out and for non-protesters to grow tired of the protests. Indeed, recent scholarship suggests that continued protests can be a double-edged sword, potentially driving non-protesters to grow frustrated not only with protests but with democracy more generally. 26

This discussion raises the question: to what extent have we seen protest fatigue in Algeria, both among protesters and non-protesters? Are each of these groups just as committed to the cause as they were back in April when Bouteflika fell?

### Surveying Algeria's uprising

An online survey of Algerians that has been ongoing since April can help to answer these questions.<sup>27</sup> Since April 1, my colleagues M.Tahir Kilavuz, Robert Kubinec, and I have been fielding

a survey in Algeria through advertisements on Facebook. <sup>28</sup> The advertisements have been shown to all Algerian Facebook users over 18 years old and living in Algeria. Clicking on the advertisement takes users to Qualtrics, where they complete a consent form and then fill out the survey. <sup>29</sup> (You can read more about the methodology, and how we screen for bots or other irregularities, here).

The Facebook sample is of course not nationally representative. Only about 45 percent of Algerians (about 19 million) are on Facebook. 30 As Table 1 indicates, compared to the general population, the Facebook sample skews more urban and better educated, among other biases. 31 However, on key political attitudes, such as support for democracy, frustration with the economy, and trust in the police, the Facebook survey obtains relatively similar results to the most recent wave of the Arab Barometer. Despite that, there are likely unmeasured psychological differences between the general population and the subset active on Facebook and willing to take surveys advertised there.

Table 1: Representativeness of Facebook Survey in Algeria

	Census (%)	Arab Barometer (%)	Facebook Ads (%)
Female	49	50	46
Age < 30	55	40	51
College-educated	48	25	61
Algiers	8	9	16
Unemployed	12	21	21
Democracy-Best Government		68	61
Democracy-Suitable		52	56
Economy Bad or Very Bad		85	91
Trust Police		48	52
N	41,320,000	2,332	10,441

While not nationally representative, surveying the Facebook population offers several advantages over traditional surveys. First, as an online survey, it does not put any survey team in danger, a real concern in a repressive state like Algeria. Second, we were able to ask more sensitive questions than would be permitted in traditional surveys requiring government approval. The Arab Barometer, for instance, could not ask about trust in the government or parliament let alone the military. Third, Facebook allows us to target advertisements to users with specific interests. We targeted one set of ads to Algerians with an interest in the military in order to oversample military personnel (excluded in this paper).

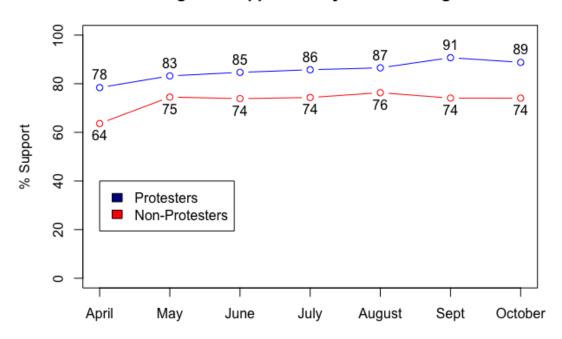
This long-term survey permits us, cross-sectionally, to trace changes over time within the Algerian Facebook population

Perhaps the most important advantage is that it is significantly cheaper than traditional surveys, allowing us to generate a much larger sample and field the survey for a much longer period of time. We have fielded the survey continuously since April 1, generating a sample of more than 14,000 Algerians (including the oversampling of military personnel, excluded in this piece). This long-term survey permits us, cross-sectionally, to trace changes over time within the Algerian Facebook population.

### Measuring "protest fatigue" in Algeria

The survey therefore allows us to explore the question at hand: to what extent are Algerians still committed to the goals and tactics of the "hirak" - the protest movement? We begin by examining attitudes toward the over-arching goal of the protest movement: a complete change of the political system. Figure 1 plots the percent who support or strongly support a complete change among two subsets: protesters, defined as those who self-report participating in at least one protest since February, and non-protesters, who have not.





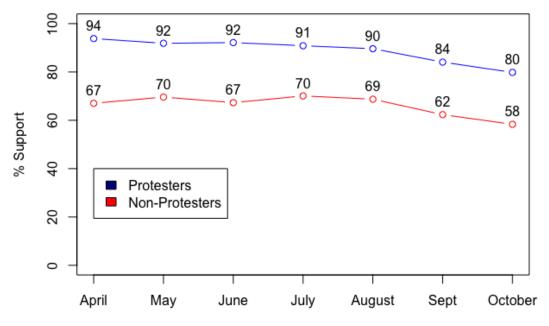
Source: Online survey conducted by Grewal et al (2019)

As can be seen, the vast majority of protesters and non-protesters continue to support systemic change. In fact, support for a complete change of the political system has grown over time among both protesters (78 to 89 percent) and non-protesters (64 to 74 percent). Nine months into the protests, there has been little if any fatigue in support for the goals of the movement.

However, while the Algerian Facebook population remains committed to the *hirak*'s goals, there appears to be some disillusionment with the particular tactic of protests. Figures 2 and 3 plot

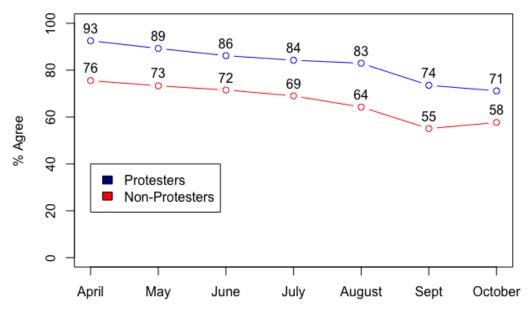
the percent of respondents who support the protests and want protests to continue. respectively. As can be seen, support for the protests has slightly fallen from 94 to 80 percent among those who have protested, and from 67 to 58 percent among non-protesters. Similarly, those who want the protests to continue has fallen from 93 to 71 percent among those who have protested, and from 76 to 58 percent among non-protesters. It is important to reiterate that a majority of each group continues to support the protests; but there has been a slight decline over time, particularly since August.

### Algeria: Support for the Protests



Source: Online survey conducted by Grewal et al (2019)

### Algeria: Protests should continue



Source: Online survey conducted by Grewal et al (2019)

### Dwindling concessions for protesters

One way to make sense of these seemingly disparate trends is to distinguish between the goals and tactics of the protest movement. While Algerians remain committed to the goal of systemic change, there may be growing doubt over whether protests will be able to achieve that goal.

At first, the weekly Friday protests were regularly met with additional concessions. 32 Between April and July, the protests succeeded in toppling not just President Bouteflika, but also his brother and advisor Said, two former prime ministers, a legendary spymaster, 33 several prominent businessmen, and other ministers and politicians. The protests, at first, seemed to be producing systemic change.

Since August, however, these concessions have become fewer and farther between. The regime has been unwilling to concede to one of the protesters' most vocal demands: the removal of interim president Abdelkader Bensalah and Prime Minister Noureddine Bedoui, both of whom are remnants of the Bouteflika regime. Instead, the

regime has tried to reimpose a roadmap by once again calling for presidential elections, currently slated for December with a line-up of five Bouteflika-era officials. Meanwhile, the regime has stepped up its repression of the protest movement, arresting both opposition leaders and demonstrators.

With protests winning fewer concessions, support for the tactic of protesting may have dimmed, even while support for systemic change has increased. If this trend continues, it may set the stage for some in the movement to adopt new tactics. Calls began in August for civil disobedience, <sup>34</sup> potentially encompassing strikes and sit-ins beyond the transitory marches and protests. Late October then saw strikes by various labor unions and judges, while rumors have begun circulating for a general, nationwide strike as well.

In short, the protest movement shows no signs of abating. Nine months in, demands for systemic change have only grown. However, as protests struggle to achieve that goal, support may grow

for complementing protests with strikes or sit-ins. But what remains clear is that the regime has been unable to appease, repress, or tire out the protesters.

Beyond addressing these substantive questions, this piece has also highlighted one potential benefit of conducting surveys through Facebook advertisements. While not nationally representative, the lower cost of these surveys allows one to keep the survey running for longer, permitting us, cross-sectionally, to track change over time. Especially when examining questions like protest fatigue, such surveys can be particularly useful.

### SURVEYING NUCLEAR ATTITUDES IN THE MIDDLE EAST:

PERCEPTIONS, MISPERCEPTIONS, AND FUTURE RESEARCH1

### By Matt Buehler, University of Tennessee

The Middle East and North Africa (MENA) has recently experienced what Mehran Kamrava has dubbed a "nuclear renaissance." 35 Since 2000, nearly a dozen Arab states have either launched nuclear energy programs or declared intent to develop advanced civilian nuclear technology. Most notably, the United Arab Emirates (UAE) has aggressively pursued a nuclear energy program, while Jordan, Algeria, Morocco, and Saudi Arabia have each undertaken major steps to develop nuclear energy. Morocco has had an active nuclear research program since the mid-1980s, with an operational research reactor at its Maamora site since 2009.36 Even Tunisia, with its economic problems following the 2011 revolution, has shown interest in civilian nuclear energy, signing a deal in 2016 with Russia's state-owned nuclear reactor vendor company, Rosatom, to help develop its civilian nuclear program. 37 Kuwait started a civilian nuclear program in 2009, but abandoned it for fear that a meltdown-on the scale of Chernobyl—could leave this entire small country's

<sup>1</sup>Thank you to the University of Tennessee's Howard H. Baker Center Jr. Center for Public Policy and Institute for Nuclear Security for their financial support for this project. territory uninhabitable.38

How do ordinary Arab citizens feel about these nuclear programs? Few studies have analyzed public attitudes toward the burgeoning nuclear programs of Arab states in the MENA. We know little about how Arab citizens view these programs' possible benefits and costs, their aftereffects on intra-regional relations, and their repercussions for international treaties and organizations—especially the 1968 Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA). Tracking citizens' attitudes toward these nuclear programs furnishes a richer, more complete understanding of their origins, development, and future potential in the MENA.

# Contemporary methods of survey research can help explore individual-level variation in attitudes toward the MENA's new nuclear programs

Contemporary methods of survey research can help explore individual-level variation in attitudes toward the MENA's new nuclear programs. Collaborating with the University of Tennessee's Howard H. Baker Jr. Center for Public Policy and the Institute for Nuclear Security, in 2016 I launched 2000-respondent nationallyrepresentative survey in Morocco, one of the Arab world's aspiring nuclear energy states. Morocco has had an active nuclear energy research program since the 1980s, so it is reasonable to expect that most its citizens will have at least a basic understanding of their country's quest to obtain nuclear power.<sup>39</sup> Other Arab states' nuclear programs are newer (most have been established since 2000), so citizens' understanding might be more hypothetical and less based on historical knowledge. Of course, survey evidence gleaned from one country case study is limited, though it provides a starting-point for more research. Future studies might seek to examine how attitudinal trends from Morocco about nuclear programs either parallel or contradict public opinion in other MENA states.

# Exploring Nuclear Attitudes in the Middle East: Preliminary Results from Morocco

My Morocco-based survey revealed two key findings in attitudinal trends. First, nuclear energy has widespread support among ordinary Moroccans. My survey found that only 19 percent of citizens think that nuclear power should be banned worldwide, while 71 percent disagreed with that proposition. This indicates considerable popular support for nuclear energy in Morocco, specifically. It may suggest, more broadly, that such support could exist in neighboring Arab countries as well, though new surveys are needed to confirm if this is true.

More research, however, should explore which types of citizens are more or less supportive of nuclear power. This approach would parallel research in the U.S. and Western European countries, where past studies have assessed variation in public support for nuclear energy. 40 from the Generally, research advanced industrialized countries shows that specific demographic, educational, and generational cohorts can have either more or less support for nuclear energy. The few studies of this topic in the Middle East, notably Nicolas Seeley's and Jillian Schwedler's studies of Jordan, suggest that citizens with concerns about the environmental and fiscal costs of nuclear energy tend to oppose it. 41 Preliminarily, my survey's results suggest that variables like citizens' degree of adherence to post-materialist values<sup>42</sup> and their level of nationalism may influence their support for (or opposition to) civilian nuclear energy.

Second, my survey results illustrate how nuclear politics interact with intraregional relations amongst MENA states in different ways that support and contradict previous analysis. For example, one result confirms conventional wisdom on Israel's nuclear program. Even though Israel has never officially confirmed or denied that it possesses nuclear weapons, and practices a policy of nuclear opacity (amimut), scholars and policymakers nearly universally agree that it does

have them. 43 Surveyed Moroccans concur, with over 90 percent of citizens affirming that Israel does have a nuclear program for military purposes, like building nuclear bombs. Despite the fact that Israel has never publicly tested a nuclear bomb, which constitutes the "gold standard" of proof for a state's nuclear weapons power status, ordinary Moroccans nonetheless overwhelmingly agree with scholars and policymakers that it does have them.

Respondents also seem to have accurate information about Egypt's nuclear weapons program. Egypt aggressively pursued building a nuclear weapon in the 1960s but formally abandoned this initiative by 1973 to support establishing a nuclear weapons free zone in the MENA. 44 Most Moroccans seem to understand this facet of regional history, as over 73 percent do not think Egypt has a nuclear program for military purposes. Yet it is somewhat unclear why this is so, and may relate to coverage in the local media or to knowledge of Egypt's 1979 bilateral peace treaty with Israel. In effect, Moroccans may presume that Egypt has eschewed a nuclear weapons program given the absence of a strategic threat from Israel, as had existed in the 1960s and 1970s.

In contrast, other results from this battery of questions contradict conventional wisdom. They suggest that ordinary Moroccans may have some misunderstandings about nuclear politics and intraregional relations among MENA states. For while Moroccans have information about Egypt's former nuclear weapons program, they seem to know less about its civilian nuclear energy program. Even though Egypt has had a quite active civilian nuclear research program since the 1955 establishment of the Egyptian Atomic Energy Authority, nearly 40 percent of Moroccans were unaware of this program's existence.45 Similarly, ordinary Moroccans did not have accurate information about Pakistan's nuclear program. For example, even though Pakistan successfully tested five nuclear weapons in 1998, 46 what became known as the 'Islamic bomb' in media accounts, nearly 40 percent of Moroccan citizens were unaware that this country has a nuclear program for military purposes. Perhaps latent stereotypes about these two countries have indirectly influenced these responses. For instance, since Pakistan has a lower level of economic development than Morocco (in terms of both its Human Development Index and GDP per capita rankings), respondents may presume it doesn't have the technical capacity to possess a nuclear weapon, if Morocco itself does not have one. However, more research would be needed to understand why certain information is accurate or not.

My survey's questions also showed that ordinary Moroccans did not have fully accurate information concerning Iran's nuclear program. The Joint Comprehensive Plan of Action (JCPOA), which was formally signed in October 2015 and practically implemented in January 2016, placed Iran's civilian nuclear program under IAEA safeguards, significantly reducing the chances such technology could be diverted for military purposes. 47 The agreement ensures Iran's right to a civilian nuclear program, if dedicated solely to peaceful purposes (like energy production) and placed under safeguards specified in the NPT. 48 Despite these changes, however, about 70 percent of Moroccan citizens in my survey (which was completed four months after the JCPOA's implementation) overwhelmingly believed that Iran still had a nuclear program for military This finding suggests that some purposes. Moroccans may concur with Emily Landau that Iran practices "strategic deception in the nuclear realm."49 Since negotiations around Iran's nuclear program received extensive media coverage in Morocco, and generally had high issue salience throughout the MENA, these opinions of Moroccan respondents may reflect underlying anti-Shia or anti-Iranian biases or general distrust of Iran, rather than direct answers to the survey questions.

My survey's results suggest that many Moroccan citizens perceive certain countries as having nuclear weapons, which have never formally tested them or have put their civilian nuclear programs under IAEA safeguards. Further, many citizens view certain countries as not having nuclear weapons, which in fact do have them. This

point also holds true for civilian nuclear energy. Often these attitudinal trends do not constitute majorities of the respondent sample, yet they nonetheless show significant misperceptions about nuclear politics in the MENA among ordinary citizens. These findings are important, because they suggest that decision makers who make policy about nuclear programs do so in a low information environment, where their own constituents and those of neighboring states may have numerous misunderstandings about nuclear programs and their intent. Such misunderstandings could provoke strategic misperceptions, leading some citizens-for example-to feel unnecessarily threatened by a neighboring state's civilian nuclear energy program that they mistake for a nuclear weapons one. Not only do such strategic misperceptions foster anxiety among ordinary citizens, but they could also possibly stimulate public pressure for pro-proliferation policymaking or future nuclear cascades.

#### Future Research

Extending this research, I can see four potentially fruitful future research topics regarding citizens' nuclear attitudes in the Middle East and North Africa. First, the development of civilian nuclear energy programs does not occur in a vacuum, but must be weighed against other energy policy options-solar, wind, natural gas, and oil. In investing tax monies, MENA politicians will ask citizen taxpayers to weigh the costs and benefits of nuclear energy vis-à-vis other energy programs. Additional survey research in the region could help to track how much ordinary citizens understand the trade-offs between different types of energy policies. Future surveys, for example, could assess whether citizens find that the regional prestige accompanying nuclear energy outweighs potential expense its environmental risks. 50 Similarly, surveys could determine whether citizens consider environmental benefits of solar and wind energy greater than the reliability of nuclear energy, which provides more consistent electrical current for large-scale industrial operations essential for the economy.

Second, although scholars have examined the link

between nuclear energy and nuclear weapons, 51 we know little about how ordinary citizens view this relationship. Do they fully understand the difference between the two, or do they presume inaccurately that the former necessarily produces the latter? The process of converting nuclear technology energy into nuclear weapons technology is complex and often requires considerable extra expertise uranium enrichment, ignition and delivery mechanisms, and other ancillary technology. Future research, however, might try to unearth the circumstances under which ordinary citizens would support diverting civilian nuclear technology for military purposes.

Third, we know little about how citizens of the MENA region view international organizations, notably the IAEA, in the arena of nuclear politics. This organization conducts inspections and monitoring-which some Arab autocrats have described as invasive<sup>52</sup> -to ensure nuclear materials are under adequate safeguards as specified by NPT treaty obligations. Do citizens allowing foreigners (and Westerners) access to their state's nuclear facilities if it means that in return they will receive international assistance in nuclear technology development from the IAEA? It seems likely that historical memories of both colonial occupation and Western military intervention, respectively, could shape variation in Arab citizen trust (or distrust) in the IAEA and its inspection process. Yet only future survey research could uncover, document, and track such attitudinal trends.

Fourth, we know little about how citizens see the role of nuclear weapons states-especially the United States, France, Russia, and China-that often act as foreign patrons, furnishing technical assistance for nuclear programs in the MENA. In pursuing full-scale nuclear energy power plants, Arab states have nearly always sought the assistance of international vendors from foreign countries for purchasing nuclear technology and reactors. Many of these vendors are either purely state-owned or public-private hybrid corporations. To buy its nuclear reactors, the United Arab Emirates contracted a quasigovernmental South Korean company (the Korea Electric Power Corporation), which underbid U.S., Russian, and French companies. Jordan, by contrast, has reached out-like Tunisia-to forge agreements with Russia's Rosatom. Such reactor deals not only can serve as a major financial boon for foreign countries—South Korea earned about \$20 billion from its deal with the Emirati government<sup>53</sup>-but can also provide exceptional opportunities for these states to expand their soft power in the MENA through manipulative contracting and loan arrangements.<sup>54</sup> In this vein, it could be interesting to run a survey assessing which foreign vendor-U.S., Russian, South Korean, Chinese, or French-citizens trust more as a collaborating partner in purchasing nuclear reactors. Such a study would help to inform U.S. and western policymakers best strategies to help mitigate growing Russian influence in the MENA.

### **TEXT AS DATA**

### APPLICATIONS OF AUTOMATED TEXT ANALYSIS IN THE MIDDLE EAST AND NORTH AFRICA

How do political parties in Tunisia present their economic platforms? How do Saudi political activists and their online followers change their social media behavior after arrest? How do Syrian state-owned media promote the political agenda of the state? These are just some of the types of questions that researchers are answering today using new text-as-data approaches.<sup>55</sup> Text-as-data applications have experienced a notable increase over the last decade as digitization of documents and the Internet make large corpora of texts more accessible and as greater computing power makes the processing of such texts more feasible. The study of Middle East politics is no exception.

We organized this symposium to highlight the new work being done using Arabic language and text-asdata methods, to address some of the risks and rewards of adopting these methods, and to familiarize the Arabic-language research community with what remains a relatively new methodological approach in comparative political science.<sup>56</sup>

The contributions included in this newsletter illustrate the wide variety of texts that can be analyzed using new computational methods: (1) religious texts<sup>57</sup> (2) party platforms<sup>58</sup> (3) social media<sup>59</sup> and (4) traditional news media.<sup>60</sup> These articles highlight how bodies of Arabic text can be analyzed to uncover new puzzles, measure key patterns of language usage, or make inferences about political behavior by key actors in the region. For example, Richard Nielsen discusses how male and female Salafi preachers appeal to different types of authority in their religious discourse.<sup>61</sup>

In addition to exploring various kinds of corpora for text analysis, each of the contributions details their methodological approaches and the challenges they faced. Broadly, these challenges include decisions about preprocessing the Arabic text data (e.g. dealing with distinguishing proper nouns from other words in the absence of capitalization and what types of stopwords to remove<sup>62</sup>) and decisions about how to analyze the data (e.g. using supervised or unsupervised methods). Alathan Grubman's project on party ideology is an example of an unsupervised approach to ideological scaling, while Alexandra Siegel and Jennifer Pan's article on social media in Saudi Arabia uses supervised classification methods.

Importantly, the authors each illustrate the way that a deep understanding of the region and the texts is pivotal to using text as data methods. Text analysis points to the importance of language learning, deep thinking about the meaning of words, and recognizing the limits of automated methods. Once a researcher has developed her own understanding of the purposeful and delicate ways language is used, she can make decisions about how to process the text, what type of approach to use, or how to work with research assistants to classify texts. The authors included in this symposium reflect on engaging in that process in their own research.

Close knowledge of the region also helps researchers to think carefully about the ethical issues associated with using text-as-data methods. Ala' Alrababa'h discusses intellectual property issues and the ethical concerns around ensuring that online access to the newspapers is not disrupted for other readers when researchers are scraping the websites. And Alex Siegel addresses the debates around

highlighting an online individual's social media activity in repressive settings. Looking ahead these ethical issues should remain at the forefront of researchers' discussions.

#### Looking Ahead

If the recent uptick in social science research using text-as-data methods with Arabic language is any indication, these approaches will continue to develop and grow in political science. Work using computational text analysis methods in other languages offers some ideas about possible new avenues for research using these tools with Arabic, including: (1) literature, political theory texts, and textbooks<sup>65</sup> (2) candidate platforms and manifestos<sup>66</sup> (3) open-ended survey questions, interview transcripts, or personal narratives<sup>67</sup> (4) political speeches and press releases<sup>68</sup> and (5) diplomatic records, judicial decisions, and other government documents.<sup>69</sup>

Furthermore, from a methodological perspective, it would be interesting to see more work exploring technical aspects of Arabic text analysis. For instance, should analysis of Arabic traditional and social media incorporate French texts, particularly in former French colonies, and how consequential is that decision? Do the results of automated text analysis of Arabic differ after stemming versus lemmatization? Because Arabic relies on a strong root system, lemmatization could also be a powerful way to analyze the language.

Despite advances in Google Translate, automated language translation from Arabic performs more poorly than other major languages (and does not translate colloquial Arabic), and Arabic language remains underrepresented in artificial intelligence applications more broadly. The Based on my own experience working in Arabic, for these reasons, automated translation from Arabic often fails to capture the meaning of a phrase or the correct translation of specific words within a given phrase. Thus, in analyzing computer-translated Arabic texts, the bag-of-words assumption could be violated. The works highlighted in this newsletter do not use automated language translation, and, in the short to medium term, that is likely to remain the gold standard for Arabic automated text analysis.

### Some Arabic Text Analysis Resources

Rich Nielsen, one of the contributors to this newsletter, has developed stemmers for both Arabic (<u>Arabic Stemmer</u>) and Persian (<u>Persian Stemmer</u>). Additionally, there are many resources that have been developed outside of political science with applications to Arabic text-as-data analysis. For instance, the Computational Approaches to Modeling Language (<u>CAMeL</u>) Lab is a research lab at New York University Abu Dhabi focused on Arabic language analysis, and the Stanford University Natural Language Processing Group has developed software that can also process Arabic language texts (<u>Stanford CoreNLP</u>).

As highlighted by this collection of essays on recent research that employs Arabic text as data methods, there are many research questions - both new and old - to which these methods can contribute. We hope that by featuring this work, we provoke further discussion around the promise and pitfalls of these methods, particularly as it relates to Arabic language texts, and encourage scholars to familiarize themselves with these methods, if not add these tools to their repertoire.

- Alexandra Blackman, New York University - Abu Dhabi

## USING SOCIAL MEDIA DATA TO STUDY ARAB POLITICS

### By Alexandra A. Siegel, Stanford University

From clerics with millions of online followers and government-sponsored bot armies, to activists organizing and individuals discussing politics, elites and everyday citizens across the Arab World are increasingly using social media tools to achieve their political goals. Taking advantage of the real-time digital footprints that these diverse actors leave online, social media data offers opportunities to measure political behavior in the Arab World and other comparative contexts. Additionally, social media use for political purposes has tangible offline consequences and is itself a political phenomenon of interest. Here I describe how social media data can be used to both study political behavior in the Arab World as well as explore the role that social media is playing in Arab politics. I then lay out a set of resources and tools for collecting and analyzing social media data, and discuss practical limitations and ethical and challenges in using this data for political science research.

### Using social media data to study political behavior

In the Arab World, there is high social media penetration and online platforms are widely used by elites and everyday citizens to discuss politics and achieve political goals, making social media data a particularly valuable resource for political scientists.73 In particular, there are several structural affordances of social media data that enable us to measure political behavior. First, because social media use is near constant-with hundreds of millions of users leaving digital traces on online platforms every day by posting, commenting, tweeting, liking, and sharing content-it provides researchers with real-time organic measures of behavior. Second, because of its networked structure, social media data offers measures of mass and elite behavior on the same platforms. Third, social media data enables us to access politically sensitive data from populations that are often difficult to reach in authoritarian

regimes or conflict settings using more traditional data sources.

A growing body of research from the Arab context highlights how these affordances facilitate new studies of mass and elite political behavior in the region. For example, recent work has used social media data to: explore the short-term dynamics of military conflict in Gaza, 74 develop real-time measure of transnational ideological diffusion across Islamist groups, 75 and investigate the dynamics of political polarization in post-coup Egypt. 76

Along these lines, my own work<sup>77</sup> takes advantage of the real-time and networked structure of social media data to assess when religious and political elites strategically incite sectarian tensions. Using millions of Arabic language tweets to construct measures of elite incitement, the analysis demonstrates that, while Saudi clerics and royal family members spread hostile sectarian rhetoric in the aftermath of foreign episodes of violence, they attempt to rein in this discourse following domestic episodes of violence.

In another recent project, 78 Jennifer Pan and I examine the political imprisonment of well-known Saudis to provide the first large-scale, systematic study of the effects of repression on online dissent. Analyzing more than 300 million tweets and Google search data from 2010 to 2017 using automated text analysis and crowd-sourced human evaluation of content, the paper tests whether repression has deterrent or backlash effects. We although repression that, imprisoned Saudis from continuing to dissent online following their releases, it did not suppress dissent overall. Observing repression increased dissent-including criticisms of the ruling family and calls for regime change-among the followers of those who were imprisoned, and drew public attention to arrested Saudis and their causes. By showing the varied effects of repression on online dissent, this work helps elucidate the relationship between repression and dissent in the digital age.

access to real-time, networked data facilitates analysis of the microdynamics of conflict and mass-

As these examples illustrate, access to real-time, networked data facilitates analysis of the microdynamics of conflict and mass-elite interaction. Moreover, given how politically sensitive sectarianism and dissent are in the Gulf, it would have been extremely challenging to collect more traditional data that would provide insights into these political phenomena in Saudi Arabia.

### Social media as a political tool

A second strand of literature focuses on the use of social media itself as a political tool in the Arab World. This includes work exploring the role of social media in organizing or sustaining protest, the use of social media by armed and extremist groups, and online disinformation and computational propaganda campaigns by governments and other powerful political actors.

Some of the earliest research using social media data in the Arab World explored the effect of social media on protest dynamics during the Arab Spring period. A wide array of empirical research attempted to shed light on the question of whether social media instigated or facilitated protests, where it was most influential, and how its influence compared with other social, economic, political, or cultural factors. While many early articles argued that social media was the single most important driver of the Arab Spring protests, 79 later work tended to question the role of social media, highlighting that other factors, including offline networks and legacy media, were more important. 80 This echoes similar debates in the literature about the role of social media and protest in diverse contexts.81

After the initial optimism regarding the democratizing power of social media in the Arab World, more recent research has focused on the darker sides of social media use in the region. One strand of this research has focused on detecting

and understanding the role of disinformation in conflict settings, particularly the Syrian civil war, which has been dubbed the first "socially mediated civil conflict." Be It has explored how diverse actors inside and outside of Syria have worked to spread disinformation online from government-funded anti-White Helmets narratives, at 0 disinformation campaigns developed by armed and extremist groups about the conflict.

Focusing on extremist groups' use of social media, following the rise of ISIS, a number of studies used social media data to map the organization's digital recruitment strategy and the remarkably successful broadcasting of its message on social media across social media platforms in the Arab World and globally. 85 Other work has used social media data to study the impact of events on radicalization, 86 as well as to predict the likelihood that individuals become radicalized over time. 87

Online information in conflict settings can be a matter of life and death, particularly for vulnerable populations. Under conditions of high anxiety and ambiguity, Syrian refugees have relied heavily on social media to access information during their journeys and upon arrival in host countries. In my own work analyzing data from public Facebook pages, I find that refugees rely heavily on unofficial sources of information, the potential for rumors disinformation. Other recent work in this space shows that frequent policy changes, information dissemination limits, and ad-hoc implementation often lead to rumors and disinformation among refugees. 88 Big data analysis of refugee communications aids our understanding of gaps in their information needs as well as where those populations are most vulnerable.89 Using anonymized and aggregated digital trace data can also help researchers avoid some of the ethical challenges that may emerge when conducting research on refugees and other vulnerable populations. 90 Together, these studies provide valuable insight into how diverse actors-from governments and activists to armed groups and refugees-are using social media to pursue their political goals.

### Collecting and Analyzing Social Media Data

One of the primary advantages of social media data for political science research is that a great deal of data is free and publicly available and can be collected in a scalable manner. Twitter data is most widely used by social scientists due to its ease of collection and extensive metadata. While less popular in the Arab world than Facebook and WhatsApp, the platform is nonetheless widely used to discuss politics, and Gulf countries have some of the highest levels of Twitter penetration in the world. 91

The most common way in which researchers access Twitter data is using application programming interfaces (APIs), which enable users to download data using individual access tokens. Twitter data can be queried through the Rest API, 92 which allows researchers to search for specific information about users and tweets including user profile metadata, lists of followers and friends, and up to 3200 tweets generated by a given user. This can be done using publicly available statistical packages including twitteR, rtweet, and netdemR.

For collecting real-time Twitter data, researchers can use the Streaming API93 to connect to a "stream" of tweets as they are being published, filtering by keywords, location, or sampling 1 percent of all tweets on Twitter. The R library streamR can be effectively used to access the streaming API. Researchers can also access historical Twitter data (non-real-time data) using Gnip's Historical PowerTrack API,94 which offers paid subscriptions to tweets and can be queried with keyword, location, and other metadata filters. Finally, as we enter what Deen Freelon has called a "post-API age," 95 many researchers have developed tools to scrape Twitter directly, 96 avoiding rate limits and obtaining largely unlimited access to historical data.

Twitter data is particularly well suited to time series analysis of changing rhetoric and engagement behavior over time. The text analysis

methods-both supervised and unsuperviseddescribed in Rich Nielsen's contribution "What Counting Words Teaches us About Middle East Politics" in this newsletter are well suited to categorizing tweets as belonging to particular topics or expressing sentiments. A well-developed set of free tools have also been built for cleaning and analyzing Twitter data. 97 That said, because tweets are very short, some automated text analysis approaches like topic modeling often do not work particularly well on tweets, and human validation is particularly crucial when evaluating model performance on such short texts. Moreover, textual analysis of social media data from the Arab World requires special care due to combination of Modern Standard Arabic text, text in multiple dialects, transliterated text (Arabizi), and text in English and French, not to mention Internet slang, hashtags, emojis, URLs, and other social media specific symbols. It is therefore particularly important that researchers pre-process their text carefully and transparently. 98

Additionally, because Twitter's data structure enables us to measure both connections among users (friend-follower networks) and interactions among users (retweets, likes, and replies), this data is also particularly well suited to network analysis. In particular, we can identify influential nodes in networks of political discussion, track how information spreads through a network, and measure how closely particular users are tied together in a given network. Tools for network analysis visualization are freely available through R and Python, as well as using Gephi, 99 an opensource network analysis and visualization software package.

While Facebook is the most popular platform in the Arab World, collecting Facebook data has become increasingly difficult over time as there is currently no Terms of Service compliant way to access Facebook data—including data from public pages. Applications have been developed to scrape public data in violation of Facebook's terms of service, but they are frequently shut down by the platform. Social Science One's recent partnership<sup>100</sup> with Facebook has opened the door for academic researchers to obtain limited access

to Facebook data through the Crowdtangle platform, 101 which research teams currently must apply to access. Opportunities for research on Facebook moving forward may depend both on the development of these partnerships and continuing debates in the social sciences over the ethics of scraping publicly available data in the post-API age.

Facebook's Ads feature also offers valuable opportunities to safely survey hard to reach populations on politically sensitive topics in the Arab World. For example, recent work has used this feature to conduct a Facebook survey experiment on Egyptian Facebook users evaluating the persuasiveness of competing information provided by a human rights organization and the Egyptian security forces at shaping attitudes toward state-sponsored violence. 102 By enabling researchers to conduct surveys on large numbers of individuals without collecting or supplying identifying information, these online tools have potential for conducting low-cost surveys in the region. Recent work seeking to validate the use of these online surveys in developing countries with traditional survey data to help researchers address concerns about representativeness and reliability is promising, 103 though more research is needed to validate these tools in the MENA context.

YouTube, an underexplored platform for research on politics both in the Arab World and globally, has a very generous API. 104 Using YouTube's public API, researchers can access all data going back to including automatically 2006, generated transcripts of videos and user comments. Given that political and religious elites, as well as armed groups and extremist actors regularly produce content on YouTube, we can use text analysis tools to explore how content produced by diverse actors changes over time, as well as how everyday Youtubers engage with content produced by particular actors using similar techniques to those described in the discussion of analyzing Twitter data. Similarly, Instagram also offers a treasure trove for researchers, particularly as accessible tools have increasingly been developed for image analysis. 105 The platform is widely used in the Arab World, by elites and everyday citizens alike, and although its API is increasingly restricted, <sup>106</sup> it is still possible to collect data from public accounts.

### Limitations and Challenges

Despite the opportunities that social media data affords, it also brings a unique set of challenges for researchers. Most importantly, social media data is almost by definition not representative. While social media penetration is high in the Arab World, particularly in the Gulf, it is not used uniformly across the region and we, of course, cannot assume that behavior on any given social media platform, or surveys conducted on a particular platform, are representative. This is especially the case given the rise of bots and trolls, which can easily flood or mischaracterize mass behavior online. Moreover, as people in the Arab World are increasingly moving sensitive political conversations to closed groups and private or encrypted messages, publicly available social media data is not necessarily even representative of online discourse more broadly.

However, there are plenty of opportunities to use social media for research that do not require the data to be representative. For example, research using social media data to study the behavior of particular actors-for example known religious or activists, political elites, media outlets. extremist groups, or the engaged followers of any of these actors does not require representative Additionally, when researchers interested in studying online phenomena specifically such as the spread of online hate speech, extremist content, or disinformation, then social media users of public platforms are the population of interest. Finally, when we are conducting research on hard to reach populations or politically sensitive topics, we may still gain valuable non-representative insights from social media users' behavior that nonetheless advance our knowledge of particular political phenomena in the region.

Second, there are important ethical challenges to working with social media data. As governments in the Arab World increasingly criminalize and punish

online dissent or criticism, collecting and analyzing social media data requires special attention to protect subjects, especially when making data available for replication following publication. For the analysis phase, data should be stored on encrypted and password protected computers, and the account names and account content produced by users should be stored in separate files. 107 Upon publication, researchers should make available the code used to query a given dataset either through an API or other method, analysis code for producing an aggregate dataset, and aggregate data for deriving any statistical results, rather than a full dataset of raw social media content. Researchers should also be careful when displaying example social media posts in their research -especially those that contain politically sensitive content-that they do not supply any identifying information.

Along these lines, when conducting surveys on Facebook, researchers can take care to ensure that their participants are not providing any trace data or identifiable information. For example, once a Facebook user clicks on an ad for a survey, they can be redirected to Qualtrics so that researchers cannot connect their responses to their Facebook accounts. Researchers should also disable Qualtrics tracking of respondents IP addresses to insure that information is not inadvertently collected about participants.

Finally, given how quickly the online sphere evolves, studying social media and politics requires regularly updated descriptive research to understand how conditions are shifting. 108 For example, platform use among a given population will likely change over relatively short time horizons. Findings about how diverse actors are using social media, or phenomena like the spread of disinformation or extremist content, for example, may therefore shift rapidly. Recognizing this, there is a great deal off value to designing projects that allow for scalable data collection so that researchers can continue to track particular online phenomena over time. Along these lines, it is also crucial that researchers using social media data regularly reconsider the ethics of their studies as contexts shift, working to ensure the safety and privacy of users whose data they analyze.

### Conclusion

Not only can the real-time and networked structure of social media data provide insights about political behavior in the Arab World, but the use of these tools by diverse actors is also politically consequential in and of itself. Like any research approach, using social media data to study politics in the Arab World is not without challenges and limitations, but it nonetheless can be a valuable resource-particularly for scholars studying politically sensitive topics among hard to reach populations or well-known actors and groups. As computational social science approaches to collecting and analyzing data become increasingly accessible, they provide researchers with another set of tools that can be used on their own or integrated with traditional data sources-including survey data, event data, qualitative analysis, and ethnographic fieldworkto improve our understanding of politics in the region.

# QUANTITATIVE TEXT ANALYSIS OF ARABIC NEWS MEDIA

# By Ala' Alrababa'h, Stanford University

Middle East scholars have long relied on Arabic news media to understand the priorities of Arab publics and regimes. In 1962, Palestinian American scholar Ibrahim Abu Lughod conducted one of the earliest quantitative analyses of newspapers from seven Arab countries, focusing on coverage of international events and major external powers, such as the United States and the Soviet Union. He claimed that this analysis of Arabic media shed light on "the degree to which the reading public is being oriented toward the outside" and that it could inform scholars "about the judgments and values that are being formed." 109 Abu Lughod relied on the tools available at the time, so he calculated the square centimeters of each newspaper dedicated to certain major powers and coded articles on the front pages by country, topic, and sentiment. Given the difficulty of conducting a quantitative analysis with the available tools at the time, Abu Lughod limited his analysis to two weeks of newspaper coverage.

Recent developments in quantitative text analysis allow scholars to improve on such analyses of Arabic media. While these methods have been widely used in the analysis of social media in the Middle East 110 and authoritarian media outside of the Middle East, 111 they have not yet been widely applied to the analysis of Arabic news media. However, applying these new tools to Arabic news media holds much potential. Not only can Arabic news media act as an important source of data in a region where obtaining high quality data can be difficult, but the news media itself also has major effects on Arab politics. 112 In this article, I discuss ongoing research projects that utilize these tools in the Arabic news media to show their advantages and potential. I then go over some challenges associated with using quantitative text analysis with Arabic news media. Finally, I describe some of the relevant ethical considerations and technical details when using these tools.

# Applying quantitative text analysis to Arabic news media

While quantitative text analysis tools have only recently been used by political scientists to analyze Arabic media, several ongoing research projects reflect the potential of these tools. These projects demonstrate how quantitative text analysis can be used for exploratory research into trends in Arabic media, systematic testing of hypotheses, and identifying texts that would be useful for close qualitative reading.

the ability to process large amounts of text allows us to explore trends in media and understand how regimes and foreign powers use the media to influence regional publics.

First, the ability to process large amounts of texts can allow scholars to explore general trends in media. In an analysis of regime-controlled media in Syria, Lisa Blaydes and I examine trends in the discussion of topics related to foreign threats and the Syrian regime. 113 While many scholars argue

that regimes sometimes initiate conflicts to enhance their domestic standing, diversionary wars are rare because of their high cost. Instead, we show how the Syrian regime used diversionary rhetoric in state media. Using hand-coding of articles, unsupervised-learning methods—in which the computer discovers the topics in the texts with little intervention by the researchers 114—and qualitative analysis of articles, we demonstrate how Syrian state media has long relied on foreign threats for domestic control and how the sources of foreign threats changed over time. The quantitative analysis of texts allows us to cheaply analyze trends over a decade, using tens of thousands of articles.

Relatedly, analyzing trends in Arabic media can show the ways in which foreign countries intervene in the region. Metzger and Siegel explore how the Russian-controlled RT has attempted to influence global discourse on the Syrian conflict both through their English- and Arabic-language content. 115 They analyze Twitter data to show that RT was the most shared Arabiclanguage news source about Syria, and they conduct an analysis of the content to illustrate how RT's coverage was favorable of Russia's intervention. This research demonstrates how foreign countries use Arabic language news to influence the narratives around their intervention in the region. This research also shows the interplay between traditional news media and social media.

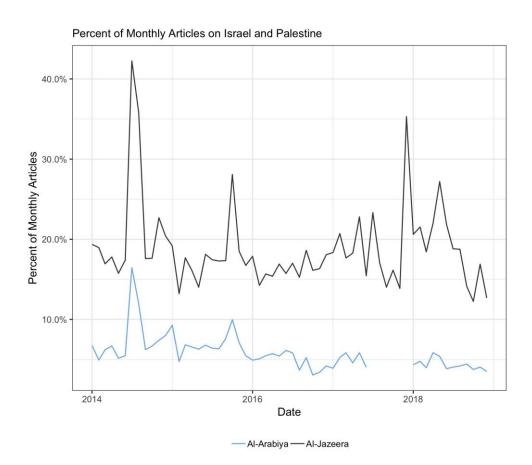
In addition to exploratory research, quantitative text analysis can be used for hypothesis testing. Koehler-Derrick, Nielsen, and Romney (2017) ask whether culture or political institutions explain the supply of conspiracy theories in Egypt. 116 They also examine whether conspiracy theories function as tools for messaging or distraction by the regime. Using a combination of supervised learning and case studies, they analyze state and independent media in Egypt. They find that political institutions explain the supply of conspiracy theories and that the promotion of conspiracy theories often acts as a messaging tool from the government to communicate fears and priorities.

Similarly, in a research project about the use of transnational media as public diplomacy tools, I analyze hundreds of thousands of articles from Saudi-owned *Al-Arabiya* and Qatari-owned *Al-Jazeera*, two of the most prominent news channels in the Middle East. <sup>117</sup> I provide an argument about how Qatar has attempted to mobilize Arab publics, especially in rival countries, while Saudi Arabia has attempted to pacify Arab publics to reduce the risk of revolutions. I test this argument by analyzing *Al-Arabiya* and *Al-Jazeera*'s coverage of foreign countries, including the rhetoric and topics they employ in an attempt to pacify or

mobilize Arab publics.

For instance, one of the particularly mobilizing topics for Arab publics is the Israeli-Palestinian conflict. Figure 1 shows the percent of articles in Al-Arabiya's and Al-Jazeera's Arabic websites that mention the words "Israel" or "Palestine." As can be seen in this figure, Al-Jazeera consistently discusses this conflict at a much higher rate than Al-Arabiya, suggesting the relative importance of this topic in Al-Jazeera.

Figure 1: Percent of monthly articles in Al-Arabiya and Al-Jazeera that mention "Israel" or "Palestine"



Finally, in my dissertation project, I examine how Arab regimes responded to the rise in information technology and independent news media. Before the rise in this technology, regimes state media was the main source of information. While people may not always believe the regime's propaganda,

Lisa Wedeen argued that the "regime's power resides in its ability to sustain national fictions, to enforce obedience, to make people say and do what they otherwise would not." 118 But the rise of independent media and the ability to access it cheaply using the Internet posed a challenge to

regime media. I claim that regimes responded to this by using state media to psychologically manipulate their publics, especially by playing into their fears, with the goal of reducing dissent. I test this through an analysis of news media from several Arab countries to examine how coverage varies during peaceful times and during periods of dissent.

In summary, the ability to process large amounts of text can be helpful to political scientists, because it allows us to explore trends in media and understand how regimes and foreign powers use the media, particularly state-owned news outlets, to influence regional publics.

# Challenges of quantitative text analysis with Arabic media

While quantitative text analysis has much potential when applied to Arabic media, there are important challenges to consider when obtaining and analyzing this media. For instance, especially when compared to U.S. media, media in the Arab world has been digitized only relatively recently, which temporally limits the scope of using these methods to study Arabic media. In addition, despite improvements over the years, Optical Character Recognition (OCR) tools remain underdeveloped in Arabic and it is often difficult to convert Arabic PDF images to text.

In addition to challenges with obtaining data, challenges also arise when analyzing the data. On the bright side, much of the traditional news media across Arab countries is written using Modern Standard Arabic (MSA), which allows for comparative study of these media. But scholars still need to be careful when analyzing these texts, because local colloquial words still often make it to these papers. For instance, Arabs in several countries use the English word "van" to refer to small transportation buses. This often makes it to Arabic media (¿i.) but this is also the same word for something mortal or perishable (Other forms of transportation like taxis, or Tok Tok, also often make it to Arabic media).

Relatedly, there are often spelling differences

even when using Modern Standard Arabic—for instance, Egyptian media often omits the dots below the letter ya ( $\varphi$ ) in Arabic when it is at the end of the word. This could make it potentially challenging to conduct a comparative analysis between, say, Egyptian media and Saudi media, because the same words may be spelled differently.

Scholars who conduct text analysis in Arabic should also watch for names, which often have meanings, especially when taken to their roots. For instance, the name Salman (for instance, the Saudi king, King Salman), when stemmed, becomes selm (سلم), which is the same three-letter root for the word "peace." This does not mean that these methods are not useful in Arabic, but it does suggest the importance of thinking carefully about the technical aspects of, for example, stemming the words—possibly including a list of words that the program should *not* stem—validating the results, and conducting close qualitative analysis in addition to any quantitative one.

Another challenge with obtaining and analyzing Arabic media relates to the political environment. Scholars should be aware of censorship, including self-censorship, practiced in many Arab countries. Media, including independent outlets, are often restrained by a series of formal laws that punish incitement and spreading falsehoods (as defined by the governments). 119 This makes media even less representative of the publics' opinions and priorities. Of course this can still provide an opportunity to analyze media to examine the priorities of regimes and what they allow to be published.

This discussion suggests the importance of validating the results of text analysis in Arabic and combining the quantitative analysis with a qualitative reading of the texts. It also suggests the importance of being clear and careful about the goals of Arabic media analysis, keeping in mind the important role of censorship.

# Technical tools and ethical considerations

When scraping news websites, it is important to

take into consideration ethical and legal issues. First, intellectual property and copyright laws apply to these websites, so authors should not republish the texts of news articles (at least without explicit consent from the news source). Note that this is tricky, because it could make replication harder. Some researchers suggest that publishing the stemmed document-term matrix may be ethical, but there are no clear standards in the field yet.

A related concern is reading and understanding the terms and conditions of a website before scraping, as some explicitly ban it. In theory, scholars should use the Application Programming Interface (API) when scraping; however, in practice, I am not aware of any news websites in Arabic with APIs. These may be developed by some of these websites in the future.

Finally, it is important to make requests at a reasonable pace. Many Arabic news websites, especially small independent ones, cannot handle a lot of traffic. So if research make too many repeated scraping requests, researchers could unintentionally slow down or even shut down the websites, and this could be interpreted as a Denial of Service attack by the scholar.

There are many tools that make scraping relatively easy in R and Python. In R, rvest is a powerful library that makes it easy to scrape many news websites. After downloading the data, scholars often need to manipulate it. Sometimes websites include JavaScript, making it difficult to scrape using rvest. The open-sourced tools Selenium in Python or Rselenium in R can be particularly helpful to deal with these websites, as they allow the researcher to write code that browses the Internet like a user. There are several packages in R that are helpful to process and clean text data, including tidytext, broom, and stringr/stringi. As change in trends over time is often important with news media, lubridate is a particularly powerful package to manipulate dates. With Arabic texts, Nielsen's arabicStemR is particularly helpful for removing stop words and stemming. Farasa is another tool that allows parsing of Arabic texts, which also includes identifying parts of speech in Arabic sentences.

#### Conclusion

Conducting political research on the Middle East can often be challenging. Many regimes do not maintain easily accessible archives, restrict survey work, and sometimes even put the safety of researchers at risk. Arabic media thus offers a valuable source of data to learn about many questions related to regime behavior, intervention by foreign powers, public diplomacy, and political opposition in Arab countries. Yet the role of Arabic media goes beyond providing a source to study these topics. Research has shown that Arabic news media itself plays an important role in influencing regional politics. Quantitative text analysis provides researchers with the tools to use vast amounts of texts in order to study some of these topics and, in particular, the role of news media in politics. While there are important challenges and limitations, ongoing research projects that apply quantitative text analysis to Arabic media demonstrate the potential of these tools.

# IDEOLOGICAL SCALING IN A POST-ISLAMIST AGE

# By Nate Grubman, Yale University

In recent years, a growing body of scholarship has focused on the interaction of cultural identity and class as potential bases for partisanship in the Arab world. A number of puzzles have emerged: Following the 2010 to 2011 uprisings driven in large part by economic grievances, why did party systems in Egypt and Tunisia revolve more tightly around competing notions of religious and national identity than competing economic orientations? 120 Why did many of the poor turn to Islamist parties rather than Marxist-Leninist or Arab nationalist ones? 121 How can the perceived dominance of a secularist-Islamist cleavage and the popularity of Islamist parties be reconciled with observation that citizens of Arab countries are concerned with the mundane economic issues that preoccupy other people of the world? 122

In this article, I argue that the application of textas-data methods to the speech disseminated by politicians can contribute new insight to each of these questions. Text-as-data methods can help researchers identify the issues on which politicians focus and the main differences in the ways they discuss said issues. These methods can particularly valuable in understanding unfamiliar political actors, learning where familiar political actors stand with regard to unfamiliar issues (such as Islamists talking about purchasing power), or some combination thereof. To ground the discussion of the methods, I discuss my use of ideological scaling methods in an ongoing project to understand the choices presented by post-uprising Tunisian politicians, especially on economic issues. I reflect on my unreasonably high initial hopes, the conclusions I have drawn after several years of research, and potential uses for these methods beyond Tunisia.

# How and why to scale campaign materials

Survey research has raised a set of puzzles regarding the place of economic policy differences in partisanship in the Arab world. Researchers have noted that those usually expected to support the left—the poor and other advocates of redistribution—have generally not in the Arab world. 123 Furthermore, shortly after Egypt and Tunisia's party-system liberalizations, efforts to task survey respondents with mapping the parties onto an economic spectrum produced inconclusive or puzzling results. 124

These findings raise questions about the choices parties have presented to voters, especially with regard to economic problems. Did political parties in Egypt and Tunisia diverge in their approaches to economic issues? If so, which parties positioned themselves on the "economic left" traditionally identified by researchers and which ones set up on the right? Alternatively, did they diverge in ways not captured by capitalist-socialist, equalityseeking, or statist-individualist dichotomies? How did these distinctions regarding economic issues map onto other ideological dimensions such as the one pitting Islamists against more secularist rivals?

Motivated in part by these questions, dissertation focuses on why the post-uprising Tunisian party system seemed to offer starker choices regarding identity issues and muted those related to economic policy, despite many of the ingredients for the type of default left-right politics often assumed by political scientists. Part of the project uses text-as-data methods to understand and describe distinctions in how politicians talk Tunisian about economic problems. Using unsupervised methods of scaling political party platforms, as well as conducting interviews with their authors and politicians, I show that, rather than staking out positions varying in their orientation to capitalism or socialism, Tunisian parties have instead generally competed through valence-based claims to competence.

I was initially drawn to text analysis because of several virtues over alternative methods of ideological scaling, such as surveys. Text analysis is cheaper, easier to apply retroactively, and perhaps less subject to reactivity-all major concerns for a young scholar from the United States studying events by then several years past. When I initially set out to understand the differences in the ways Tunisian politicians talked about economic issues, I imagined that I might be able to throw a hodgepodge of different types of text into R, sit back, and bask in the insight. I gathered Arabic and French Facebook posts, televised campaign statements, election posters, newspaper articles from party newspapers, and party platforms.

In practice, I have learned that the fundamental assumption of using text analysis for ideological scaling—that unobservable political differences can be discerned from observable patterns in word usage—requires more careful selection of texts. The problem is that word choice is not just a function of political attitudes or positions. Differences in word usage in one party's Facebook posts and another party's manifesto may have more to do with the differences in the purposes and constraints of these media than underlying differences in political attitudes. So if a researcher wants to use words to uncover

differences in political attitudes, it is helpful to select texts likely to express these differences but do not differ for other reasons. And if a researcher wants to understand differences regarding a particular dimension, such as transitional justice or public-welfare provision, then it helps to find texts focused on these topics.

If a researcher wants to use words to uncover differences in political attitudes, it is helpful to select texts likely to express these differences but do not differ for other reasons.

I began with party platforms for the same reasons that have drawn other scholars to them: They are long statements of political priorities and so they constitute large samples of words presumably drawn from some underlying political message. Party platforms enjoy somewhat of a tradition in Tunisia. Opposition parties published platforms at least as far back as the 1981 elections, and Ben Ali's RCD routinely published lengthy electoral platforms. After the revolution, most of the major parties published platforms and disseminated the messages in them through their Facebook pages, newspapers, campaign speeches, and other events.

Of course, platforms have well-known limits. They paper over intraparty differences and, because citizens generally do not read them, there are questions regarding the degree to which they reflect the messages citizens actually see and use to make choices. In my research, I have engaged with these limits in two ways. To nuance the role of platforms within Tunisian parties, I have conducted dozens of interviews with those who worked on platform-committees for Tunisia's largest parties. To assess the degree to which platform messages reflect those communicated to the public through other media, I am currently expanding the project to incorporate the analysis of nationally televised, subnational campaign videos. 125 These are just a few ways in which scholars can validate the importance and reception of the texts that they study.

There are multiple methods for using texts to

ideologically scale actors, and the appropriate approach depends on the nature of the research problem. Broadly speaking, researchers can use dictionary-based, supervised, or unsupervised methods. A researcher wanting to place unfamiliar political actors in a debate with well-known poles and well-known terminology associated with them might create a dictionary, perhaps coding documents as falling on the left based on the number of times they include words such as distribution, state, or socialist. Alternatively, a researcher with a good idea of the sides in a debate but doubt about the lexicons associated with them might use a supervised method such as wordscores, 126 identifying reference texts to represent each pole, and then coding the remaining documents based on whether their word usage approximates that of one pole or the other. This method depends on the researcher to have a good understanding of the main dimension of difference. For example, in Tunisia, speeches by communists and Islamists might make good reference texts in a debate about inheritance-law reform but poor choices in a debate about transitional justice, where they arguably share interests as the formerly oppressed.

As my research is interested in not only who set up on the left and right but also the ideological content of this spectrum, I chose to use an unsupervised-scaling model called wordfish, developed by Slapin and Proksch. 127 Wordfish has been used to scale German party platforms, 128 Turkish party platforms, 129 speeches in Irish parliamentary debate, 130 press releases issued by U.S. Senators, 131 and other sets of text. It is based on item-response theory. The method makes a strong assumption that words are drawn stochastically from an underlying ideological message according to a Poisson distribution. The model includes fixed-effects to account for the fact that some documents are longer than others and some words are generally more common than others. It then gives the research two outputs with which to try to make sense of the underlying differences in the documents. Each word is assigned a score according to which it is used with different frequency across the spectrum; each document is assigned a score according to which it uses words associated with one end or the other of that spectrum. This is where the hard work starts.

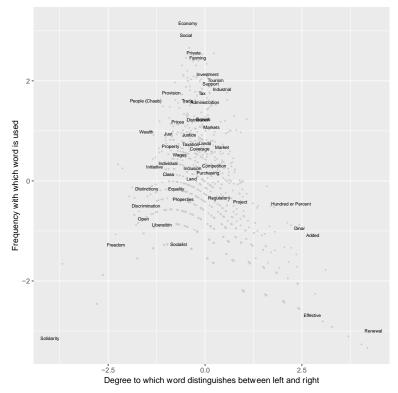
To give a concrete example, I applied the method to seven of the nine highest performing parties in 2011 Tunisian Constituent Assembly elections. 132 According to the results, the Progressive Democratic Party (PDP) and the Democratic Modernist Pole (PDM) appeared on opposite ends of the spectrum, which we can call right and left. Ennahdha, the main Islamist party, and, to a lesser extent, Ettakatol and Congress for the Republic (CPR), appeared closer to the PDP on the right and the Popular Petition and the Communist Workers' Party (POCT) appeared closer to the PDM on the left. It is easy to construct a story explaining these results, with two of the parties on the left sharing Marxist-Leninist roots and most of the parties on the right having banded together in the prerevolutionary October 18 Collective.

But the really interesting findings usually lie not in the scale but the word scores according to which it is constructed. Here, it appears that what groups the parties on the left, the side of the spectrum with the two parties of Marxist-Leninist origin, is their focus on civil and political rights and issues related to the constitution—belonging,

husband/wife, sex, discrimination, equality, and constitution, for example. Words associated with specific economic problems—gross, product, dinar, value-added, industry, etc.—distinguish the right.

The results of the analysis of the full platforms highlight a shortcoming with using wordfish: it assumes that the spectrum from which words are drawn is one-dimensional, but in the case of the 2011 elections, there were at least two main dimensions, one regarding the new constitution and the other regarding economic problems. To focus on distinctions with regard to economic problems, one must limit the analysis to the parts of the text focused on it. Although party platforms usually include section labels to facilitate this, slicing up the text in this way can raise questions if for example one party treats the inheritance law in its "cultural" section and another discusses it in its economic section.

In any case, applying the method to the economic sections of each platform yields a similar scaling, with the PDP on the right, the parties that later formed the Troika government in the center, and the PDM and POCT on the left. Below, I include a word pyramid showing the degree to which a set of words distinguish between the economic sections of the various parties' platforms.



What is striking in the word scores is not only that some parties seem to devote more attention to specific programs (numbers, percentage, dinars, and value-added are associated with the right) but also that many of the words one might expect to fall on the left or right do not. Words such as growth, distribution, support, and justice, for example, tell us little about whether a document will fall on the left or right. In my interview research, I have found that this absence of a clear distinction between statist and market-oriented economic approaches is reflective of a politics whereby leaders of the largest parties see their economic orientation as shared but their of endowments valence attributes-mainly and integrity-as the competence distinguishing factor. For example, many of those who crafted the economic policies for Nidaa Tounes and Ennahdha in 2014 saw the two parties as sharing a general orientation toward economic problems but differing in the experience, knowledge, and integrity needed to address them.

Moving forward

The importance and competitiveness of electoral politics in Tunisia make it somewhat of a singularity in the region. But this does not mean that ideological scaling through study of text as data should be confined to the study of Tunisian politics. Where the main dimension of competition is unclear, where the lexicons associated with different ideological poles are unknown, or new political groups are entering the fray, ideological scaling through text analysis may be useful.

I argue that these will likely be widespread conditions in the coming years, particularly as many parts of the Arab world-including Algeria, Egypt, Iraq, Jordan, Lebanon, Morocco, and Sudan-grapple with pressures for contentious economic reform. In many world regions, the politics of welfare reform no longer resemble a conflict over expansion and retrenchment; if this is the case in these countries, as it was the case early in Tunisia's transition, then text-as-data methods could provide useful tools for understanding the contents of the conflicts over economic reform and how they map onto other types of political divisions.

# WHAT COUNTING WORDS CAN TEACH US ABOUT MIDDLE EAST POLITICS

# By Richard A. Nielsen, MIT

I stared at the word "God"—allah in Arabic—at the top of the list on my computer screen. I was puzzled. I rechecked the computer code. It seemed correct. But how could it be that the single word that most distinguished male and female preachers on the Salafi missionary website www.saaid.net was the word "God?" From reading articles posted there, I knew that it wasn't because female preachers were any less fervent than their male counterparts about orienting their followers towards the divine. But the word count was correct. Male preachers used the word "God" incredibly frequently, once every thirty-three words; almost every other sentence. Female preachers used it only half as often.

My next discovery deepened the puzzle. Female preachers were using the word "God" less than men, because they use fewer citations to the Quran and the hadith tradition (the sayings of Muhammad and his companions). Following Islamic custom, these citations involve bound phrases that almost always include the word "God." There isn't a gendered piety gap in Salafi Islam, but rather a gendered citation-use gap. But why? Citations to these authoritative texts are the defining feature of the "Salafi method" (al-manhaj al-salafiyya) of establishing legal-religious authority readers. Ethnographers observing these same women preaching in person have concluded that their "knowledge of Quran and Sunnah [is] exhaustive" (Le Renard 2012, 116). So why do Salafi women cite the hadith and Quran only half as often as men when they write online?

The answer is that women in the Salafi movement construct their authority differently from men. Rather than relying as heavily on citations for authority, they invoke *identity authority* as women to deliver religious messages that men can't. For example, female preachers are uniquely able to oppose the UN women's rights laws (a common Salafi target) by saying "As a woman, I

don't want the West's so-called 'rights.'" Although the Salafi movement's norms are unfriendly to the theoretical idea of women's religious authority, male movement leaders nevertheless promote these female authorities, because their messages defend patriarchal practices and attract new online audiences of both women and men. These insights challenge previous conclusions about these female Salafi preachers (Le Renard 2012, 2014; Al-Rasheed 2013): that they use the Salafi method of hadith citation just as much as men, that they write exclusively on socalled "women's issues," and that men are uninterested in their preaching (in fact, 70 percent of Twitter reactions to women's preaching are from men). My findings form the basis of my article "Women's Authority in Patriarchal Social Movements: The Case of Female Salafi Preachers," forthcoming in the American Journal of Political Science.

I share this behind-the-scenes story about my research process to illustrate the power of quantifying text. When we read, our brains fill in the gaps with our prior beliefs about what we ought to find (Goodman 2014). Despite years of familiarity with the texts on this Salafi website, it wasn't until I started counting words that I was able to see the stark gender differences. Of course, these quantitative differences are merely a numerical summary of a qualitative difference, but one that I was blind to until I started counting.

Statistical text analysis is sometimes dressed up with terms like "artificial intelligence" and "machine learning." These descriptors aren't wrong, at least in their technical usage, but they obscure the fundamental simplicity of text analysis: it is largely based on counting words. The difference between the simple methods and the complex ones is the complexity of the word count. Scholars of the Middle East have occasionally turned to computational text analysis in the past (Bulliet 1979), but a recent resurgence in interest and the availability of new tools are drawing a new wave of young scholars to forge ahead (Mitts 2019, Karell and Freedman 2019, Siegel and Tucker 2018)

Counting words is no substitute for reading them, but by the same token, reading words is not always a substitute for counting them. Our brains understand narrative and insinuation in a way computers cannot, and they bring a wealth of prior knowledge to every reading. But they are stunningly bad at probability and prone to a variety of cognitive biases. And we get bored. The promise of applying statistical text analysis methods to Arabic text is that we can harness both modes of investigation for greater insight about the politics of the Arab world.

### Counting to discover

Discovering new things with statistical text analysis begins with a text, or set of texts, that are puzzling in some way. Most guides to statistical text analysis assume that the analyst already has texts in hand (Grimmer and Stewart 2013; Lucas et al 2015). This obscures the reality that, in my experience, I spend upwards of 80 percent of my time on any given project selecting, collecting, and curating the texts I will analyze. Selecting texts for discovery is both a science and an art. As usual, "the cases you choose affect the answers you get," (Geddes 1990) but when I pursue discovery via text analysis, I rarely have a fully developed question. Instead, I am usually intrigued and puzzled by a collection of texts.

How should one sample texts for discovery? When I explore a collection of texts, I generally try to explore the entire collection as demarcated by some kind of natural boundary: a website, an author, a movement, or an era. For example, my puzzlement about female Salafi preachers began when I encountered a list of 43 of them on the prominent Salafi missionary website www.saaid.net. I came to the website searching for the writings of male preachers who appear on a parallel list, but my curiosity about the female preachers spurred me to collect every document available on the website by both male and female authors. Collecting only the easiest-to-get texts or the most famous preachers might have biased my results. On the other hand, I did not collect texts from the many other Salafi websites on the Internet. I believe my findings hold true there as well, but Internet-wide data collection is extremely time-consuming (Internet-wide data collection for my book *Deadly Clerics* took several years). The general principle here is that context is just as crucial for statistical text analysis as it is for close reading. The religious texts I analyze in my research are in dialogue with each other, and artificially subdividing the documents risks missing these connections. Natural boundaries that authors and readers draw around corpora can often serve as useful analytic boundaries for scholars as well.

Using text analysis for discovery is often called unsupervised learning, a name from computer science referencing the goal of having a computer "learn" what a corpus of texts means without human input. The most widely used unsupervised learning method in political science is a topic model, which is one of the ways I explored the gendered differences in Salafi preaching. The insight of a topic model is that rather than considering differences between texts on a wordby-word basis, we can group those words into topics and consider differences topic-by-topic. This is still word counting, but through a far more complex calculation. Several papers treatments of the technical details (Blei, Ng, and Jordan 2003, Roberts, Stewart, and Airoldi 2016); my aim here is instead to give the intuition.

The goal of a topic model is to summarize the words in a corpus with a small number of dimensions, colloquially called "topics" because, in practice, they often correspond to what humans think of as topical. The model proceeds with a set of unrealistic assumptions about how documents are written. The imagined author has a fixed list of topics, each with words that they are more likely to use when writing on that topic. When they sit down to write each document, they sample proportions for how much of each topic will be in this particular document, and for each word choice, they sample first a topic, then a word conditional on that topic. The model takes word counts we observe in a corpus and estimates the parameters for this imagined model that would have been most likely to result in those word counts, if the model were an accurate summary of how the texts were written. Practically speaking, analysts look at the resulting lists of correlated words and interpret them as the main topics of the corpus.

The topic model is clearly unrealistic; no one writes in this way. In fact, if I did, the next sentence in this paragraph might have been the agrammatical: "One scholar model interpret algorithm." 133 But despite these unrealistic assumptions, topic models have proven very useful for a wide range of researchers seeking to make discoveries. Why? Because models do not have to be realistic in all the particulars to be useful. Clark and Primo (2012) argue that we should view models as maps, and that maps routinely employ unrealistic distortions to be useful while remaining parsimonious. Topic models have proven to be useful maps for exploring a wide variety of corpora.

Topic models are useful because the latent dimensions returned by the algorithm often help researchers interpret the contents of their texts. Although the model is statistical, the goal is generally interpretive as defined by Pachirat (2006): "Humans making meaning out of the meaning making of other humans." Scholars of Middle East politics are at the forefront of interpretive approaches to social science (Wedeen 2002, Parkinson 2013, Jones 2015). quantitatively oriented scholars increasingly use topic models that put interpretation front and center, perhaps this will create space for connection between these two traditions.

### Counting to scale up

When I get questions about whether text analysis is appropriate for some project, I typically return this question with one of my own: if you had infinite time to read all of the text yourself, what would you do? Often, researchers respond with a relatively simple reading task of "coding" each text, but reading and coding every text in a large corpus would take months or years. Statistical text analysis offers a way to "scale up" reading and coding. This approach is called *supervised learning*, a name that refers to the notion that the

computer is learning to reproduce the task that a human would do using supervision from human inputs.

There are many, many supervised learning algorithms, but the essence of these algorithms is similar. The analyst begins with labeled data, a subsample of the texts where the desired coding has already been done. The analyst then uses this labeled data to "train" one or more algorithms, selecting parameters for each algorithm that give good performance when attempting to relabel the already labeled data. The analyst then applies the trained algorithm to the unlabeled data to generate labels in minutes, rather than years.

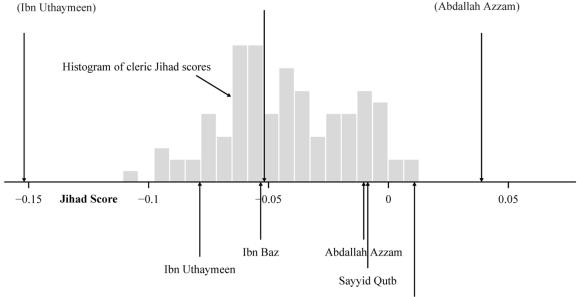
I used supervised learning to classify the writings of Muslim clerics as jihadist or not in my book Deadly Clerics (2017). This classification was part of a larger analysis testing whether weak academic networks make clerics more likely to preach jihad, but for now, I focus only on the classification task. I was working with approximately 150,000 documents by 200 Arabicspeaking clerics, with lengths ranging from a few sentences to multivolume tomes. If I had been able to skim each document in five minutes on average to render a rough coding, classifying each of these documents would have taken me approximately 12,000 continuous hours. Instead, I used The Jihadist's Bookbag, a set of jihadist documents circulating on the web, to train an algorithm called a naïve Bayes classifier to detect other jihadist documents. Heuristically, the model compares the word counts in a new document to word counts in The Jihadist's Bookbag and classifies the new document as jihadist if they are similar. This approach is faster than human coding and allowed me to use the expertise of jihadists themselves to determine which documents count as jihadist.

Figure 1

If a person arrives while the Imam is preaching at Friday prayers, he should pray two brief prostrations and sit without greeting anyone as greeting people in this circumstance is forbidden because the Prophet, peace be upon him, says, "If your friend speaks to you during the Friday prayers, silence him while the Imam preaches because it is idle talk."

There is a fundamental fact about the nature of this religion and the way it works in people's lives. A fundamental, simple fact, but although it is simple, it is often forgotten or not realized at all. Forgetting this fact, or failing to recognize it arises from a serious omission from views of this religion: its truthfulness and historical, present, and future reality. (Sayyid Qutb)

Ruling on Fighting Now in Palestine and Afghanistan. The foregoing has clarified that if an inch of Muslim lands are attacked, then Jihad is obligatory for the people of that area, and those near by. If they do not succeed or are incapable or lazy, the individual obligation widens to those behind them and then gradually the individual obligation expands until it is general for the whole land, from East to West.



The payoff, shown in Figure 1, is a ranking of Muslim clerics from least to most jihadist, based on the similarity of their writing to The Jihadist's Bookbag. 134 The numeric scale is arbitrary; what matters is that non-jihadists fall to the left of the histogram and jihadists fall to the right. For comparison, I plot scores for excerpts from the writings of Ibn Uthaymeen, Sayyid Qutb, and Abdallah Azzam. 135 For each excerpt, the words that actually enter the model are colored (the classifier omits the most and least frequent terms), with words that predict Jihadism in darker red and words that predict non-Jihadism in darker blue. A careful reader could have made the same judgment about these texts, but coding would have taken years instead of hours.

# Getting Started with Statistical Text Analysis in Arabic

I've said relatively little about the particulars of statistical text analysis in Arabic because my view is that the principles of text analysis are Usama bin Laden

fundamentally similar across languages (Lucas et al. 2015). I think of an analysis of Arabic-language texts no differently than an analysis of Englishlanguage texts; there is merely an added technical challenge of representing Arabic in a computer program, and of replacing English-specific preprocessing steps with an appropriate Arabiclanguage equivalent. But these technical challenges can be frustrating for scholars making their first foray into statistical text analysis, especially because not all of these challenges have well-established solutions.

As a language, Arabic presents a number of challenges that methodologists working with English-language texts have rarely considered. There is substantial dialect variation across the Arab world; enough so that different dialects appear to be different languages to a computer algorithm. Existing approaches to multi-language text analysis rely on translating to a single "pivot

language" (Lucas et al. 2015), but automated translation systems for most Arabic dialects do not exist. Couple this with occasional script variation, and the frequent use of Latin characters to represent Arabic letters (called "Arabizi") in online writing, and the challenges can become overwhelming. I have largely side-stepped these problems because the clerics I study tend to write in regularized, formal Arabic. But several of the other essays in this symposium deal with these challenges head-on.

Text analysis also involves language specific preprocessing steps. Often, these preprocessing decisions are assumed to be innocuous, but recent research shows they are not (Denny and Spirling, 2018). For Arabic, the step that is most different is stemming: the process of combining words with similar "stems" into a single term. For example, in English, we might combine the words "teacher," "teaching," and "teachable" into a single stem "teach." This reduces the complexity of the text by helping the computer "learn" that all of these words relate to a single concept. English is relatively easy to stem because it uses suffixes and prefixes to create new words from older concepts. But Arabic morphology relies on infixing as well; new words are created by placing affixes inside of a word stem rather than on the ends, which makes stemming more difficult. When I started, resources for working with Arabiclanguage text in modern statistical languages were underdeveloped or non-existent. I coded and released an Arabic-language stemmer for the R programming language (arabicStemR, Nielsen 2017) because this was the most crucial tool that was missing. Scholars interested in learning the details of my Arabic text analysis workflow should check out online materials I developed for a workshop on the topic at Cairo University this year, available on my website. 136

Arabic text analysis is going to become a mainstay method for Middle East scholars. The technical challenges will be met with technical solutions in fairly short order.

Despite these challenges, Arabic text analysis is going to become a mainstay method for Middle East scholars. The technical challenges will be

met with technical solutions in fairly short order. The new wave of research, described in this symposium, will make a splash and inspire even more research. But Arabic text analysis will also gain traction for a more somber reason: access to field sites in the Middle East and North Africa is closing, especially to researchers asking political questions. A resurgence of authoritarianism in the wake of the Arab uprisings means that almost any political inquiry crosses regime red lines in much of the region and field research can look a lot like spycraft to paranoid autocrats (Driscoll and Schuster 2018). Local activists are responding to this repression by moving online; conversations create the social media data that Alexandra Siegel is analyzing in this symposium. As face-to-face fieldwork becomes more difficult, and even life-threatening, senior scholars must sometimes make the ethical choice to not encourage students to place their bodies into harm's way as they carry out dissertation projects (Lynch 2018). As the physical field closes, and the online field opens, statistical analysis of Arabic texts offers one way forward.

# **ANNOUNCEMENTS**

### **OPEN CALLS**

#### 2020 MENA Politics Section Award Nominations

- APSA MENA Politics Section Award for Best Book: Awarded for the best book published in 2018 or 2019. Work utilizing any methodological, theoretical, and empirical tools for the study of the politics of the Middle East and North Africa will be considered. Please submit nominations or self-nominations to the award committee with the subject heading "MENA Politics Best Book Nomination" at <a href="mailto:apsamena@gmail.com">apsamena@gmail.com</a> by December 31, 2019.
- APSA MENA Politics Section Award for Best Dissertation: Awarded for the best doctoral thesis defended between August 30, 2017 and August 30, 2019. To be considered, the dissertation must be nominated by the dissertation adviser or another faculty member familiar with the work. The faculty member/adviser should submit a short letter explaining why the dissertation makes an exceptional contribution to the study of the politics of the Middle East and the broader discipline of Political Science. Work utilizing any methodological, theoretical, and empirical tools for the study of the politics of the Middle East and North Africa will be considered. Please submit nomination letters, with the dissertation as a PDF attachment, to the award committee with the subject heading "MENA Politics Best Dissertation Nomination" at <a href="mailto:apsamena@qmail.com">apsamena@qmail.com</a> by December 31, 2019.
- APSA MENA Politics Section Award for Best APSA Paper: Awarded for the best paper presented at the 2019 meeting in Washington, DC. To be eligible, the paper may be self-nominated or nominated by a panel chair, discussant, or co-panelist for the panel on which the paper was presented. The nominator and/or author(s) should provide the paper that was presented at the annual meeting (only paper versions as presented to the annual meeting will be considered by the committee). Please submit papers as a PDF attachment to the award committee with the subject heading "MENA Politics Best Paper Nomination" at <a href="mailto:apsamena@qmail.com">apsamena@qmail.com</a> by December 31, 2019.

# **APSA MENA Fellow**

The Project on Middle East Political Science (POMEPS) and the MENA Politics Section of the American Political Science Association invite nominations and self-nominations for the inaugural POMEPS MENA Politics Fellow. The Fellow should be an early career scholar, defined as pre-tenure, who has demonstrated excellence in scholarship and an interest in contributing to the professional and intellectual development of the field of Middle East Political Science. We are particularly interested in candidates from the MENA region, who could take the lead in translating political science research from English into and from a regional language. The Fellow will serve a one year term beginning at the 2020 Annual Meeting of the APSA, and will receive a modest honorarium in recognition of service. Please submit a statement of interest by December 31, with full application including a CV and a one page statement of purpose which outlines potential contributions to the Section's programming to @apsamena@qmail.com by February 15, 2020.

# 2020 APSA Research Development Group for early-career Arab scholars

The <u>APSA MENA Politics Section</u> is pleased to announce a Call for Applications from early-career Arab scholars (PhD students and faculty members) for the Research Development Group held in conjunction with the 2020 APSA Annual Meeting. The RDG, organized in partnership with the Project on Middle East Political Science (<u>POMEPS</u>), will be a unique opportunity to advance current research towards publication, participate in the APSA annual meeting, and develop scholarly networks with colleagues. The deadline to submit applications for the 2020 Research Development Group is Saturday, February 1, 2020. <u>Click here</u> to apply and learn more.

### **ENDNOTES**

### Gengler notes:

- <sup>1</sup> J. Gengler, M. Tessler, R. Lucas, and J. Forney. (2019). 'Why Do You Ask?' The Nature and Impacts of Attitudes toward Public Opinion Surveys in the Arab World. *British Journal of Political Science*. The study was made possible by a grant (NPRP 9-015-5-002) from the Qatar National Research Fund, a member of The Qatar Foundation. The statements herein are solely the responsibility of the authors.
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- <sup>3</sup> E.g., D. Corstange. (2014). Foreign-sponsorship effects in developing-world surveys: Evidence from a field experiment in Lebanon. *Public Opinion Quarterly* 78, 474–484.
- <sup>4</sup> J. Gengler (2017). The dangers of unscientific surveys in the Arab world. *Washington Post*. October 27.

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- <sup>5</sup> Marc Hetherington, "The Political Relevance of Political Trust, American Political Science Review vol. 92, no. 4 (1998): 791-808. <sup>6</sup> Eric Uslaner, "The Study of Trust," in *The Oxford Handbook of Social and Political Trust*, by Eric Uslaner (Oxford: Oxford University Press, 2018): 3-13.
- <sup>7</sup> Jack Citrin and Laura Stoker, "Political Trust in a Cynical Age," *Annual Review of Political Science* vol. 21 (2018): 49-70; William Mishler and Richard Rose, "What are the Origins of Political Trust? Testing Instituttional and Cultural Theories in Post-communist Societies," *Comparative Political Studies* 34, no. 1 (2001): 30-62. 2001).
- <sup>8</sup> Kenneth Newton, "Social and Political Trust," in *The Oxford Handbook of Political Behavior*, by Russel Dalton and Hans-Dieter Klingemann (Oxford: oxford University Press, 2007): 342-61.
- <sup>9</sup> Mark Beissinger, ""Conventional" and "Virtual" Civil Societies in Autocratic Regimes," *Comparative Politics* vol. 49, no. 3 (2017):. 351-372.
- <sup>10</sup> Johannes Gerschewski, "The Three Pillars of Stability: Legitimation, Repression and Co-opation in Autocratic Regimes," *Democratization* vol. 20, no. 1 (2013): 38-57.
- <sup>11</sup> Amaney Jamal, "When is Social Trust a Desirable Outcome? Examining Levels of Trust in the Arab World," *Comparative Political Studies* vol. 40, no. 11 (2007): 1328-1349; Justin Gengler, Mark Tessler, Darwish Al-Emadi and Abdoulaye Diop, "Civic and Democratic Citizenship in Qatar: Findings from the First Qatar World Values Survey," *Middle East Law and Governance* vol. 5, no. 3 (2013): 258-279.
- <sup>12</sup> See for instance Joshua Stacher, "Fragmenting States, New Regimes: Militarized State Violence and Transition in the Middle East," *Democratization* vol. 22, no. 15 (2015): 259-275.
- <sup>13</sup> For more information on the project see: <a href="https://unituebingen.de/en/faculties/faculty-of-economics-and-social-sciences/subjects/department-of-social-sciences/ifp/institute-of-political-science/people/middle-east-and-comparative-politics-professor-schlumberger/projects-and-services/arab-youth-from-engagement-to-inclusion-vw/project-description/</a>
- 14 For more information on the project see:

https://www.iai.it/en/ricerche/power2youth-freedom-dignity-and-justice

- <sup>15</sup> The research design and the implementation of the survey study was conducted by the Fafo Research Foundation in Norway. For more information on the survey results and methodology please see: <a href="http://powerzyouth.iai.it/survey.html">http://powerzyouth.iai.it/survey.html</a>
- <sup>16</sup> For a full regression table, please email the author at: nadinesika@aucegypt.edu
- <sup>17</sup> Johannes Gerschewski, op.cit; Mark Lichbach, "Deterrence or Escalation? The Puzzle of Aggregate Studies of Repression and Dissent," *Journal of Conflict Resolution* 31, no. 2 (1987): 266-297.

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- <sup>19</sup> Corstange, Daniel, and Nikolay Marinov. "Taking sides in other people's elections: The polarizing effect of foreign intervention." *American Journal of Political Science* 56, no. 3 (2012): 655-670.

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Nugent, Elizabeth, Tarek Masoud, and Amaney A. Jamal. "Arab Responses to Western Hegemony: Experimental Evidence from Egypt." *Journal of Conflict Resolution* 62, no. 2 (2018): 254-288.

<sup>20</sup> While the Palestinian Territories does have well-established and regarded survey firms, perhaps the best-known firm, the Palestinian Center for Policy and Survey Research (PSR), does not generally accept commissioned research from outside scholars. Due to the international presence and interest in the Occupied Territories, hiring a survey firm is also often prohibitively expensive for Ph.D. students and junior scholars. As such, working with Al-Maqdese, I put together my own survey team and did much of the logistical and administrative work typically carried out by a survey firm myself.

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<sup>23</sup> Scacco, Alexandra. "Anatomy of a Riot: participation in ethnic violence in Nigeria." *Book Manuscript, New York University* (2012). <sup>24</sup> Belli, Robert F., William L. Shay, and Frank P. Stafford. "Event history calendars and question list surveys: A direct comparison of interviewing methods." *Public opinion quarterly*65, no. 1 (2001): 45-74.

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- <sup>25</sup> See, e.g., Nancy Bermeo, "Myths of Moderation: Confrontation and Conflict during Democratic Transitions," Comparative Politics 29(3), 305-322; Adel Abdel Ghafar and Anna Jacobs, "Lessons for Algeria from the 2011 Egyptian uprising," *Washington Post*, Monkey Caqe, March 14, 2019.
- <sup>26</sup> Neil Ketchley and Thoraya El-Rayyes, "Unpopular Protest: Mass Mobilization and Attitudes to Democracy in Post-Mubarak Egypt," *Journal of Politics*, forthcoming. See also El-Rayyes and Ketchley, "In 2011, Egyptians quickly tired of protest. Here's why that matters for Sudan and Algeria," *Washington Post*, Monkey Cage, September 5, 2019.
- <sup>27</sup> A report based on data from April 1 to July 1 was published by Brookings: see Sharan Grewal, M.Tahir Kilavuz, and Robert Kubinec, "Algeria's Uprising: A Survey of Protesters and the Military," Brookings, July 2019,
- https://www.brookings.edu/research/algerias-uprising-a-survey-of-protesters-and-the-military/.
- <sup>28</sup> Our survey methodology and questionnaire were approved by the ethics boards at both Princeton University (IRB # 11581) and the College of William & Mary (PHSC-2019-03-11-13532), and have been funded by both universities.
- <sup>29</sup> There are important ethical questions about the data Facebook collects on its users. Since our survey is conducted on a separate platform, Qualtrics, Facebook only learns whether a user engaged with or clicked on the advertisement not whether they took the survey let alone their answers.
- 30 See: https://www.internetworldstats.com/stats1.htm

- <sup>31</sup> There are two other known biases in the Algerian Facebook population, but these are correctable. The first is gender: men represent 50.6% of the population, but 64% of Facebook users.<sup>31</sup> Second, Facebook users tend to be younger than average: 64% of the overall population are less than 35, but 76% of Algerian Facebook users are less than 35. We corrected for age and gender biases by creating separate Facebook advertisements for each agegender demographic (i.e., women aged 25-34). We then increased the number of ads shown to demographic groups underrepresented on Facebook, such as older women, in order to create a more balanced sample.
- 32 For a list of those arrested, see: https://www.tsa-algerie.com/les-personnalites-mises-en-detention-depuis-le-depart-de-bouteflika/
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- <sup>37</sup>Rosatom. 2016. "Tunisia and Russia signed an Inter-governmental Agreement on Peaceful Uses of Atomic Energy," September 26, 2016. https://www.rosatom.ru/en/press-centre/news/tunisia-and-russia-signed-an-intergovernmental-agreement-on-peaceful-uses-of-atomic-energy/
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- <sup>43</sup>Cohen, Ibid. 34-55.
- <sup>44</sup>Rost Rublee, Maria. 2009. *Nonproliferation Norms: Why States Choose Nuclear Restraint*. Athens: Georgia University Press. 109-118 <sup>45</sup>Ebinger et al. Ibid., 38
- <sup>46</sup>Samina Ahmed. 1999. "Pakistan's Nuclear Weapons Program: Turning Points and Nuclear Choices" *International Security* 23(4). <sup>47</sup>Parsi, Trita. 2017. *Losing an Enemy: Obama, Iran, and the Triumph*

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- <sup>49</sup>Landau, Ibid. 102.
- <sup>50</sup>Ahmad, Ali & M.V. Ramana. 2014. "Too Costly to Matter: Economics of Nuclear Power for Saudi Arabia." *Energy*; Luomi, Ibid. 125-158.
- <sup>51</sup>Fuhrmann, Matthew. 2009. "Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements." *International Security* 34(1): 8-10. Fuhrmann, Matthew and Benjamin Tkach. 2015. "Almost Nuclear: Introducing the Nuclear Latency Dataset." *Conflict Management and Peace Science* 32(4): 443-461..
- <sup>52</sup>Tucker, Jonathan. 1993. "Monitoring and Verification in a Non-cooperative Environment: Lesson from the U.N. Experience in Iraq." *The Nonproliferation Review.*
- <sup>53</sup>World Nuclear News, "South Korea and UAE seek cooperation beyond Barakah." February 27, 2019. https://www.world-nuclearnews.org/Articles/South-Korea-and-UAE-seek-cooperationbeyond-Baraka
- 54Ahmad, Ali. 2015. "Economic Risks of Jordan's Nuclear Program," Energy for Sustainable Development (29): 34.

#### Blackman notes:

- 55 Ala' Alrababa'h and Lisa Blaydes. "Authoritarian Media and Diversionary Threats: Lessons from Thirty Years of Syrian State Discourse." Working Paper (2019); Nathan Grubman, "Ideological Scaling in a Neoliberal, Post-Islamist Age," APSA Middle East Politics Newsletter (2019); Jennifer Pan and Alexandra Siegel, "How Saudi Crackdowns Fail to Silence Online Dissent," Working Paper (2019).
- <sup>56</sup> Christopher Lucas, Richard A. Nielsen, Margaret E. Roberts, Brandon M. Stewart, Alex Storer, and Dustin Tingley, "Computer-Assisted Text Analysis for Comparative Politics," *Political Analysis* 23, no. 2 (2015): 254-277.
- <sup>57</sup> Richard Nielsen, *Deadly Clerics: Blocked Ambition and the Paths to Jihad* (Cambridge: Cambridge University Press, 2017).
- <sup>58</sup> Grubman 2019.
- 59 Pan and Siegel 2019; Alexandra Siegel, "Using Social Media Data to Study Arab Politics," APSA Middle East Politics Newsletter (2019); Amaney A. Jamal, Robert O. Keohane, David Romney, and Dustin Tingley, "Anti-Americanism and Anti-Interventionism in Arabic Twitter Discourses," Perspectives on Politics 13, no. 1 (2015): 55-73.

  60 Ala' Alrababa'h, "Quantitative text analysis of Arabic news media," APSA Middle East Politics Newsletter (2019); Alrababa'h and Blaydes 2019. For a relevant application using U.S. news media, see: Rochelle Terman, "Islamophobia and Media Portrayals of Muslim Women: A Computational Text Analysis of US News Coverage," International Studies Quarterly 61, no. 3 (2017): 489-502.

  61 Richard Nielsen, "What Counting Words Can Teach Us About Middle East Politics." APSA Middle East Politics Newsletter (2010):
- <sup>61</sup> Richard Nielsen, "What Counting Words Can Teach Us About Middle East Politics," APSA Middle East Politics Newsletter (2019); Richard Nielsen, "Women's Authority in Patriarchal Social Movements: The Case of Female Salafi Preachers," American Journal of Political Science (2019).
- 62 For more details on preprocessing steps, see: Matthew J. Denny and Arthur Spirling. "Text Preprocessing For Unsupervised Learning: Why It Matters, When It Misleads, And What To Do About It." *Political Analysis* 26, no. 2 (2018): 168-89. Arabic texts can present a challenge because the same sequence of characters can

contain different parts of speech and have an entirely different meaning as a result of how words are connected in Arabic. For example, the sequence جمته can mean "and his/its side" or "I/She sent him/it [in the direction of]" and can be segmented into entirely different parts of speech.

<sup>63</sup> For an overview of text as data methods, see: Justin Grimmer and Brandon M. Stewart, "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts," *Political Analysis* 21, no. 3 (2013): 267-97. Supervised methods include the use of human coders and thus rely on the researcher to know *exante* what to code for in the data. Unsupervised methods generate the topics from the data but require researcher decisions about issues such as the number of topics to generate.

 $^{\rm 64}$  Siegel and Pan's research is discussed in Alexandra Siegel's contribution to this newsletter.

65 Lisa Blaydes, Justin Grimmer, and Alison McQueen. "Mirrors for Princes and Sultans: Advice on the Art of Governance in the Medieval Christian and Islamic Worlds," Journal of Politics 80, no. 4 (2018): 1150-1167; Jennifer A. London, "Re-imagining the Cambridge School in the Age of Digital Humanities," Annual Review of Political Science 19, no. 1 (2016): 351-373; Tamar Mitts, "Terrorism and the Rise of Right-Wing Content in Israeli Books," International Organization 73, no. 1 (2019): 203-24.

<sup>66</sup> Amy Catalinac, "From Pork to Policy: The Rise of Programmatic Campaigning in Japanese Elections," *The Journal of Politics* 78, no. 1 (2016): 1-18.

<sup>67</sup> Mathilde Emeriau, "Learning to be Unbiased: Evidence from the French Asylum Office," Working Paper (2019); Margaret E. Roberts, Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder-Luis, Shana Kushner Gadarian, Bethany Albertson, David G. Rand, "Structural Topic Models for Open-Ended Survey Responses," American Journal of Political Science 58, no. 4 (2014): 1064-1082.
 <sup>68</sup> Justin Grimmer, Representational Style in Congress: What Legislators Say and Why It Matters (Cambridge: Cambridge University Press, 2013).

<sup>69</sup> Azusa Katagiri and Eric Min, "The Credibility of Public and Private Signals: A Document-Based Approach," *American Political Science Review* 113, no. 1 (2019): 156-72; Benjamin Liebman, Margaret Roberts, Rachel Stern, and Alice Wang, "Mass Digitization of Chinese Court Decisions: How to Use Text as Data in the Field of Chinese Law," 21st Century China Center Research Paper no. 2017-01 (2017).

<sup>70</sup> Another interesting question is how the choice of language in social media corresponds to social class and other individual characteristics? Fred Schaffer's ethnographic study of conceptions of democracy in Senegal suggests that these language choices are closely related to class and have important implications for how people understand and engage with important political concepts like democracy. See: Frederic C. Schaffer, *Democracy in Translation: Understanding Politics in an Unfamiliar Culture* (Ithaca: Cornell University Press, 1998).

<sup>72</sup> Freya Pratty, "Arabic and Al: Why voice-activated tech struggles in the Middle East," *Middle East Eye*, September 10, 2019. Examining Danish, German, Spanish, French and Polish, de Vries, Schoonvelde, and Schumacher make the case for Google Translate. However, I have not found a comparable analysis of the performance of Google Translate for Arabic. See: Erik de Vries, Martijn Schoonvelde, and Gijs Schumacher, "No Longer Lost in Translation: Evidence That Google Translate Works for

Comparative Bag-of-Words Text Applications," *Political Analysis* 26, no. 4 (2018): 417-30.

<sup>72</sup> It would be interesting to see applications and evaluations of recent advances in language models, such as word embeddings, on Arabic texts. For an application in political science, see: Yaoyao Dai, "Measuring Populism in Context: A Supervised Approach with Word Embedding Models," *Working Paper* (2019).

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80 See Smidi, Adam, and Saif Shahin. "Social Media and Social Mobilisation in the Middle East: A Survey of Research on the Arab Spring." India Quarterly 73, no. 2 (2017): 196-209. for an overview and Aday, Sean, Henry Farrell, Marc Lynch, John Sides, and Deen Freelon. "New media and conflict after the Arab Spring." *United States Institute of Peace* 80 (2012): 1-24. for an example of empirical evidence using Twitter data to make this argument.

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<sup>81</sup> For an overview of this debate and the empirical evidence on both sides, see: Tucker, Joshua A., Jonathan Nagler, Megan MacDuffee, Pablo Barbera Metzger, Duncan Penfold-Brown, and Richard Bonneau. "Big data, social media, and protest." *Computational Social Science* 199 (2016).

<sup>82</sup> Lynch, Marc ; Freelon, Deen and Aday, Sean. 2014. *Syria's Socially Mediated Civil War*. United States Institute of Peace.

<sup>83</sup> Starbird, Kate, Ahmer Arif, Tom Wilson, Katherine Van Koevering, Katya Yefimova, and Daniel Scarnecchia. "Ecosystem or echo-system? Exploring content sharing across alternative media domains." In Twelfth International AAAI Conference on Web and Social Media. 2018.

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- <sup>91</sup> Noman, H., Faris, R. and Kelly, J., 2015. Openness and Restraint: Structure, Discourse, and Contention in Saudi Twitter. *Berkman Center Research Publication*, (2015-16); Salem, Fadi. "The Arab social media report 2017: Social media and the internet of things: Towards data-driven policymaking in the Arab World (Vol. 7)." *Dubai: MBR School of Government* (2017).
- 92 https://developer.twitter.com/en/docs.html
- <sup>93</sup> https://developer.twitter.com/en/docs/tutorials/consumingstreaming-data.html
- 94 https://developer.twitter.com/en/docs/tweets/batchhistorical/api-reference/historical-powertrack.html
- 95 Freelon, Deen. "Computational research in the post-API age." *Political Communication* 35, no. 4 (2018): 665-668.
- 96 https://github.com/twintproject/twint
- 97 https://smappnyu.org/research/data-collection-and-analysis-
- <sup>98</sup> For an overview of the need for careful decision-making and validation when pre-processing of text, see: Denny, M.J. and Spirling, A., 2018. Text preprocessing for unsupervised learning: Why it matters, when it misleads, and what to do about it. *Political Analysis*, 26(2), pp.168-189.
- 99 https://gephi.org/
- 100 https://socialscience.one/our-facebook-partnership
- 101 https://www.crowdtangle.com/
- <sup>102</sup> Malik, Mashail and Williamson, Scott. "Contesting Narratives of Repression: Experimental Evidence from Sisi's Egypt" Unpublished working paper. 2019.
- <sup>103</sup> Pham, Katherine Hoffmann, Rampazzo, Francisco, and Rosenzweig, Leah. 2019. "Social Media Markets for Survey Research in Comparative Contexts: Facebook Users in Kenya." Unpublished Working Paper.
- 104 https://developers.google.com/youtube/v3/quickstart/python
- <sup>105</sup> Torres, Michelle. "Give me the full picture: Using computer vision to understand visual frames and political communication." URL:

http://qssi. psu. edu/new-faces-papers-2018/torres-computer-vision-and-politicalcommunication (2018).

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- <sup>110</sup> See Alexandra Siegel's contribution in this newsletter.
- <sup>111</sup> Gary King, Jennifer Pan, and Margaret E. Roberts, "How Censorship in China Allows Government Criticism but Silences Collective Expression," American Political Science Review (2013); Anjalie Field et al., "Framing and Agenda-setting in Russian News: a Computational Analysis of Intricate Political Strategies," EMNLP (2018). Jaros, Kyle and Jennifer Pan, "China's Newsmakers: How Media Power is Shifting in the Xi Jinping Era." The China Quarterly 233 (2018): 111-136; Arturas Rozenas and Denis Stukal. "How Autocrats Manipulate Economic News: Evidence from Russia's State-Controlled Television." The Journal of Politics 81.3 (2019). 112 For instance, see Marc Lynch, Voices of the New Arab Public: Iraq, Al-Jazeera, and Middle East Politics Today. Columbia University Press, 2006 and Marc Lynch, "How the Media Trashed the Transitions," Journal of Democracy 26 no. 4 (2015): 90-99. <sup>113</sup> Ala' Alrababa'h and Lisa Blaydes, "Authoritarian Media and Diversionary Threats: Lessons from Thirty Years of Syrian State Discourse," Working Paper

https://blaydes.people.stanford.edu/sites/g/files/sbiybj1961/f/syria.pdf

- <sup>114</sup> See Rich Nielsen's contribution in this newsletter for more discussion of unsupervised learning.
- <sup>115</sup> Megan Metzger and Alexandra Siegel, "When State-Sponsored Media Goes Viral: Russia's Use of RT to Shape Global Discourse on Syria," Working Paper, <a href="https://alexandra-siegel.com/wp-content/uploads/2019/08/syria\_RT.pdf">https://alexandra-siegel.com/wp-content/uploads/2019/08/syria\_RT.pdf</a>
- <sup>116</sup> Gabriel Koehler-Derrick, Richard A. Nielsen, David Romney, "Conspiracy Theories in the Egyptian State-Controlled Press," Working Paper,

http://aalims.org/uploads/conspiracy\_10april2017\_AALIMS.pdf

- <sup>117</sup> Ala' Alrababa'h, "Using Transnational Media as a Public Diplomacy Tool: Evidence from Al-Arabiya and Al-Jazeera," Working paper.
- <sup>118</sup> Lisa Wedeen, "Acting "As If": Symbolic Politics and Social Control in Syria." Comparative Studies in Society and History 40.3 (1998): 5ß19
- For example, see Wafa Ben Hassine, "The Crime of Speech: How Arab Governments Use the Law to Silence Expression Online,"

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https://www.eff.org/files/2016/04/28/crime-of-speech.pdf and Matt J. Duffy, "Arab Media Regulations: Identifying Restraints on Freedom of the Press in the Laws of Six Arabian Peninsula Countries," Berkeley Journal of Middle Eastern & Islamic Law, 6 (2014): 1:31

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<sup>120</sup> Ellen Lust and David Waldner, "Parties in Transitional Settings" in Nancy Bermeo and Deborah J. Yashar, *Parties, Movements, and Democracy in the Developing World* (Cambridge: Cambridge University Press, 2016).

<sup>121</sup> Tarek Masoud, *Counting Islam: Religion, Class, And Elections In Egypt* (Cambridge: Cambridge University Press, 2014) and Sharan Grewal, Amaney A. Jamal, Tarek Masoud, and Elizabeth R. Nugent, "Poverty and Divine Rewards: The Electoral Advantage of Islamist Political Parties," *American Journal of Political Science* (2019). This observation is puzzling given that prior to democratization these movements enjoyed a base primarily among the professional middle class. See Masoud (2014); Carrie Rosefsky Wickham, *Mobilizing Islam: Religion, Activism, and Political Change in Egypt* (New York: Columbia University Press, 2002); Janine A. Clark, *Islam, Charity, and Activism: Middle-Class Networks and Social Welfare in Egypt, Jordan, and Yemen* (Bloomington: Indiana University Press, 2004).

<sup>122</sup> This is a point of emphasis for Masoud 2014. In coining the term post-Islamism, Bayat similarly noted that the predominance of Islamist actors may coincide with a politics dominated by secularist concerns. See Asef Bayat, "The Coming of a Post-Islamist Society," *Critique* (Fall 1996): 43–52.

<sup>123</sup> Grewal et al 2019 and Eva Wegner and Francesco Cavatorta, "Revisiting the Islamist–Secular Divide: Parties and Voters in the Arab World," *International Political Science Review* 40, no. 4 (September 2019): 558–75.

<sup>124</sup> With regard to Tunisia, see Lindsay J. Benstead, Ellen Lust, and Dhafer Malouche, "Tunisian Post-Election Survey: Presentation of Initial Results." Transitional Governance Project, 2012; with regard to Egypt, see Masoud (2014).

<sup>125</sup> For me this turn to subnational platforms was inspired by Amy Catalinac, *Electoral Reform and National Security in Japan: From Pork to Foreign Policy* (Cambridge: Cambridge University Press, 2016). <sup>126</sup> Michael Laver, Kenneth Benoit, and John Garry, "Extracting Policy Positions from Political Texts Using Words as Data," *American Political Science Review* 97 (2, 2003): 311–32.

<sup>127</sup> Jonathan Slapin and Sven-Oliver Proksch, "A Scaling Model for Estimating Time-Series Party Positions From Text," *American Journal of Political Science* 52 (3, 2008): 705–22.

128 Slapin and Proksch 2008.

<sup>129</sup> Abdullah Aydogan and Jonathan B. Slapin. "Left–Right Reversed: Parties and Ideology in Modern Turkey." *Party Politics* 21 (4, 2015): 615-25.

<sup>130</sup> Will Lowe and Kenneth Benoit, "Validating Estimates of Latent Traits from Textual Data Using Human Judgment as a Benchmark," *Political Analysis* 21 (2013): 298–313.

<sup>131</sup> Justin Grimmer and Brandon M. Stewart, "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts," *Political Analysis* (2013): 1–31.

<sup>132</sup> I omitted the platforms of the National Initiative of Kamel Morjane and Afek Tounes. The former seemingly did not publish a platform in 2011; the latter published a pithy Arabic document on the constitution and a lengthy French one focused on economic issues. Beforehand, I stemmed the texts using Richard Nielsen's R package (Richard A. Nielsen, *Deadly Clerics: Blocked Ambition and the Paths to Jihad* (Cambridge: Cambridge University Press, 2017). To fit the *wordfish* model, I used the Quanteda R package: Kenneth Benoit, Kohei Watanabe, Haiyan Wang, Paul Nulty, Adam Obeng,

Stefan Müller, and Akitaka Matsuo, "Quanteda: An R Package for the Quantitative Analysis of Textual Data," *Journal of Open Source Software* 3 (30, 2018).

#### Nielsen notes:

<sup>133</sup> I created this short sentence by estimating a topic model on the words in this article, treating each paragraph as a separate document. The model estimated that this paragraph was 98 percent devoted to a topic I interpret to be about topic models (keywords: topic, model, human, corpus, algorithm, goal, interpret). I sampled the five words in this sentence using the word probabilities estimated by the model for this topic. Code to reproduce this process is available on my website at

http://www.mit.edu/~rnielsen/research.htm

<sup>134</sup> An updated version of this figure appears in my book *Deadly Clerics* (2017) on page 122, along with more explanation of the method.

<sup>135</sup> Ibn Uthaymeen (d. 2001) was a prominent Salafi cleric from Saudi Arabia who did not write in support of jihadist ideology. This excerpt is from a short fatwa on prayer. Sayyid Qutb (d. 1966) was a prominent jihadist thinker from Egypt. This excerpt, from his famous work *Social Justice in Islam*, is not jihadist, so it does not get scored as jihadist by the classification model. Abdallah Azzam (d. 1989) was a prominent jihadist thinker who mentored Usama Bin Laden. This excerpt is from a treatise on jihad titled *In Defense of Muslim Lands*.

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