

MENA POLITICS NEWSLETTER

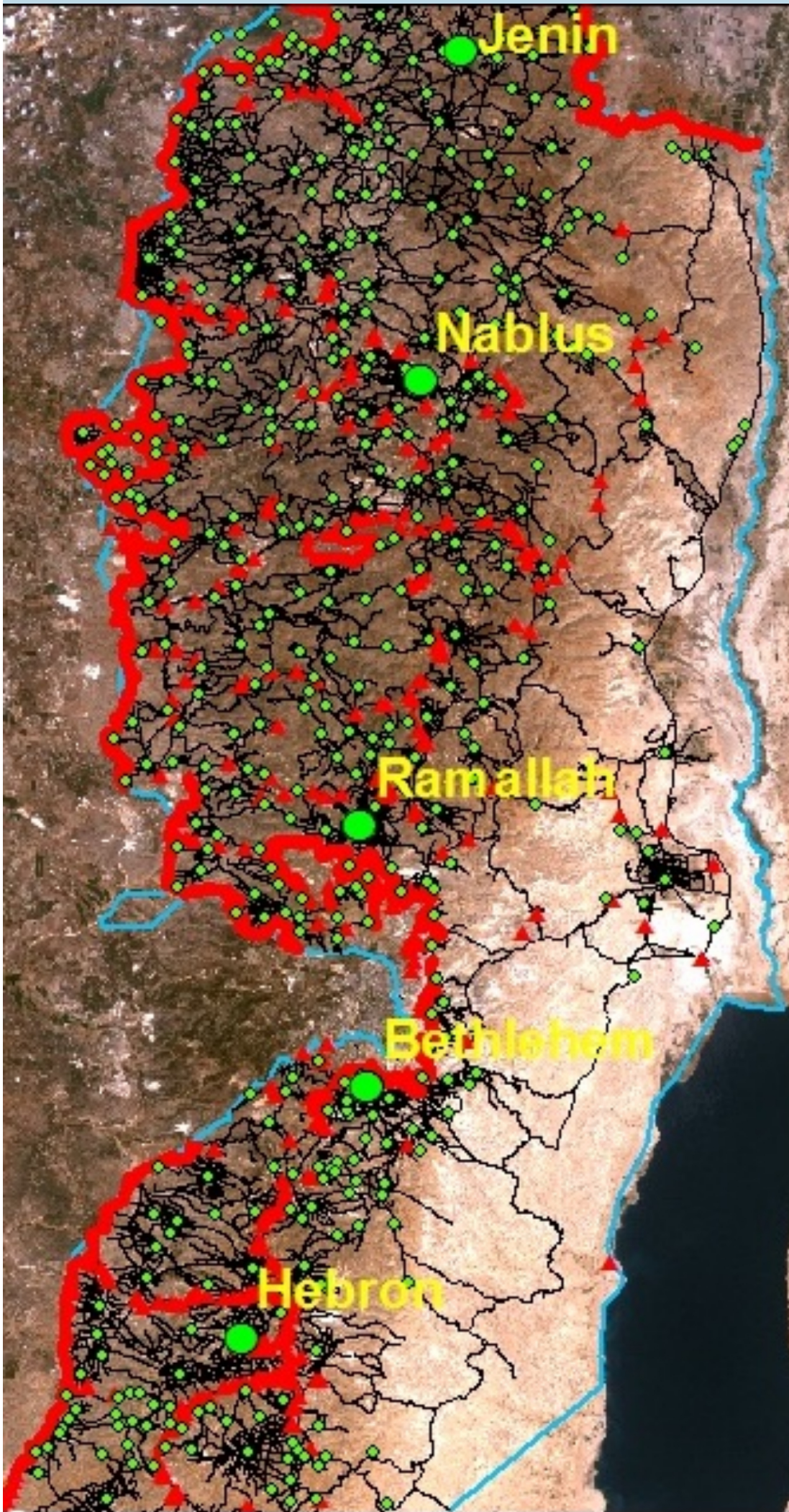
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*Taking Space
Seriously*
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Alexandra Blackman
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*COVID-19 and MENA
Political Science*
Guest Editors
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AMERICAN
POLITICAL
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ASSOCIATION
MENA POLITICS SECTION



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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. It seeks to fully integrate the rigorous study of the politics of the Middle East with the broader discipline of Political Science. It serves 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, and is produced with the support of POMEPS.

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SECTION NEWS

A LETTER FROM THE EDITOR

2021 marks the final year of my tenure as Section Chair and Newsletter Chief Editor. I would like to express my heartfelt thanks to everyone who has contributed to the Section's activities over the last two years.

The Section continues to grow, welcoming new members from around the world and expanding its activities in support of their scholarly aspirations. We have supported two major initiatives to support junior scholars: the Section sponsors the MENA Junior Scholars Research Development Group, held in conjunction with the APSA Annual Meeting, which will be held virtually for its third annual session; and the Section supports the POMEPS Virtual Research Workshop, which has met almost twenty times since its launch last year and workshopped more than 60 papers. The Section has also expanded its annual awards, adding "Best Article in MENA Political Science" to the existing awards "Best Dissertation", "Best Book", and "Best Paper Presented to the APSA Annual Meeting"; the award winners will be profiled in the fall issue of the Newsletter.

This Newsletter is a critical part of the Section's activities. We take great pride in its rapid development into a widely read publication featuring a wide range of short essays and organized symposia of interest across our field. The Newsletter benefits from a very actively engaged, diverse and enthusiastic Editorial Board; new members are elected to join the Board every year, and we welcome self-nominations for consideration. In that context, we are delighted to announce the successful conclusion of a competitive search for a new editorial team to take the reins as of the Spring 2022 issue: Nermin Allam (Rutgers University), Gamze Çavdar (Colorado State University) and Sean Yom (Temple University). (See below for more on the new editorial team). The Newsletter will be in good hands!

This issue of the Newsletter begins with a short profile of the MENA Scholars Barometer, a new biannual survey of scholars of the region launched earlier this year by Shibley Telhami (University of Maryland) and myself, with the cooperation of the Section, the Middle East Studies Association and the Project on Middle East Political Science. My introduction of the project explains the methodology, presents some of the key findings of the first wave, and points out some intriguing differences in the responses from political scientists and other disciplines.

The Newsletter then presents a feature research essay by Shimaa Hatab (Cairo University). Ten years on from the eruption of the Arab Uprisings, Hatab urges adopting a cross-regional and historical perspective to help shed light on the post-uprisings' trajectories in the region's transitions. She uses these broad comparisons to highlight what is unusual and what is rather typical in the region's experience, and develops an alternative approach focused on the agency of actors and strategic interaction within the opposition.

Two rich, exciting symposia round out the Newsletter. The first, edited and introduced by Alexandra Blackman and Lama Mourad, surveys new research and methods in the rich terrain of spatial

studies. Alexei Abrahams (Harvard University) and Diana Greenwald (City College of New York) show how geospatial research can help complement other types of data in the study of Palestine. Christiana Parreira shows how satellite imagery and nighttime light data can be used to explore state capacity and service provision. Emily Scott discusses the use of GIS methods to inform the study and practice of humanitarian aid provision. Ashrakat Elshehawy explores the uses and availability of historical maps for political science research, while Ahmad Gharbieh presents a fascinating discussion of the assumptions behind mapmaking and the results of creative efforts to develop alternative approaches to mapping urban life. Finally, Julia Clark shows how data on changes in municipal boundaries which are not publicly available can be generated and used for political science research.

The second symposium, edited by Nermin Allam, Justin Gengler, Lisel Hintz and Noora Lori explores some critical dimensions of the COVID-19 pandemic. Sultan Alamer, Rana Mamdouh and Nathan Brown dissect the differences in Saudi and Egyptian responses to COVID-19 by examining their past experiences with infectious disease. Başak Yavçan digs deep into the local level to show the micropolitics of Turkey's response, while Aida Essaid shows the problems with assessing the Jordanian state response in refugee communities. Robert Kubinec finally offers thoughts on new methodological approaches which could strengthen the use of the online surveys to which many scholars have turned in the face of the inability to travel for research.

We hope you find this issue of the MENA Politics Newsletter as compelling and interesting as we do, and always welcome your feedback and suggestions for future articles and symposia.

Marc Lynch (Editor)

Prerna BalaEddy and Tessa Talebi (Assistant Editors)

INTRODUCING THE NEW EDITORIAL TEAM

Introducing the Incoming Editorial Team

We would like to thank our current Editorial Board for all the hard work they have done over the last two years for the APSA-MENA Politics Newsletter. In addition, we would like to give a warm welcome to the incoming Editorial Team! Nermin Allam, Gamze Çavdar, and Sean Yom will begin serving as the new Editorial Team for Volume 5 of the APSA-MENA Politics Newsletter.



Nermin Allam

Dr. Nermin Allam is an Assistant Professor of Politics at Rutgers University-Newark. Before joining Rutgers, Allam held a Social Sciences and Humanities Research Council of Canada postdoctoral fellowship at Princeton University. Allam holds a Doctorate of Philosophy in International Relations and Comparative Politics from the University of Alberta, Canada.

Gamze Çavdar

Gamze Çavdar is an Associate Professor and Graduate Coordinator in the department of Political Science at Colorado State University. She has conducted fieldwork in a number of countries particularly on Islamist movements and their gender policies. Her research interests more recently expanded to include the politics of food in the Middle East and North Africa (MENA) region.



Sean L. Yom



Sean Yom is an Associate Professor of Political Science at Temple University and Senior Fellow in the Middle East Program at the Foreign Policy Research Institute. He is a specialist on regimes and governance in the Middle East, especially in Arab monarchies like Jordan, Kuwait, and Morocco. His research engages topics of authoritarian politics, democratic reforms, institutional stability, and economic development in these countries, as well as their implications for US foreign policy.

THE MIDDLE EAST SCHOLAR BAROMETER

Introducing the MENA Scholar Barometer

Marc Lynch

This February, the MENA Politics Section cooperated with the University of Maryland's Sadat Center and the Project on Middle East Political Science to field the first ever MENA Scholars Barometer. Organized by Shibley Telhami and Marc Lynch, and administered by Brittany Kyser, the MENA Scholars Barometer offers an unprecedented snapshot into the views of scholars in the field.¹ The results were featured in the Washington Post's Monkey Cage Blog.² The MENA Scholars Barometer will be fielded twice a year, with some questions being repeated to track trends over time and new questions being introduced. Members of the APSA MENA Politics Section are encouraged to suggest questions which might be added to the survey.

Whose views are represented in the first round of the MENA Scholar Barometer? We began by constructing a list of scholars from the membership of the Middle East Studies Association, the MENA Politics Section and POMEPS. We identified 1,293 such scholars, across multiple disciplines. In future rounds, we hope to expand the list to include scholars not affiliated with those professional associations. During the three days the survey remained open, 521 scholars had responded (a 40 percent response rate), divided almost equally between political scientists and nonpolitical scientists. We asked basic demographic information, as well as primary academic discipline and whether they were primarily based inside or outside the United States.

The headline results have already been presented in The Monkey Cage. The results which attracted the most attention were those related to the Israeli-Palestinian conflict. Those results were indeed striking. 59 percent described the current reality for Israel and the Palestinians as "a one-state reality akin to apartheid," while only 2 percent described the situation as a temporary Israeli occupation of the West Bank and Gaza. 52 percent said that a two state solution is no longer possible, while only 6 percent consider it probable within the next decade. And without a two state horizon, 77 percent expect to see the emergence of a one-state reality akin to apartheid, while only 1 percent expect to see a single binational state with equal rights for all.

The survey also found some fascinating disagreement over the future and the significance of the Arab uprisings. Thirty percent expect another wave of mass protests within the next decade, while 46 percent say that the uprisings are actually still ongoing in different forms. Only 7 percent think that the uprisings are over and gone, while 17 percent think they probably won't recur for at least a decade. A slim majority, 54 percent, describe their impact as significant, but not transformational.

¹ The questionnaire and results can be found at <https://criticalissues.umd.edu/middle-east-scholar-barometer/middle-east-scholar-barometer>

² Marc Lynch and Shibley Telhami, "Here's how experts on the Middle East see the region's key issues, our new survey finds." Washington Post Monkey Cage Blog 16 February 2021
<https://www.washingtonpost.com/politics/2021/02/16/heres-how-experts-middle-east-see-regions-key-issues-our-new-survey-finds/>

Surprisingly to me, at least, only 29 percent thought the uprisings had a transformational effect, while 17 percent view them as a temporary disruption with little long-term impact.

We chose to survey one big current policy issue: a U.S. return to the nuclear agreement with Iran (the JCPOA). Overwhelming majorities supported such a return, while only 4% recommended that the U.S. continue the Trump administration's "Maximum Pressure" policy.

We also asked about international and regional power. Only 3 percent of the scholars view the United States as stronger in the Middle East today compared with a decade ago, while 75 percent view the United States as weaker. Quite strikingly, only 38 percent still view the United States as the single dominant external power in the region.

The survey did see some intriguing differences between political scientists (mostly, but not exclusively, members of this Section) and non-political scientists. Only 49% of political scientists described the current Israeli-Palestinian reality as "a one-state reality akin to Apartheid," compared to 72% of scholars from other disciplines. Political scientists were less pessimistic in their assessment of the Israeli-Palestinian conflict: 48% said a two state solution was no longer possible, compared to 58% of non-political scientists. But if the two state solution is taken off the table, the differences disappear: 77% of political scientists and 80% of non-political scientists then expect a one state Apartheid reality.

There were few other significant differences. More political scientists (34%) than non-political scientists (26%) viewed the impact of the Arab uprisings as "transformational." More political scientists (82%) than non-political scientists (68%) view the United States as weaker in the Middle East today compared with ten years ago, but they also were more likely to describe the U.S. as still the most dominant power in the Middle East (44% to 35%). Political scientists were more likely to say that global powers had less influence over MENA politics today, 33% to 25%.

We also asked a question about regional power, asking respondents to rank MENA countries in terms of "their current regional influence." The findings were difficult to interpret. Israel was named most often as the most influential (34%), followed by Iran and Saudi Arabia (tied at 23%). Egypt was most often named the least influential, by a full 50% of respondents. Those topline numbers are intriguing. But as a political scientist, I found the question and the results unsatisfying. I suspect that people had very different things in mind as they determined their rankings. Some probably had raw military power in mind, while others may have been thinking about influence over regional outcomes. Israel and Iran are certainly powerful, but how much influence do they really have over other regional powers? The UAE and Qatar both placed quite low, a result which matches conventional Realist understandings of the importance of large populations and territory in national power but which seems out of line with their outsized impact on conflicts around the region in the decade since the Arab uprisings. We hope to refine this question to probe more deeply in future surveys.

A NOTE FROM APSA

Hello from APSA's International Programs. We hope you and your loved ones continue to stay safe and healthy wherever you are.

Although the COVID-19 pandemic continues to change the way scholars teach, collaborate, and conduct research (see APSA's [COVID-19 resources page](#)), we are pleased that the 2021 Annual Meeting will be held in a hybrid format combining both an in-person as well as a virtual option. The meeting is scheduled to take place September 30-October 3 in Seattle, Washington. APSA is determined to create a meeting that is safe, inclusive, and accessible for the entire discipline during this challenging time, while allowing all attendees to pick a format that works best for their circumstances. More details can be found [here](#).

Additionally, our membership team at APSA [launched](#) a new program offering a complimentary 90-day trial membership. This one-time program provides prospective members access to APSA's journals, announcements, and career resources. We encourage you to invite your colleagues, especially those in the MENA region, to sign up and benefit from this free opportunity.

As for our MENA programs, we have been busy over the past couple of months developing new opportunities and fine-tuning old ones for the virtual world. We are finalizing plans with the [2020 MENA Workshop](#) co-leaders for a follow-up virtual program with the 14 fellows who work on security issues in MENA. In the coming weeks, we look forward to announcing a Call for Applications from early-career scholars interested in joining the 2021 MENA Virtual Workshop. In addition, APSA is sponsoring 14 scholars to participate in the 2021 summer virtual programs of both IQMR and ICPSR. We are also glad to support this year's MENA Research Development Group (RDG) in collaboration with the MENA Politics Section and POMEPS. This year's program will take place virtually on September 28, in conjunction with the APSA Annual Meeting, and will support 5 early-career scholars from MENA to receive research feedback and discuss professional development opportunities.

The [departmental collaboration initiative](#) continues to attract interest from faculty members and departments at Arab Universities. APSA recently awarded grants to the University of Tunis El-Manar and to Alexandria University to run STATA training workshops and research design seminars, respectively. The tailored programs will support graduate students and faculty members at these institutions and hopefully expand into other trainings and collaborations.

Finally, check out the Arab Political Science Network ([APSN](#))'s new website for information on their many virtual events and [public webinars](#). In December 2020, APSN organized a virtual Teaching Workshop focusing on Teaching [Gender Politics](#) in the Middle East. This event brought together over 15 multi and interdisciplinary faculty members teaching women and gender politics inside and outside the Middle East. Research from APSN's December 2019 workshop on [Teaching International Relations](#), led to a [special forum](#) recently published in *International Studies Perspectives*. If you are interested in a conversation on experiences of local governance and

decentralization in the Arab world, please register to attend this [webinar](#) in collaboration with the GLD program at Gothenburg University on May 26.

Additional digital resources can be found in the APSN [resource page](#) which features subtitled research methods videos and syllabi from undergraduate and graduate courses in political science. APSN encourages all scholars, especially those based in the region, who teach courses in political science and relevant interdisciplinary topics to contribute their syllabi in Arabic, English and/or French. For more information on APSN and their latest projects and events, visit the website at www.arabpsn.org or follow APSN on [Twitter](#) or [Facebook](#).

If you are interested in 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
American Political Science Association

FEATURE ARTICLE

DEMOCRATIC WAVES AND THE ARAB UPRISINGS

By Shimaa Hatab³

Regime transitions around the world over the last five decades have been marked by repeated democratic waves cascading over different regions. The Third Wave (1974–88), the Post-Soviet and Sub-Saharan Africa Wave (1989–94), the Color Revolutions (2000–2007), and the Arab Uprisings (2010–11) each featured linked contentious episodes stemming from cross-border contagion which pushed through radical changes. Tunisia ignited the Arab uprisings that spilled over borders to drive major regime challenges in Egypt, Libya, Syria, Bahrain and Yemen and significant protests in most other Arab countries. This “diffusion” processes caught scholars by surprise, as a region that had defied the previous three global waves of democratization suddenly witnessed massive protests that toppled long-standing autocrats and opened horizons for regime transitions.

A decade’s perspective shows that the cross-border Arab torrent of mass protest produced diverse political trajectories. While it led to a smooth political transition in Tunisia, within a few short years popular movements gave rise to a new authoritarian crackdown in Egypt and brutal civil wars in Syria, Libya and Yemen.⁴ The crushing of the “Arab Spring” spurred scholars to reproduce arguments about the robustness of authoritarianism in the region, with many explanations emphasizing either the predominance of Islamists in the opposition or the heavy presence of coercive apparatuses.⁵ However, those analyses underestimate the importance of political dynamics and actors’ choices. Those choices made at a critical time of political turmoil set the transition path, generating recurring patterns of behavior and shaping the context and the pace of regime change. Looking at the experience of other regional protest waves, and their diverse transition outcomes, can usefully inform our understanding of and explanations for the Arab experience over the last decade.

Waves of Transition

In the democratic waves that swept Latin America, Eastern Europe and Sub-Saharan Africa, the balance of power and the strategic interactions between regime incumbents and opposition contenders played a crucial role in the outcome of regime transitions. Transitologists have

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⁴ Jason Brownlee, Tarek Masoud, and Andrew Reynolds, *The Arab Spring: Pathways of Repression and Reform* (NY: Oxford University Press, 2015).

⁵ Lisa Blaydes and James Lo, “One man, one vote, one time? A model of democratization in the Middle East,” *Journal of Theoretical Politics* 24, no. 1(2012):110-146; Steven Heydeman and Reinoud Leenders, “Authoritarian Learning and Counterrevolution,” in *The Arab Uprisings Explained: New Contentious Politics in the Middle East*, ed. Marc Lynch (NY: Columbia University Press, 2014) pp. 75–92; Eva Bellin, “Reconsidering the Robustness of Authoritarianism in the Middle East Lessons from the Arab Spring,” *Comparative Politics* 44, no. 2 (2012): 127-149; Hazem Kandil, *The Power Triangle: Military, Security, and Politics in Regime Change* (Oxford: Oxford University Press, 2016).

considered concluding a pact between “moderate” opposition and “soft-liners” of old regime as an “efficacious” strategic choice that historically led to faster and stable transitions.⁶ The “collapse” mode of transition that broke with old regime holdovers and adopted non-negotiable approach to power struggle had more variegated effects on transition, depending on the extent of incumbents’ control over the military establishment and the degree of cohesion and the organizational capacity of the oppositional forces.

The Arab uprisings bear resemblances to these historical global waves of democratization. As in Eastern Europe and Sub-Saharan Africa, some confrontations between old elites and rising oppositions resulted in durable transitions, while others ended in protracted conflicts or with one side able to prevail unilaterally, to impose its terms of regime transitions or to block the transition process altogether.⁷ In Egypt, the underlying stalemate produced a short-lived “pacted” transition and aborted democratic transformation, but confrontation between a cross-ideological opposition alliance and old powerholders enabled durable regime change in Tunisia. In Syria and Yemen, the stalemate resulted in escalated armed conflicts between diverse sects and ethnicities and stalled regime change.

The divergent routes of changes after the eruption of protests in the Arab region are in fact typical of the outcome of protest waves in other regions and historical eras. They show that neither an exclusive focus on the balance of power between incumbents and oppositions to facilitate “pact-making” transition nor the unproblematized account of oppositions’ cohesion to tip the balance of power in their favor offers satisfactory explanations for the conditions under which different regime transition outcomes emerged. The variegated trajectories of the Arab uprisings redirect attention to *opposition-opposition bargains* in an ideologically bifurcated structure to interrogate oppositions’ choices of cross-ideological coordination (or lack thereof) and their relations with regime incumbents who retain *de facto* or *de jure* power resources. The military is an especially critical actor in such situations, with its availability as a veto player or potential ally shaping the calculations and expectations of both former elites and different factions within oppositions during the uncertain period of regime changes.

The Democratization Literature

The previous waves of democratization resulted in a large body of democratization literature that offers a thorough examination of the causes of authoritarian breakdown. An influential stream in these studies focuses on the lingering effects of the preceding type of authoritarian regime and the modes of transition (negotiated, transplacement, transaction, rupture, extrication) on the institutional features of the emerging regimes, patterns of elite competitions and prospects for

⁶ Guillermo O’Donnell and Philippe Schmitter, *Transitions from Authoritarian Rule: Comparative Perspectives* (Baltimore: Johns Hopkins University Press, 1986); Michael Burton, Richard Gunther, and John Higley, “Introduction: Elite Transformations and Democratic Regimes,” in *Elites and Democratic Consolidation in Latin America and Southern Europe*, eds. John Higley and Richard Gunther (NY: Cambridge University Press, 1992)

⁷ Michael Bratton M and Nicolas Van De Walle, *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective* (NY: Cambridge University Press, 1997); Jon Elester (ed.), *The Roundtable Talks and the Breakdown of Communism* (Chicago: Chicago University Press, 1996).

future stability of democratic rules.⁸ The pathbreaking study of Linz and Stepan,⁹ for example, distinguished between different regime types that delineated possibilities and limits of regime transitions and democratic consolidation in Southern Europe, South America and the post-Soviet bloc. Authoritarian regimes with limited pluralistic feature may allow some space for democratic opposition with organizational and ideological capacities to develop and to push for the establishment of autonomous authority within parameters of democratic institutions after regime breakdown. Likewise, “mature post-totalitarian” regimes with limited pluralism within state apparatuses and restricted constitutional and legal guarantees may give rise to possible collective leadership to guide incipient societal opposition and instill different ideology in society. On the contrary, the total absence of autonomous political society and legal and constitutional rules in “totalitarian” and “sultanistic” regimes push rulers of these regimes to build their legitimacy on either monolithic ideology and strong leadership in the former, or on the whims of personalistic authority in the latter. In such regimes, the bar of establishing democratic rules is particularly high as they lack any prior experience in organized oppositions and universalistic legal practices or norms.

This body of literature offered compelling arguments which analyze the consequences of historical legacies of the preceding regime type beyond its own life, showing the effect of “modes” of transition on prospects of short-term stability or long-term consolidation (with a prime focus on the position of the military institution and the eradication of its reserve domains of unchecked power that preclude civilian control over the military). The institutional historical legacies approach does not, however, explain why actors chose particular strategies that facilitate transition in the first place and how such choices made during a short length of time had lasting effect on the stability of the emerging regimes.

A “strategic choice” approach to democratization therefore emerged, which highlights actors’ agency, choices, expectations and behavior that enable transition after the collapse of authoritarian regimes. These studies represent a step away from the grip of historical legacies and instead see democratic consolidation or failure as outcomes of elite compromises and negotiations. The “strategic choice” model examines how uncertainty about the balance of power between “incumbents” and “oppositions” may enable “pacted transition” and stabilize the newly emerging regime.¹⁰ The strategies and tactics of “soft-liners” of the old ruling bloc and “moderate” opposition

⁸ Juan Linz and Alfred Stepan, *Problems of Democratic Transition and Consolidation* (Baltimore and London: The Johns Hopkins University Press, 1996); Gerardo L. Munck and Carol Skalnik Leff, “Modes of Transition and Democratization: South America and Eastern Europe in Comparative Perspective,” *Comparative Politics* 29, no. 3 (1997): 343-362.

⁹ Linz and Stepan, *Problems of Democratic Transition*.

¹⁰ Burton, Gunther, and Higley, Introduction: Elite Transformations and Democratic Regimes; Terry Karl, “Petroleum and Political Pacts: The Transition to Democracy in Venezuela,” in *Transitions from Authoritarian Rule Latin America*, eds. Guillermo O’Donnell and Philippe Schmitter (Baltimore and London: Johns Hopkins University Press, 1986), pp. 3-18; Dankwart A. Rustow, “Transitions to Democracy: Toward a Dynamic Model,” *Comparative Politics* 2, no. 3 (1970): 337-363; O’Donnell and Schmitter, *Transitions from Authoritarian Rule: Comparative Perspectives*; Michael McFaul, “The Fourth Wave of Democracy and Dictatorship: Noncooperative Transitions in the Post-communist World,” *World Politics* 54, no. 2 (2002): 212-244.

(as principal players) to strike a power-sharing deal and limit the policy agenda received the most theoretical attention.¹¹

This scholarly work, however, has three main shortcomings: *First*: “strategic choice” studies tend to limit the analytical focus to a few cases in Latin America and Eastern Europe that followed the paradigmatic model of the Spanish transition and offer deterministic account for the irreversible path of successful regime transition as an outcome of the pact between regime’s “soft-liners” and a “moderate” opposition. The conventional pact-making model emerged firstly in Spain with the *Pacto de Moncloa* that embodied elite accommodation between the conservative incumbents and the leftist opposition.¹² Such pacted transitions heralded regime transitions in a few Latin American countries (Venezuela, Colombia, and to some extent in Brazil)¹³ and Eastern Europe (Poland and Hungary where the Solidarity movement and Hungarian Democratic Forum (MDF) led the negotiations with the communist incumbents).¹⁴ Contrary to this conventional wisdom, “pacted transition” that featured elite reconciliations between the Brotherhood and the military in Egypt did not produce stabilized democracy. The ideological polarization and tense struggle between Islamists and non-Islamist oppositions led to a military coup and nipped democratic experiment in the bud. Historically, agreement on neutralizing extremists and hardliners of old regime forces (the military in Spain), the moderating role of the military during the transition period (Poland), and the return of the military to the barracks (Latin America) or revocation of its intervention in politics (the Warsaw pact countries and Southern Europe) relinquished a grip of the coercive apparatus on power and changed the strategic environment within which pivotal players made their choices and calculations about regime transition.

Second: “strategic choice” studies tend to deal with the “moderate” opposition as a coherent camp acting as an organic whole and having a stake in excluding extremists and concluding an agreement with the regime’s “soft-liners”. The heavy emphasis on elite compromises between old forces and pro-democracy oppositions sapped their ability to develop the most obvious perspective of scope conditions under which diverse (if not divided) opposition groups coordinate across social and/or ideological cleavages. The lure of attaining office may discourage opposition politicians to back one another to pry power from old power centers. In the historical instances that led successful pact model of transition, warring elites of different oppositional camps had to overcome either historical animosity and ideological divisions (in Latin America) or disorganization and fragmentation (in Eastern Europe) as a steppingstone towards entering into a deal with regime’s “soft-liners.” For example, the *Colorados* and the *Blancos* in Uruguay had to coordinate efforts to reach an agreement with the military on presidential candidacy in the “Naval Club Pact” and avoid the type of polarization that had previously paved the way for the military coup in 1973.¹⁵ Similarly, in Chile

¹¹ O'Donnell and Schmitter, *Transitions from Authoritarian Rule: Comparative Perspectives*; Adam Przeworski, *Democracy and the Market Political and Economic Reforms in Eastern Europe and Latin America* (NY: Cambridge University Press, 1991).

¹² Munck and Leff, “Modes of Transition and Democratization”.

¹³ Karl, “Petroleum and Political Pacts”; Frances Hagopian, “Democracy by Undemocratic Means?: Elites, Political Pacts, and Regime Transition in Brazil,” *Comparative Political Studies* 23, no. 2 (1990): 146-170.

¹⁴ Elester, *The Roundtable Talks and the Breakdown of Communism*.

¹⁵ Linz and Stepan, *Problems of Democratic Transition and Consolidation*, p. 158.

the Socialists and the Christian Democrats overcame their mutual recriminations over the breakdown of democracy in 1973 and joined the center-left coalition—*Concertación*— to dislodge the military dictator in the plebiscite of 1988.¹⁶ Finally, in Argentina, old warring elites of the Radical Civic Union (UCR) and the *Peronist* (PJ) party joined the *Multipartidaria* in 1981 to pressure the military dictatorship and create a national reconciliation that would establish a democratic regime.¹⁷

Opposition forces in the Soviet bloc had to organize themselves from scratch to tilt the balance of power in favor of the growing anti-communist oppositions in 1989. In Poland, for example, the Solidarity movement drew together militant trade unionists and radical generation that pushed for the negotiation with the Communist party to gain legal recognition and strike a power-sharing deal. Also, in Hungary, loose alliance of ecologists, journalists, reform economists, independent student and worker organizations formed urban-based liberal groupings that organized into political parties in the late 1980s to increase their tactical bargaining capacity vis-à-vis the reformist Communist leaders.¹⁸

Similarly, in the Arab region, only Tunisia heeded a lesson of enduring regime transition stemmed from the formation of cross-ideological alliance between opposition groups. Islamist and secular forces extended beyond ideological differences and concluded a deal of power sharing to holdup democratic institutions. The *Troika* government comprising Islamist Ennahda and two secular partners, the *Congrès pour le République* (CPR) and *Ettakatol party* steered a rocky path to transition (with one step forward and two steps back) between 2011 and 2013 and laid the groundwork for peaceful alternation of power.

Third: stalemated power relations between the regime incumbents and growing social and political opposition did not necessarily push warring sides to get to the negotiation table in East Europe and Sub-Sahara Africa.¹⁹ In some contexts, polarization between incumbents and oppositions precluded concessionary tendencies and enhanced a winner-take-all approach to conflict resolution. The intricate transition path in many Eastern European cases that entailed democratic reforms, market liberalization and multi-ethnic state formation eroded possibilities of negotiations and reconciliations. The organizational capacity of democratic oppositions in some of the Warsaw pact countries and intensity of disputes over territorial domains and nation-state building after the disintegration of the Soviet Union tempted anti-communist forces into believing that they could prevail unilaterally and impose their first best preferences (as it happened in the Baltic countries and Czechoslovakia).²⁰ Moreover, transitions in Sub-Saharan Africa unfolded along a path of

¹⁶ Gerardo L. Munck and Jeffrey A. Bosworth, "Patterns of Representation and Competition: Parties and Democracy in Post-Pinochet Chile," *Party Politics* 4, no. 4 (1988): 471-493.

¹⁷ Gerardo L. Munck, *Authoritarianism and Democratization: Soldiers and Workers in Argentina, 1976-1984* (The University Park, Pennsylvania: Pennsylvania University Press, 1988).

¹⁸ Elster, *The Roundtable Talks*; Michael Bernhard, "The Moore thesis: what's left after 1989?," *Democratization* 23, no. 1(2015): 118-140.

¹⁹ Except South Africa Mandela's national reconciliation approach and wide appeal for moderates on all sides reinforced prospects of negotiated solutions and reaching multiracial agreement and formation of national unity government.

²⁰ Linz and Stepan, *Problems of Democratic Transition and Consolidation*.

escalating confrontations between personalist “strong-men” and oppositions until one side or other prevailed and achieved a decisive victory. While South Africa and Zambia achieved a smooth transition and well-organized opposition forces succeeded in wresting power from old incumbents, stalemated power relations engendered prolonged conflicts in Angola, Kenya, Liberia and Mozambique and enabled old incumbents to outmaneuver disorganized opposition and hobble the democratization efforts in Nigeria, Burundi, Cape Verde, Lesotho, and Seychelles.²¹

In the Arab countries, the confrontational stance with the old regime produced durable regime transition only in Tunisia, thanks to the opposition coordination that crafted new institutionalized democratic practices. Contrarily, stalemated power position between incumbents and fragmented opposition precluded regime changes in Syria that lapsed into protracted civil war and obstructed durable regime transition in Yemen that descended into civil disorder.

Opposition-Opposition Bargains and Transitions

The lacuna in the available literature stems from taking opposition as a unified given and focusing exclusively on the implications of its choices in a power stalemated situation for the transition process. It is unclear why some opposition actors opted to coordinate effort and enter into a pact with old regime figures and why others ever chose to turn on each other. The Arab uprisings showed the necessity of focusing the analysis not only on the interaction between incumbents and oppositions, but also between ideologically different oppositions and its implications for regime transitions. Pivoting the focus to opposition-opposition bargains contextualizes actors’ choices in conflict-ridden situations and establishes the endogeneity of their preferences as they were shaped and reshaped by actors’ political calculations and cognitive responses to the unfolding political processes.

Few studies in the democratization literature spotlight the role of oppositions in blocking regime changes or undermining nascent democratic regimes. One strand in this tradition focuses on the implications of beliefs and attitudes of politicians after losing founding elections.²² These few writings shift the focus away from winners’ commitments to democratic norms and bring out losers’ expectations and commitment to the rules of the game, especially when the founding elections result in a clear redistribution of power resources. A second stream focuses on ideological polarization between opposing political parties²³ and its consequences for democratic sustainability or breakdown. These scholarly works depart from Sartori (1976)’s notion of polarization and highlight the necessary presence of “centrist” forces to absorb centrifugal tendencies and to keep the regime from falling apart.²⁴ These studies, however, did not offer thorough examination of diverse trajectories resulted from losers’ disillusionment with democratic

²¹ Bratton and Van De Walle, *Democratic Experiments in Africa*.

²² Christopher J. Anderson, et al., *Losers’ Consent: Elections and Democratic Legitimacy* (Oxford, New York: Oxford University Press, 2005).

²³ Linz and Stepan, *Problems of Democratic Transition and Consolidation*; Nancy Bermeo, *Ordinary People in Extraordinary Times: The Citizenry and the Breakdown of Democracy* (NJ: Princeton University Press, 2003).

²⁴ Giovanni Sartori, *Parties and Party Systems: A Framework for Analysis* (Cambridge: Cambridge University Press, 1976).

rules and deepening ideological polarization. That is, why these conditions led to abortive or blocked transitions in some contexts and facilitated transition or prevented democratic breakdown in others. Historically, when neither side of warring elites has had the capacity to achieve its first preferences through the use of force, the rival forces have opted for negotiated settlements and put the military's coercive potential out of action.

The military is a critical actor in conflict dynamics during regime changes. In Latin America, armies played the arbitrator role throughout the 1960s and 1970s to solve disputes between leftist and rightist forces who could not settle for rules to overcome distributional and ideological conflicts. Leftist forces were portrayed as “totalitarians in disguise” that pushed powerful elites —always doubtful of leftists’ commitment to democratic governance— to mobilize supporters and incite the military to overthrow elected leftist governments. The withdrawal of the military from the political scene and its return to the barracks altered actors’ calculations and stabilized democratic rules during the third wave of democratization that swept the western hemisphere in the late 1970s and early 1980s. Furthermore, in Eastern European transitions, Mikhail Gorbachev’s endorsement of domestic reforms eroded the “Brezhnev Doctrine” that historically justified Soviet military intervention in the Eastern block to forestall any threats to the Socialist order. Eroding the military veto of the Soviet Union empowered reformist leaders in Poland, Hungary, Czechoslovakia and Baltic nations to tip the balance of power in favor of the anti-communist oppositions by mid-1989. Finally, in sub-Saharan Africa, although military coups have also been prominent, African armies have rarely acted as unified forces in reaction to or against pro-democracy opposition. The military institutions have evolved into neo-patrimonial structures that lacked wide bases of social support and riven by political factionalism based on both personal ties with ambitious officers and ethnic solidarities in the ranks. The subversion threat came primarily from the military acting alone to block democratic reforms and/or support incumbents who refused to accede to voters’ verdict and stimulated conflicts to rescind the results of the founding elections.²⁵

The presence of the military as a veto player and/or viable interlocutor for different oppositional camps, therefore, complicates actors’ calculations, alters the incentive structures and tempts actors to enter into a deal with the veto power to forcibly block or reverse the least preferable course of action. The Arab uprisings illustrate how oppositions’ cost-benefit calculations of regime transition in an ideologically divided landscape of power struggles are conditioned by *first*, the balance of forces between different ideological camps (most notably, Islamists and non-Islamists); and *second*, by the presence or absence of the military as an active veto player that regulates courses of regime transitions and controls the political process. The Brotherhood in Egypt opted for a domineering approach and the presence of the military as an active veto actor in Egypt stripped actors of the independent ability to introduce institutional provisions and actively shaped their preferences. The continued dependence of opposition groups (Islamists and non-Islamists alike) on the military accentuated polarization and pushed non-Islamists to adjudicate to the military to curtail the democratic bargain. Conversely, in Tunisia, the relative balance of power between rival oppositional forces and the absence of robust veto players old powerholders pushed the oppositions to establish durable institutional rules. Counterintuitively, divided oppositions (along sectarian lines in Syria or

²⁵ Bratton and Van de Walle, *Democratic Experiments in Africa*.

sectarian and tribal lines in Yemen) in asymmetrical power structure (with the absence of the military acting cohesively as a veto actor or as decisively defected units with hierarchical command chain in support of anti-regime protests), radicalized insurgent groups who aspired to prevail unilaterally and restructure the state apparatuses.

Contextualizing opposition-opposition bargains during uncertain periods of regime transition is thus a critical dimension in unpacking the multiple routes of the Arab uprisings. Opposition calculations about immediate and future benefits, alongside existential fears of possible eruption of violence in the future, are centered on a politics of uncertainty²⁶ that affects their strategic choices of coordination, collusion and/or insurgency. I argue that uncertainty during a transitional period unfolds as a three-level game between opposition groups. The first concerns *uncertainty* about the *balance of power* between them that affects their immediate political calculations, choices, expectations and reactions to unfolding processes. Symmetrical balance of power between opposition actors during transition affects their electoral tactics (either to form an electoral coalition or prevail unilaterally) and lessens concerns about the short and long-term payoffs and possible chances of winning in future. In Tunisia, the relative distribution of power resources among Islamists and non-Islamists gave assurances that no party could unilaterally make binding decisions and rival forces ushered in institutional and constitutional transformations that staved off a possible overwhelming victory for the Islamic parties. In Egypt, however, the Brotherhood moved in a more self-assertive direction, dwarfed their ideological opponents and imposed itself (together with ultra-conservative *salafis* groups) as a predominant electoral force with no need to share power with non-Islamist forces.

The second involves *uncertainty* about the *future stability of institutional rules* as the institutionalization of competition rules serves as “coordinating device” for conflict resolution. Institutionalized rules emerge when power resources are sufficiently dispersed to restrain players from unilaterally crushing their opponents or changing the competition rules to keep unfavorable parties from taking office in future. Availability of veto player in the form of regime holdovers confounds interactions between relevant actors and complicates oppositions’ strategies to cope with unpredictable institutional outcomes. Actors face choices of either to collude with the veto player to terminate their conflict or to establish durable rules of conflict resolution. In Egypt, the landslide victory of the Islamic parties and, most notably, the unpredictable political weight of the *salafis* aggravated the centrifugal tendencies between the ideologically antagonistic forces and raised doubts about the Islamists’ future intents. The active political role of the military cajoled losers to adjudicate to it to remove the Brotherhood president from power. On the contrary, with the absence of robust veto player, all oppositional forces in Tunisia struck a power-sharing deal to subject their interests and values to the uncertain operations of democratic institutions and to dissuade unilateral defections from the democratic bargain. All opposing forces established institutional mechanisms for mediation and crisis management to keep the process from going off

²⁶ Andreas Schedler, *The Politics of Uncertainty: Sustaining and Subverting Electoral Authoritarianism* (Oxford, New York: Oxford University Press, 2013).

the rails and the *Troika* government stepped down in 2013 to dispel the phantom of social violence and disorder.

The third level entails *uncertainty* about *existential threats* as perceptions of possible eruption of violence in future may incentivize different actors to endorse offensive and insurrectional strategy to reduce danger and/or attack previously identified enemies. Security threats (whether based on non-instrumental emotions such as fears, hatred or resentment in contexts of power differentiation between “in-group” and “out-group” members²⁷ (as it has been the case between Sunni and Alawi in Syria) or on instrumental emotions triggered by elites’ control of information or propaganda machine (as it was the case in Egypt during the short tenure of Brotherhood in office in 2012-2013) may push opposition actors to radicalize the political landscape and/or to collude with the *ancien régime* to preserve or restore the *status quo ante*. In Syria, the Alawites’ (as a minority sect) monopoly over power pushed the majority Sunni to adopt militancy strategy in response to Al-Asaad’s offensive military operations to lethally subdue -what the regime dubbed- Sunni “terrorists.”²⁸ Additionally, in Egypt, the fear of the Islamists’ perpetual grip on power and possible eruption of societal and sectarian violence (with the accentuation of polarization and identity differences) pushed opposition politicians to band together and mobilize large swathes of the population to support the military effort at deposing the Islamist president.²⁹

To recap, politics of uncertainty about power relations between oppositions and about future sustainability of the new institutional rules and social stability help to unify and integrate questions and insights about regime transitions. It is the mutual recognition of the balance of forces and expectations of possible future stability and chances of winning in electoral contestation for multiple actors, as well as the cognitive formulation of boundaries of political action that establish stable “equilibria” for regime transition (a point at which all parties push through regime changes and no party has an incentive to move back to the authoritarian era). Cross-regional comparisons with Latin America offer interesting examples of regime transitions to test how politics of uncertainty and the dilemma of “uncommitted opposition” are solved over time by excavating how antagonistic ideological forces evolved and shifted ideological positions or orientations over time, neutralized the military and developed commitment to democracy.

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²⁷ Barry R. Posen, “The Security Dilemma and Ethnic Conflict,” *Survival* 35, no. 1 (1993): 27–47; Roger D. Petersen, *Understanding Ethnic Violence: Fear, Hatred, and Resentment in Twentieth-Century Eastern Europe* (MIT: Cambridge University Press, 2002).

²⁸ Paulo Gabriel Hilu Pinto, “The Shattered Nation: The Sectarianization of the Syrian Conflict,” in *Sectarianization: Mapping the New Politics of the Middle East*, eds. Nader Hashemi and Danny Postel (Oxford: Oxford University Press, 2017), pp. 123-142; Marc Lynch. *The New Arab Wars: Uprisings and Anarchy in the Middle East* (New York: Public Affairs, 2016).

²⁹ Shimaa Hatab, “Threat Perception and Democratic Support in Post - Arab Spring Egypt,” *Comparative Politics* 53, no. 1 (2020): 69 – 98

RESEARCH SYMPOSIUM: TAKING SPACE SERIOUSLY

INTRODUCTION: TAKING SPACE SERIOUSLY: THE USE OF GEOGRAPHIC METHODS IN THE STUDY OF MENA

By Alexandra Domike Blackman and Lama Mourad

The use of geo-spatial methods in political science has grown rapidly over the last decade.³⁰ In studies of the Middle East, these methods have been used to examine important social and political outcomes including the origins of Islamist political organizations, the distribution of public goods, local levels of religiosity, and dynamics of civil war violence,³¹ as well as to understand the political implications of significant changes to people's lived environments, such as checkpoints, road blocks, border walls, and humanitarian aid.³² In this symposium, we highlight the potential opportunities and pitfalls of using these methods in the study of MENA politics.

The contributors to this symposium share a common interest in adopting spatial approaches for understanding political phenomena in the MENA region. As a whole, their pieces indicate that we need to take space seriously in the study of politics in the region, but that in doing so, we need to be 'serious' about it—that is, cautious and aware of both the limitations and ethical dilemmas that

³⁰ For overviews of the ways in which social scientists generally and political scientists more specifically have used GIS-based approaches, see: Dimitris Ballas et al. *GIS and the social sciences: Theory and applications*. Routledge (2017). Jordan Branch, "Geographic Information Systems (GIS) in International Relations." *International Organization* 70, no. 4 (2016): 845-869; Luke J. Keele, and Rocío Titiunik, "Geographic Boundaries as Regression Discontinuities," *Political Analysis* 23, no. 1 (2015): 127-155; Katsuo Kogure and Yoshito Takasaki, "GIS for empirical research design: An illustration with georeferenced point data," *PLoS ONE* 14, no. 3 (2019). In conflict-related research, this has been enabled in part by the development of major georeferenced datasets, most prominently the [Uppsala Conflict Data Program Georeferenced Events Dataset](#) (UCDP GED) and the [Armed Conflict Location Events Dataset](#) (ACLED). For a comparison of these two datasets, see Eck, Kristine. "In Data We Trust? A Comparison of UCDP GED and ACLED Conflict Events Datasets." *Cooperation and Conflict* 47, no. 1 (March 2012): 124-41.

³¹ Steven Brooke and Neil Ketchley, "Social and Institutional Origins of Political Islam," *American Political Science Review* 112, no. 2 (2018): 376-394; Christiana Parreira, "Power Politics: Armed Non-State Actors and the Capture of Public Electricity in Post-Invasion Baghdad," *Journal of Peace Research* (2020), doi:[10.1177/0022343320940768](https://doi.org/10.1177/0022343320940768); Avital Livny, "Can Religiosity be Sensed with Satellite Data? An Assessment of Luminosity during Ramadan in Turkey," *Public Opinion Quarterly* (Forthcoming); Sabri Ciftci, Michael Robbins, Sofya Zaytseva, "Devotion at Sub-National Level: Ramadan, Nighttime Lights, and Religiosity in the Egyptian Governorates," *International Journal of Public Opinion Research* (2020), <https://doi.org/10.1093/ijpor/edaa019>; Adam G. Lichtenheld and Justin Schon, "The consequences of internal displacement on civil war violence: Evidence from Syria," *Political Geography* 86 (2021).

³² Roy van der Weide, Bob Rijkers, Brian Blankespoor, Alexei Abrahams, "Obstacles on the Road to Palestinian Economic Growth," *World Bank Policy Research Working Paper* 8385 (2018); Alexei Abrahams, "Hard Traveling: Unemployment and Road Infrastructure in the Shadow of Political Conflict," *Political Science Research and Methods* (2021): 1-22, <https://doi.org/10.1017/psrm.2021.8>; Anna Getmansky, Guy Grossman and Austin L. Wright, "Border Walls and Smuggling Spillovers," *Quarterly Journal of Political Science* 14, no. 3 (2019): 329-347; Shaza Loutfi, "The Impact of Humanitarian Aid on Internally Displaced Persons' Movement: A Case Study in Syria," Master's Thesis, (University of Illinois at Chicago, 2017). <https://hdl.handle.net/10027/21958>.

these approaches bring forth. While they all agree that GIS can be a boon for researchers, including helping to overcome data limitations and paucity in both historic and contemporary contexts, it also has important challenges that, while not unique to the MENA region, may be more readily apparent in countries in the region. In this brief introduction, we highlight some of the overarching themes and questions that this collection raises.

First, many of the authors highlight the importance of **who determines and draws the boundaries** upon which the analysis and data rely. The geographic boundaries of cities and other administrative units are themselves often the outcome of a political, rather than purely technocratic, process and may not map a specific space as people experience it.³³ Ahmad Gharbieh, for instance, discusses the tension inherent in acknowledging the utility of shared and standardized spatial boundaries, while recognizing that they do not map onto the socio-political and lived realities of boundaries in Beirut. Alexei Abrahams and Diana Greenwald, drawing on research on Israel-Palestine, discuss the challenge of relying on the demarcations of one actor versus another in a context of contested boundaries.

Second, all the authors discuss the ways in which the development of GIS technology has opened up **new data possibilities**, particularly in the MENA context where the paucity of data is the norm. Ashrakat Elshehawy shares strategies and resources for making greater use of historical records by integrating spatial data and analysis. Historical maps often contain detailed local data that may not be available in historical censuses. Both Christian Parreira and Emily Scott, in each of their contributions, address how GIS allows for collecting data related to local public goods and refugees that would otherwise be difficult and costly, if not impossible, to access. For instance, Parreira demonstrates how nighttime lights data can be used to generate local measures of the provision of key public goods like electricity.

In both Parreira and Emily Scott's contributions, however, they acknowledge that GIS data has its limits and needs to be analyzed and contextualized through other methods, often field-based. As Scott discusses, borders that appear as hard lines in analysis may actually be porous in ways that affect the research and that the researcher should understand as they proceed. Some of these challenges are compounded in contexts in which, as Abrahams and Greenwald emphasize, geospatial data may be some of the most highly politicized, particularly in sites of conflict.

Changing boundaries represent another challenge for using some GIS data that researchers must contend with. Historical units may be difficult to match with contemporary units, making spatial comparisons across time more challenging. Parreira cites the challenge of accessing up-to-date municipal boundary shapefiles in Lebanon as the units are often subject to change. But these changing borders can also present new research opportunities. In her piece, Julia Clark discusses how shifting municipal boundaries can provide opportunities for new forms of analysis and shares her approach to mapping these boundary changes in Tunisia. Shifting boundaries have important

³³ Intissar Kherigi, "Municipal Boundaries and the Politics of Space in Tunisia," *University of Gothenburg Program on Governance and Local Development Working Paper 38* (2021).

implications for many contexts in the region, where electoral and administrative districts may change regularly, often with important social and political implications.³⁴

Third, many of the authors, whether implicitly or explicitly, highlight the **need for geospatial analysis at multiple, interrelated scales**. For instance, drawing on her work on Iraq and Lebanon, Parreira shows how local-level variation in distributive outcomes is driven in part by center-local relations that favor certain locales over others and shape levels of capacity and institutionalization at the local level. Even beyond the level of the state and center-local relations, international factors, such as foreign aid and international sanctions, can have a significant impact on local dynamics. Abrahams and Greenwald caution against “missing the forest for the trees”—that is ignoring the ways in which factors at higher levels of aggregation shape outcomes—when undertaking local level analysis.

Finally, many of the contributions raise **important ethical considerations and challenges of concern in the collection and use of geospatial data**. As discussed above, boundary drawing is not an objective process abstracted away from the interests of the mapmaker. In addition to the implications this has for how we understand and use maps, Gharbieh also suggests that researchers should think critically about the power structures that they reinforce through the use of certain geographic representations. Abrahams and Greenwald highlight the potential threats to privacy and autonomy that can result from the use of geo-coded data from human subjects that may not have given explicit consent, such as cell phone data. And, finally, Scott discusses some of ethical challenges in the adoption of GIS methods to study refugees, including using data that allows the researcher to abstract away from the lived realities of war and migration and ensuring that other actors cannot access geo-referenced data on vulnerable populations for nefarious purposes.

The contributions to this symposium help researchers to think through the potential and pitfalls associated with taking space seriously, both in terms of what it can contribute to our research and in terms of what new questions about power and ethics these methods raise. The research agendas and novel data collection that these geographic methods can contribute are an exciting new frontier in MENA politics research that we are excited to see all of our contributors (and many others) develop in the coming years.

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³⁴ For instance, Gharbieh discusses electoral gerrymandering in Lebanon.

GEOSPATIAL RESEARCH IN SETTINGS OF CONTESTED SOVEREIGNTY

By Alexei Abrahams and Diana B. Greenwald

Contests over the territorial sovereignty of states have been, and will continue to be, a prominent feature of politics in the MENA region. Globally, between 2011 and 2019, 64 out of 99 armed conflicts recorded in the UCDP/PRIO Armed Conflict Dataset (version 20.1) were over the status of territory.³⁵ Among them were conflicts spanning 12 countries in the MENA region, including well-known, protracted conflicts (Israel/Palestine) and internationalized civil wars (Syria, Libya, and Yemen); episodic violence against Islamic State affiliates (Algeria, Egypt, Iran, Jordan, Lebanon, and Tunisia); Kurdish separatist conflict in Turkey and Iran; and the end of a war of secession from Sudan.³⁶

Geospatial research can help us better understand political processes and outcomes in such settings of contested sovereignty. In contexts where there is ongoing conflict over territorial boundaries, conventional data sources (e.g., censuses and surveys) may be absent, partial, unreliable, or even deliberately withheld by authorities. Geospatial data, however, can sometimes offer a way around these obstacles. Satellite imagery is often free³⁷ and available at increasingly granular spatial and temporal resolution, allowing researchers to measure electrification, economic vibrancy, urban and agricultural development patterns, activity at ports and transit hubs, the movement of populations, and even observe markers of conflict such as structural damage, barriers, land use change, and bomb craters. Hard copies of maps can be digitized and georeferenced, while contemporary fault lines of conflict can be superimposed upon, and compared to, historical boundaries.

While geospatial data are no panacea -- indeed, geographic data are among the most likely to be politicized in contested settings -- they can complement conventional data sources to understand how politics in the Middle East and North Africa interacts with the region's physical environment itself. Political scientists working with observational data often rely on the collection efforts of organizational actors on the ground -- such as states or within-country NGOs -- or international organizations that may or may not have a formal presence within the country. These include surveys, censuses, and various aggregates measuring key features of the political, social, or economic landscape. Territorial conflict, however, introduces unique challenges to data collection and quality. In extreme cases, fear of violence may force data collection to be limited or suspended altogether. Lebanon, for instance, has not conducted a census since 1932, with some claiming that

³⁵ Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., & Strand, H. (2002). Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research*, 39(5): 615–637. Pettersson, T., & Öberg, M. (2020). Organized violence, 1989-2019. *Journal of Peace Research*, 57(4). Pettersson, T. (2020). UCDP/PRIO Armed Conflict Dataset Codebook v 20.1. (<https://ucdp.uu.se/downloads/>). As described in Pettersson (2020), "UCDP defines state-based armed conflict as: 'a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year,'" (1).

³⁶ Interestingly, Iraq's war against the Islamic State and its predecessors during this period is coded as a conflict over government rather than a conflict over the status of territory.

³⁷ For example, nighttime satellite imagery and derivative datasets are available for free at: <https://ngdc.noaa.gov/eog/download.html>.

revealed changes to the country's demographic breakdown could reignite conflict. Similarly, Iraq had not conducted a census covering the full country, including the northern Kurdistan region and disputed territories, since 1987.

Even where data are collected, however, they may be withheld. States, and, even at times, NGOs, have an interest in the conflict's outcome and may not be neutral data collectors. For example, conflict researchers sometimes find that governments are more willing to share data on rebel violence than comparable data on government violence toward civilians.³⁸ Finally, even where data are shared, a researcher's continued access to data from that collection authority may be conditioned on the interpretations they publish. One of the authors, for example, was advised by a senior researcher to tone down their criticism of the Palestinian Authority (PA) in order to ensure continued access to data from the Palestinian Central Bureau of Statistics (PCBS). Further, political considerations may still impact labeling decisions. Hirsch-Hoefler and Ben Shitrit (2020) carefully document how the counting of Jewish settlements in the West Bank by the Israeli statistics bureau has been subject to the ideological pressures of annexation and territorial maximalism.³⁹ Finally, if researchers wish to analyze local phenomena in contested cities such as Jerusalem, they face choices between Palestinian and Israeli official data sources and multiple, competing definitions of how the city, and its population, are defined.⁴⁰

Remote sensing data can be used to circumvent some of these data challenges. Satellites deployed by the United States and the European Union, among other governments and private actors, routinely scan the Earth's surface to gather environmental telemetry -- a practice known as *remote sensing*. Though typically intended for natural scientific purposes, the imagery can often be repurposed for social science research. Perhaps the most well-known example of such repurposing is nighttime lights imagery. Originally collected by US Air Force satellites to detect weather patterns by way of the reflection of moonlight on cloud tops, it was quickly realized that, on clear nights, the satellites recorded light patterns on the Earth's surface, typically corresponding to human settlements. The image tiles were cleaned and mosaicked into global composites by the National Oceanic and Atmospheric Administration (NOAA), and have been uploaded to the public for free via NOAA's website.⁴¹ Economists eventually demonstrated that, after differencing out country and year effects, year-to-year fluctuations in light intensity could be reliably correlated with year-to-year fluctuations in GDP, essentially offering social scientists a worldwide proxy for subnational economic growth.⁴²

³⁸ Wright, A. L., Condra, L. N., Shapiro, J.N., and Shaver, A.C.. (2017). Civilian abuse and wartime informing. *The Pearson Institute Discussion Paper*, 42.

³⁹ Hirsch-Hoefler, S., & Ben Shitrit, L. (2020). So, how many settlements are there? Counting, tracking, and normalizing Jewish settlements in the Israeli Central Bureau of Statistics (CBS) Yearbook, 1967 to the present. *Project on Middle East Political Science*, 41.

⁴⁰ Greenwald, D.B. (2017, December). Before Deciding Who Rules Jerusalem, Decide What Jerusalem Is. *The National Interest*. <https://nationalinterest.org/feature/before-deciding-who-rules-jerusalem-decide-what-jerusalem-23523>.

⁴¹ See: <https://ngdc.noaa.gov/eog/download.html>.

⁴² Henderson, J. V., Storeygard, A., & Weil, D. N. (2012). Measuring economic growth from outer space. *American economic review*, 102(2), 994-1028.

In the occupied Palestinian territory of the West Bank, such a proxy has proven useful to assess the economic impact of Israeli army road obstacles, which disrupted labor and trade flows within the territory during and after the Second *Intifada*.⁴³ Van Der Weide et al. (2018) find that the luminosity of Palestinian neighborhoods dims as Israeli checkpoints are deployed along routes to commercial centers and brightens when these obstacles are later removed. Abrahams (2021), on the other hand, exploits pre-*Intifada* luminosity to predict asymmetries in the flow of Palestinian commuters between West Bank neighborhoods.⁴⁴ Digitizing a series of UN maps to geolocate Israeli obstacles along the internal road network, the paper merges Palestinian census data from before and after the uprising to triangulate the impact of Israeli obstacles on Palestinian employment rates. The asymmetric commuting flows, interacted with obstacle deployment, end up giving rise to countervailing impacts, with some Palestinian laborers gaining jobs that others could no longer reach (see Figure 1).

These recent applications of remote sensing data to Palestine are only the latest examples of such research in the MENA region.⁴⁵ Recent research on Turkey and Iraq uses nighttime luminosity data to either proxy for economic development or to capture other variables of central theoretical importance.⁴⁶ The usefulness of lights data, moreover, is not limited to the study of subnational explanatory variables. Sanctions against Iran, as well as negative shocks to oil prices, have been shown to differentially impact nighttime luminosity in districts of Lebanon that rely heavily on the patronage of Hezbollah.⁴⁷ Further, satellite imagery captures more than just nighttime lights. As satellite resolution becomes more granular, one can view roads, changes in urbanization, settlements, traffic, agricultural land use patterns, public spaces, and even air pollution. For example, remote sensing was used to estimate crop production levels in ISIS-controlled territory in Iraq and Syria⁴⁸ and to identify damaged structures in the densely populated Jenin refugee camp in the wake of the Israeli invasion in 2002, when the camp was declared a closed military zone and,

⁴³ Abrahams, A. (2021). Hard traveling: Unemployment and road infrastructure in the shadow of political conflict. *Political Science Research and Methods*, 1-22. doi:10.1017/psrm.2021.8. van der Weide, R., Rijkers, B., Blankespoor, B., Abrahams, A.S. (2018). Obstacles on the road to Palestinian economic growth. *World Bank Group, Policy Research Working Paper*, 8385.

⁴⁴ Due to the proximity of Israeli settlements to Palestinian neighborhoods and well-known blurring problems in the lights imagery, economic activity cannot be reliably estimated at the neighborhood level without first deblurring the imagery. See Abrahams, A., Oram, C., & Lozano-Gracia, N. (2018). Deblurring DMSP nighttime lights: A new method using Gaussian filters and frequencies of illumination. *Remote Sensing of Environment*, 210, 242-258.

⁴⁵ See, e.g., Witmer, F. D.W. (2015). Remote sensing of violent conflict: eyes from above. *International Journal of Remote Sensing* 36 (9): 2326-2352. Some of the earliest applications of remote sensing to study conflict zones were in, or proximate to, the MENA region. For example, Witmer (2015) notes that satellite technology was used to detect environmental damage in Kuwait after the First Gulf War, and in Sudan's War in Darfur that began in 2003. At the time, much of this data was used by militaries or applied humanitarian researchers.

⁴⁶ See, e.g., Livny, A. (Forthcoming.) Remote Sensing Religiosity in the Muslim World: An Assessment in the Turkish Case. *Public Opinion Quarterly*. Bozçağa, T., & Christia, F. (2021). Imams and Businessmen: Non-State Service Provision by Islamist Movements. Unpublished manuscript. Parreira, C. (Forthcoming). Power Politics: Armed Non-State Actors and the Capture of Public Electricity in post-invasion Baghdad. *Journal of Peace Research*. <https://doi.org/10.1177/0022343320940768>.

⁴⁷ Arbatli, C.E., & Gomtsyan, D. (2021). Sectarian Aid, Sanctions and Subnational Development. *SSRN Working Paper*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3798717.

⁴⁸ Jaafar, H. H., & Woertz, E. (2016). Agriculture as a funding source of ISIS: A GIS and remote sensing analysis. *Food Policy*, 64: 14-25.

thus, inaccessible to outsider researchers.⁴⁹ Satellite data can also be merged with geocoded data from the ground, as was done in a recent study of electricity provision and exposure to violence in the Syrian civil war.⁵⁰

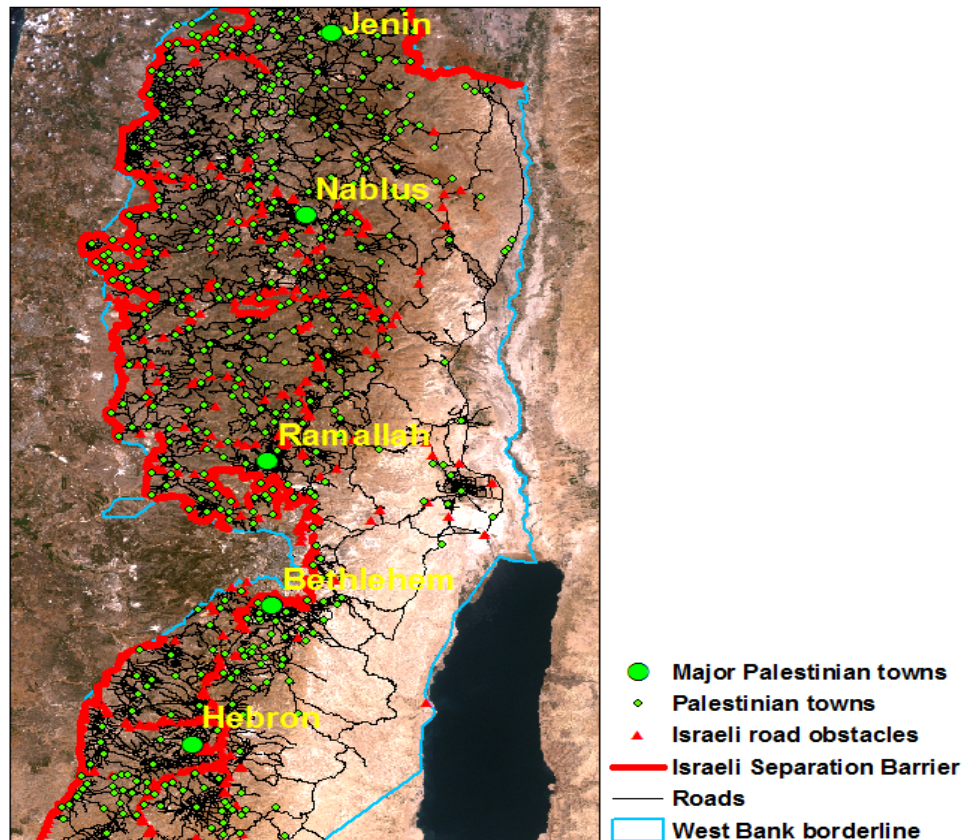


Figure 1. Map re-digitized from pdf by author, showing Israeli road obstacles in the West Bank, circa December 2007. Reprinted from Abrahams (2021).

Beyond data that are remotely sensed from above, MENA researchers can study geographic variation by digitizing and geocoding historical maps, as described by Elshehawy in this newsletter. This type of analysis can be fruitful for uncovering long-run processes in areas of contested sovereignty. For example, Palestine Open Maps is a project that has digitized a set of maps from British Mandate Palestine, recently made publicly available by the Israeli national library, and merged in other sources such as village-level statistics, “historic photography, oral histories and present-day digital maps and data.”⁵¹ This type of visual merging of multiple data sources may allow researchers to uncover local-level research puzzles that they would not have otherwise observed.

⁴⁹ Al-Khudhairi, D.H.A., Caravaggi, I., & Giada, S. (2005). Structural Damage Assessments from Ikonos Data Using Change Detection, Object-Oriented Segmentation, and Classification Techniques. *Photogrammetric Engineering & Remote Sensing*, 71(7): 825-837.

⁵⁰ De Juan, A., & Bank, A. (2015). The Ba’athist blackout? Selective goods provision and political violence in the Syrian civil war. *Journal of Peace Research* 52(1): 91-104.

⁵¹ See: <https://palopenmaps.org/about>.

More traditional data can also be geo-referenced: i.e., surveys can be geocoded with the addition of a random shock to the respondent's geolocation, or with a sufficient level of aggregation to ensure the data remains deidentified. For example, Afrobarometer and AidData have partnered to geocode six rounds of Afrobarometer surveys in 37 African countries providing data on citizen attitudes and preferences at a locally aggregated level.⁵² Notably, this effort includes surveys from Morocco, Algeria, Tunisia, Egypt, and Sudan from 2013 to 2015. In addition, interest in local-level experiences with the state has spurred survey sampling strategies that aim to achieve representativeness at a highly local level: The Local Governance Performance Index, conducted by the Program on Governance and Local Development and implemented in Tunisia in 2015, is one prominent example.⁵³ To the extent that such efforts can be scaled up to more localities and more countries, locally representative survey data could be combined with other geocoded variables and datasets of theoretical interest. Hypothetically, interviews or other forms of qualitative observation done by researchers on the ground could also be coded by geolocation.

Importantly, remote sensing data complements, but does not substitute for, data collected in the field. While we suggest GIS data are a way to circumvent the state, when it comes time to analyze remote sensing data, political scientists may find that decisions by the state continue to impinge on their research. For example, the assignment of imagery-based data to geographic units requires assumptions about those units including, at times, their orthogonality to other key variables in the analysis. Unfortunately, boundaries between units in territorial conflict zones are rarely random and can thus complicate causal identification. For example, the Oslo Accords between Israel and the Palestinian Liberation Organization (PLO) assigned nearly all of the territory of the West Bank to Areas "A", "B", and "C", distinguished by the extent of security control that the Israeli military shares with the Palestinian police apparatus (see Figure 2 for a snapshot of these areas around the city of Nablus). While the delineation of these zones clearly reflected political interests, the sensitivity of the issue of territorial sovereignty means that, as per one author's experience, extensive field-based qualitative research is needed to identify possible causal factors that led one Palestinian town to be located in Area A while a neighboring, similarly-sized town is in Area B. Thus, moving from imagery-based data to the definition of meaningful geographic units often requires knowledge of the local context.

All conflict zones feature aspects of political calculus and aspects of randomness, whether the conflict is over territory or something else. However, even asking questions about the *origins* of geographic delineations in settings of contested sovereignty can be difficult. Further, remote sensing data can have their own ethical implications, even if they are not regulated as "human subject" data. Scott's contribution to this symposium discusses some of these issues in the context of research on refugees. While current remote sensing data are not granular enough to introduce concerns about non-consensual identification of human subjects, social scientists should think about what they will do when they become so. Researchers that use geocoded, human subject data (i.e., cell phone data) must consider these questions more directly.

⁵² See: <https://afrobarometer.org/data/geocoded-data>.

⁵³ See: <https://gld.gu.se/en/projects/local-governance-performance-index-lgpi/>.

As GIS data becomes available at increasing resolution, researchers may be tempted to design their research questions around hyper-local forms of variation. In settings of longstanding, intractable conflict, a disproportionate focus on local-level variation could be seen by some as “missing the forest for the trees.” However, here it is important to note that just because one is looking at local-level variation doesn’t mean they are ignoring “aggregate”-level or even international-level drivers of that variation (i.e., see the aforementioned piece on the local impact of international sanctions in Lebanon). As discussed by Parreira in this newsletter, GIS data can allow scholars to link macro-, meso-, and micro-level explanations. In a current book project, Greenwald seeks to do this, using features of the occupation regime at the central level -- namely, the relationship between Israel and the PA -- to explain local-level variation in governance in the West Bank. A focus on distributional outcomes or local-level variation does not rule out additional research on bigger equilibrium shifts and large-scale transformation.

Territorial conflict will continue to shape politics in the MENA region. GIS data, insofar as they map political borders, human movement, and the environmental effects of armed conflict, are clearly useful to making sense of these contests. While they carry their own ethical considerations, GIS data can complement conventional data sources to make sense of the dynamics of political conflict at local, national, and even regional levels.

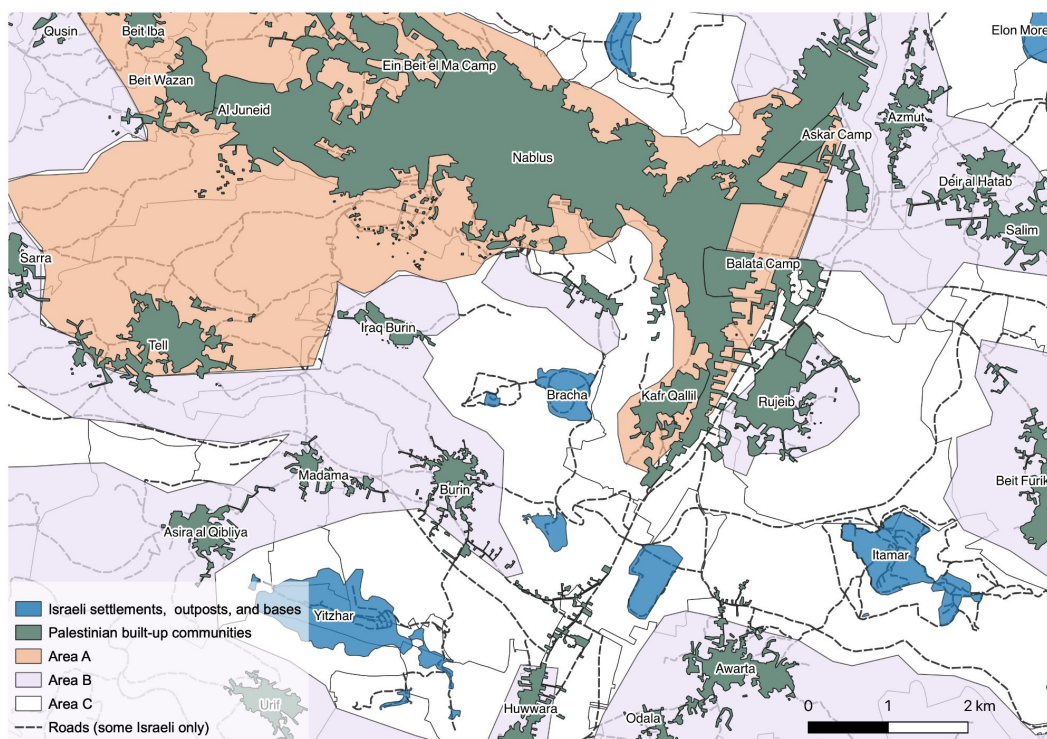


Figure 2. Palestinian communities, Israeli settlements, and security zones (Areas A, B, and C) around the city of Nablus. Map by author, using data provided by the Palestinian Ministry of Local Government, B’Tselem, and the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

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MAPPING MUNICIPAL CHANGE IN TUNISIA

By Julia Clark⁵⁴

Before 2016, around one-third of Tunisians—some 3.6 million people—lived in rural sectors outside of the country’s 264 municipalities, with no elected representation at the local level. Beginning in 2015, the government undertook a process to extend municipalities continuously throughout the territory by creating new municipalities and expanding existing ones to incorporate rural sectors and populations. In the absence of publicly available data on the location of both old and new municipal boundaries, I created a geospatial dataset to study this process by aggregating lower-level administrative units to approximate these changes using data from multiple administrative sources and Open Street Map (OSM).

This dataset has a number of applications. In this note, I demonstrate how it can be used to visualize the distribution and change in municipalities and communal populations across Tunisia over the past few decades, and to better understand the process (and potential politics) behind these changes. In addition, I preview how the data can be used to explore the consequences of this mass-enfranchisement on local governance and political development, including by shaping electoral outcomes and dramatically expanding the territory and population for which municipal councils must deliver basic services.

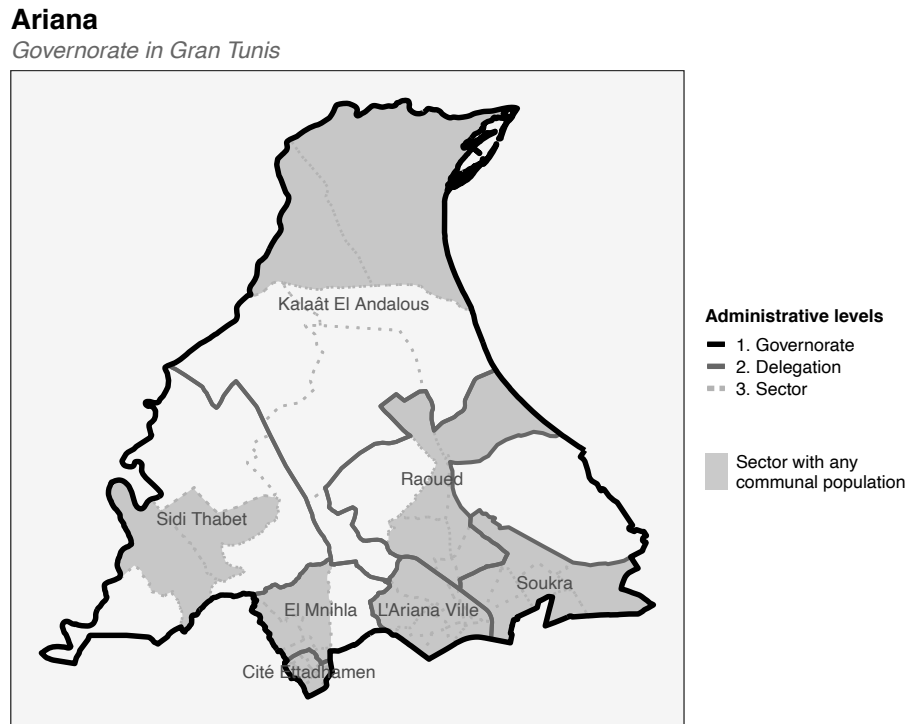
Tunisia’s local governance structures

Following Tunisia’s independence in 1956, political power was increasingly centralized, with regional and local governance structures designed primarily to exert territorial control and subvert tribal and community identities in favor of “nation building.”⁵⁵ These structures have persisted in the post-Ben Ali era, and consist of layers of centrally-dependent administrative units throughout the territory, anchored by 24 governorates (*wilayat*) that as of the 2014 Census were divided into 264 delegations (*muatamdiyat*) and 2084 sectors (*imedat*). Figure 1 shows an example of these territorial divisions in the governorate of Ariana in the northeastern capital region.

⁵⁴ PhD Candidate, University of California, San Diego.

⁵⁵ See, inter alia, Amor Belhedi. “Maillage administratif régional et régionalisation en Tunisie : Continuité et rupture.” *Revue Tunisienne de Géographie*, 44-45 (2016) : 51-88 and Mourad Ben Jelloul. “Régionalisation et découpage territorial en Tunisie : De la gestion centralisée à la gouvernance territoriale” in Hayder, A. and Cherif, M. (eds.) *Les découpages territoriaux*. Faculté des Sciences Humaines et Sociales de Tunis, (2018): 29-58.

Figure 1. Example of territorial divisions in Tunisia (2014)

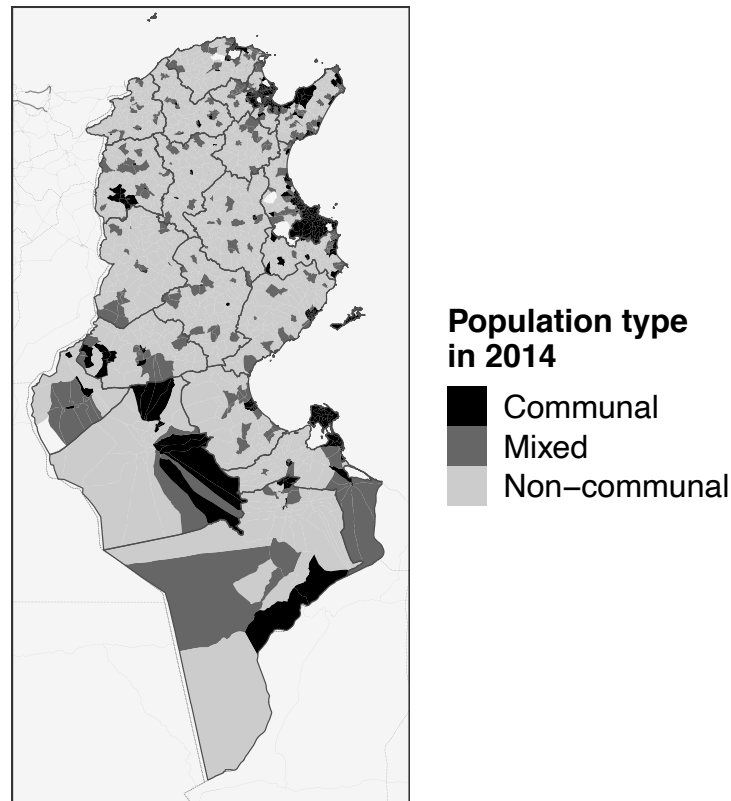


In parallel to these administrative entities, however, the post-independence Tunisian state has progressively granted some limited autonomy to selected municipal areas or *communes*, including the ability to elect local councils and raise some of their own revenues.⁵⁶ The incorporation of municipalities thus divided the country into two groups, reflected in census categories: (1) “communal” populations in urban or suburban areas under the jurisdiction of elected municipal councils, and (2) “non-communal” populations in more peri-urban or rural areas governed by unelected rural councils.

Although these municipalities were a separate structure, they have generally corresponded with administrative levels. For example, municipalities typically contain the population of multiple sectors, and as of 2014 the majority of sectors had either 100 percent communal or 100 percent rural populations (i.e., their populations were either entirely inside or outside a municipality). However, there have also been “mixed” sectors with both communal and non-communal populations (see Figure 2), and even for sectors with 100 percent communal populations, it is possible that the municipal borders fell inside sector boundaries if certain parts of the sector were uninhabited, as is common in the southern desert regions.

⁵⁶ As with administrative structures, the creation of municipalities was often used as a tool of control, to reward supporters or punish rivals under the Bourguiba and Ben Ali regimes, as summarized in Intissar Kherigi. “Municipal Boundaries and the Politics of Space in Tunisia.” Working Paper 38 (University of Gothenburg: Program on Governance and Local Development, 2021).

Figure 2. Sector population type



As a product (and perpetuator) of regional inequalities, municipalities were clustered in coastal areas, while non-communal areas were largely concentrated in the marginalized interior and southern governorates. However, because decentralization and “positive discrimination” these regions were key demands of the 2011 revolution, the 2014 Constitution included requirements to increase the power of municipal councils and extend their jurisdictions to cover the entire territory. Under this mandate, the Ministry of Local Affairs (MAL) carried out a process of “generalizing” municipalities to make them continuous across the territory between 2015 and 2017, expanding some old municipalities and creating 86 new ones for a total of 350.⁵⁷

Although the Government released a PDF with maps of the new municipalities,⁵⁸ official shapefiles or other systematic data on the precise location of these new municipal boundaries had not been published as of 2020.⁵⁹ To quantitatively analyze this process and its implications, I therefore

⁵⁷ Ministry of Local Affairs (MAL). “Report on the Proposed Generalization of the Municipal System” (Government of Tunisia, 2016, in Arabic). For an in-depth analysis of this process, see Kherigi, “Municipal Boundaries and the Politics of Space in Tunisia.”

⁵⁸ Ministry of Local Affairs (MAL). “Municipal Strategy” (Government of Tunisia, May 2016, in Arabic).

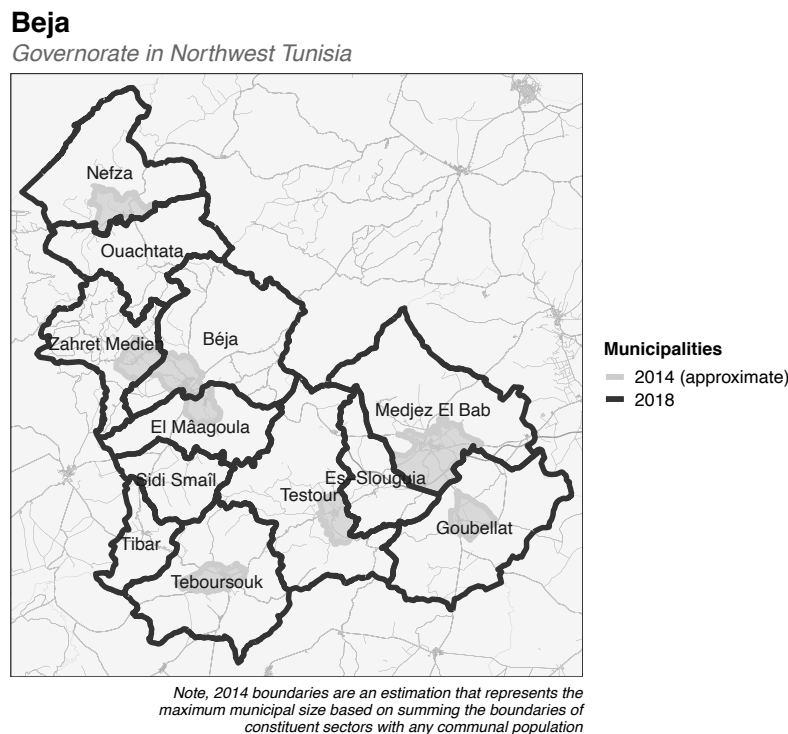
⁵⁹ To my knowledge, official municipal-level shapefiles have not been publicly released by the Tunisian government. An extensive online search revealed official shapefiles only down to the delegation level (e.g., via GADM). According to

created a spatial dataset to approximate changes in municipal boundaries by matching sectors to municipalities over time.

Methodology and Data

Matching sectors and municipalities. I used three primary sources to match each of Tunisia's 2085 sectors to municipalities in 2014 (the year of the last census, before municipal generalization) and in 2018 (the year of the first democratic local elections, after municipal generalization).⁶⁰ The first is the 2014 census data,⁶¹ which gives the population of each sector that lives in communal and non-communal areas. I matched this information with the total census population for municipalities to determine which sectors were all or partially incorporated into each of the 264 municipalities existing in 2014. As noted above, sectors are the lowest level administrative unit that is largely subsumed by municipalities, and therefore aggregating the boundaries of sectors that contained some communal population in 2014 provides an outer bound for the location of municipalities at that time.

Figure 3. Expansion of municipality boundaries from 2014 (approximate) to 2018



Kherigi, "Municipal Boundaries and the Politics of Space in Tunisia," the MAL had not yet finalized detailed boundaries for all municipalities as of June 2020.

⁶⁰ As of 2014, there were 2084 sectors. A new sector, Ouled El Felah, was created in Sidi Bouzid in 2015 (Decree 2015-0296, published in JORT 2015-028).

⁶¹ National Statistics Institute. "2014 Census" (Government of Tunisia, 2014).

Second, I used the report produced by the MAL in 2016⁶² with the first comprehensive information on the new municipalities. This included PDF maps of the proposed 350 municipalities and their sectors, and codes indicating whether a municipality was “no change” (previously incorporated and comprised of 100 percent communal sectors), “new” (newly incorporated out of previously rural sectors), or “expansion” (already existed and gained new sectors and/or had mixed sectors with rural populations that were newly incorporated).⁶³ A manual comparison of the municipal sectors and type in this PDF with the 2014 census data enabled me to match sectors to both the 2014 and 2018 municipalities. Finally, I reconciled the 2018 sector-municipal assignment with sector-level data from the 2018 elections⁶⁴ to account for changes that happened after the 2016 MAL announcement.⁶⁵ In total, there were at least 23 municipalities where sectors assignments changed between May 2016 and May 2018.

Sector classification. With the above data, I created a typology of sectors shown in Table 1 to study the municipal assignment process. First are communal or mixed sectors that were previously incorporated into one of the 2014-era 264 municipalities. This includes: (a) sectors in old, “*unchanged*” municipalities (n=442); (b) sectors that were part of expansion municipalities and served as the “*node*” of their expansion (n=506); and (c) a small number of sectors that *changed* municipalities between 2014 and 2018 (n = 44).⁶⁶ Second are rural sectors with non-communal populations that were incorporated into municipalities for the first time, either as (a) *peripheral* sectors added to existing expansion municipalities (n=739) or (b) as part of entirely *new* municipalities (n=351). In Figure 3, for example, all sectors in Es-Slouguia, Ouchtata, Sidi Smail, and Tibar are newly incorporated into new municipalities, while all others are expansion municipalities where the shaded areas are “nodes” (representing the sectors previously included in these municipalities) and the unshaded areas are the “peripheral” rural sectors that were recently added.

⁶² MAL, “Municipal Strategy.”

⁶³ A few municipalities, notably Gafsa and El Kef, were marked as “no change” but based on 2018 election data appear to each have lost a few sectors.

⁶⁴ Sector-level election data comes from the Electoral Commission (ISIE) and a longitudinal dataset developed for Julia Clark, Alexandra Blackman, and Aytuğ Şaşmaz. “What Men Want: Politicians’ Strategic Response to Gender Quotas.” (Working paper, 2021).

⁶⁵ As noted by Kherigi, “Municipal Boundaries and the Politics of Space in Tunisia,” the process of drawing municipal boundaries was contentious, with various local and national actors mobilizing to change boundaries as initially announced by the MAL.

⁶⁶ In some cases, these sectors switched from one pre-existing municipality to another; in others they were part of an existing municipality and split off to become a new municipality (e.g., the municipality of Ettadhamen-Mnihla in Ariana became two municipalities: Ettadhamen and Mnihla).

Table 1. Sector typology

Sector Population Type in 2014				
2018 Municipal Assignment	Communal	Mixed	Non-communal	Total
<i>Previously incorporated</i>				
Unchanged municipality	442	0	0	442
Expansion node	236	269	0	505
Changed or split	29	15	0	44
<i>Newly incorporated</i>				
Expansion periphery	0	0	740	740
New municipality	0	0	351	351
Total	707	285	1,090	2,082

Note: Excludes two sectors with no recorded population (Lile de la Gualite in Bizerte and Ain Ouled El Gerissi in Tozeur) and one created after the 2014 census (Ouled El Felah in Sidi Bouzid).

Creating shapefiles. I then used the matching of sectors to municipalities to create shapefiles for both the old and new municipal boundaries, as shown in Figure 3. This was accomplished by merging the sector-municipal mapping above to a sector-level OSM-derived shapefile in R,⁶⁷ and then dissolving the sectors to both the old (2014) and new (2018) municipalities.⁶⁸ In addition, I used the census and 2018 elections data to correct some errors in the sector boundaries, and follow similar procedures to create improved shapefiles at the delegation, governorate, electoral district, and regional levels. All shapefiles include standardized administrative codes and names in Arabic and English, and are available for download and use on GitHub.⁶⁹

Limitations. There are some limitations to this data. First, 2014 and 2018 municipal shapefiles are based on 2017 sector boundaries from OSM, which may be inconsistent to some degree with the official boundaries established by the government, particularly if sector boundaries have shifted over time.⁷⁰ Second, while the 2018 municipal shapefile is likely to approximate the true boundaries—given that municipalities are now contiguous and cover all parts of sectors—the 2014 municipal shapefile boundaries include the entirety of sectors with *any* communal population, which means they include rural parts of sectors that were not actually within the true municipal boundaries. The 2014 municipal shapefiles should therefore be seen as an approximation that overestimates the geographic size of certain municipalities, particularly those that include “mixed” sectors with large rural populations or large geographic areas (this includes, for example, many

⁶⁷ Sector level shapefiles from the OSM Cartographie Citoyen project, available at http://kcit.org/site0/index0.html?#art_DM-Fonds%20de%20cartes%20Tunisie%20OdBl.

⁶⁸ The Cartographie Citoyen projects and others—e.g., the “Administrative Structures” map on the <http://www.tunisieelections.org> website produce by Democracy international—have followed a similar procedure, creating a map of 2018 municipalities using MAL, “Municipal Strategy”; however, these do not appear to account for post-2017 changes and some inconsistencies in the MAL data.

⁶⁹ See https://github.com/jmgclark/tunisia_shapefiles.

⁷⁰ Kherigi documents multiple cases where sector boundaries changed during the 2015-2017 municipal generalization process or where municipality boundaries cut across sectors, but it is not clear how widespread these deviations are.

municipalities in the desert regions of Kebeli, Tozeur, Tataouine and Medenine). These boundaries can be improved with additional administrative and spatial data.

Applications

The above data have a number of uses that will be explored in more depth in future work. In this note I focus on three specific applications for this dataset: (1) modeling the boundary-making process, (2) exploring the consequences of these changes on local and national politics, and (3) understanding logistical governance challenges in new and expanded municipalities.

Boundary politics. According to the MAL’s stated process,⁷¹ boundaries were determined centrally based on technocratic criteria—including population size, geographic area, and development indicators—rather than by political bodies, and so the scope for largescale manipulation was limited. Indeed, initial tests provide no evidence of national-level partisan influence on the allocation of rural sectors to existing versus new municipalities, suggesting that this process was *not* a product of classic gerrymandering tactics such as concentrating supporters in certain municipalities or splitting up the opposition.⁷² At the same time, given the importance of municipalities for local development, elections, and party building,⁷³ local politicians and communities have a clear interest in shaping boundaries to their benefit.⁷⁴ This dataset provides the foundation for a more systematic analysis of the politicization and contestation of Tunisia’s municipal spaces in the post-Ben Ali era.

Election results. These data can also be used to examine the effects of municipal generalization and expanding the local franchise on electoral outcomes. For example, I create a counterfactual using 2014 boundaries to look at levels of competition and turnout in the 2018 elections.⁷⁵ As shown in the “Actual” columns in Table 2, expansion municipalities had slightly more competitive lists and smaller margins of difference than old municipalities in the 2018 elections, but slightly lower

⁷¹ As described in MAL, “Report on the Proposed Generalization of the Municipal System.”

⁷² In a logistic regression controlling for population and area (two MAL criteria), sectors with more votes for Nidaa in the 2014 elections were more likely to be assigned to existing municipalities, while those with more votes for Ennahda and independents were more likely to be assigned to new ones. However, this effect disappears with governorate fixed effects, given the high correlation between region, municipal concentration, and historical support for specific parties. For a deeper discussion of the colonial and geographic legacies of political party affiliation in Tunisia and elsewhere, see Alexandra Blackman, “Ideological Responses to Settler Colonialism: Political Identities in Post-Independence Tunisia.” Working Paper (2021), and Janine A. Clark, *Local politics in Jordan and Morocco: strategies of centralization and decentralization* (New York: Columbia University Press, 2018).

⁷³ Multiple studies across a variety of contexts have demonstrated the importance of municipal party “machines” for both local and national politics, such as mediating patronage and clientelist networks (see, for example, Susan Stokes, Thad Dunning, Marcelo Nazareno, and Valeria Brusco. *Brokers, voters, and clientelism: The puzzle of distributive politics*. Cambridge University Press, 2013).

⁷⁴ Kherigi, “Municipal Boundaries and the Politics of Space in Tunisia” documents multiple cases where a technocratic approach appears not to have been applied consistently, and was in some cases captured by local clientelistic interests. As a result of this and some unpopular decisions (e.g., splitting up existing municipalities) many of the new municipal borders became hotly contested.

⁷⁵ All election data come from Clark, Blackman, and Şaşmaz, “What Men Want: Politicians’ Strategic Response to Gender Quotas.”

turnout, consistent with historical patterns in rural sectors.⁷⁶ However, if we aggregate results to municipalities' 2014 boundaries—i.e., excluding votes from newly added sectors—there is no significant difference between old and expansion municipalities on these measures. Future analyses will provide more a more robust analysis of this impact and persistent effects for the 2019 parliamentary elections.

Table 2. Competitiveness in the 2018 municipal elections

Type of municipality	Effective Number of Lists		Margin of Difference		Turnout (% of population)	
	Actual	2014 boundaries	Actual	2014 boundaries	Actual	2014 boundaries
<i>Expansion (n = 187)</i>	4.44 (1.50)	4.24 (1.43)	0.11 (0.10)	0.13 (0.13)	0.18 (0.05)	0.21 (0.07)
<i>Old (n = 77)</i>	4.26 (1.42)	4.26 (1.42)	0.14 (0.11)	0.14 (0.11)	0.22 (0.07)	0.22 (0.07)
<i>New (n = 86)</i>	3.89 (1.17)		0.13 (0.10)		0.18 (0.07)	
Total municipalities	350	264	350	264	350	264
p-value	0.028	>0.9	0.058	0.2	<0.001	0.4

Note: Effective number of lists is calculated using a Herfindahl-Hirschman Index, margin of difference is the difference in vote share between first- and second-placed lists, and turnout is the percent of votes cast divided by the population (excludes blank or cancelled votes, as this data is not available). Results in the "actual" column are the observed results from the 2018 elections with the true 2018 boundaries. Results in the "2014 boundaries" column report the results only for those sectors that were part of the municipality in 2014 (i.e., excluding the newly added sectors). Columns report the mean and standard deviation (in parentheses), and p-values are calculated across municipal type using a Kruskal-Wallis rank-sum test.

Governance challenges. As of 2014, municipalities were highly concentrated in the northeast (particularly in the Grand Tunis capital area) and center-east Sahel regions, and nearly half of these (68 out of 154) remained unchanged in 2018.⁷⁷ In comparison, as Table 3 shows, a large majority of existing municipalities in interior and southern regions were expanded as of 2018 (101 out of 110). In the governorates of Kairouan, Kasserine, and Sidi Bouzid, the median municipality increase in population size by approximately 71 percent, and in geographic area by over 500 percent. These changes have important implications for the capacity of newly formed or expanded municipal governments to meet the increased expectations for service delivery under decentralization and—if unaddressed—have the potential to widen regional inequalities.

⁷⁶ During the 2011 and 2014 national-level elections, rural sectors had consistently lower turnout levels, more competitive lists, and lower margins of difference than communal sectors, suggesting that their citizens were less politically engaged and ideologically polarized than in municipalities.

⁷⁷ The historic concentration of municipalities in the northeast and center east reflects the higher levels of urbanization on the coast but well as the clientelistic incorporation of more municipalities in favored governorates like Monastir during the Bourguiba regime (see Kherigi, "Municipal Boundaries and the Politics of Space in Tunisia").

Table 3. Municipal characteristics by type (2014 to 2018)

Region	Type	N	Population (median)			Area in km ² (median)		
			2014	2018	Change	2014*	2018	Change
Northeast	<i>Unchanged**</i>	25	42,518	42,518	0%	17.1	16.0	0%
Ariana, Ben Arous, Bizerte, Mannouba, Nabeul, Tunis, Zaghouan	<i>Expansion</i>	52	21,113	27,607	32%	39.0	97.7	107%
	<i>New</i>	14		19,360			183.5	
Northwest	<i>Unchanged</i>	1	9,807	9,807	0%	173.2	173.2	0%
Beja, Jendouba, Le Kef, Siliana	<i>Expansion</i>	37	9,634	20,155	58%	36.8	360.6	552%
	<i>New</i>	15		12,830			169.4	
Center East	<i>Unchanged</i>	43	12,962	12,962	0%	20.8	20.8	0%
Mahdia, Monastir, Sfax, Sousse	<i>Expansion</i>	34	11,629	29,303	63%	51.5	182.1	305%
	<i>New</i>	13		18,914			152.1	
Center West	<i>Unchanged</i>	0						
Kairouan, Kasserine, Sidi Bouzid	<i>Expansion</i>	32	9,731	25,044	71%	48.5	422.4	593%
	<i>New</i>	23		15,507			256.3	
Southeast	<i>Unchanged</i>	6	45,790	45,790	0%	(*)	161.1	
Gabes, Medenine, Tataouine	<i>Expansion</i>	16	10,633	17,772	33%	(*)	720.7	
	<i>New</i>	11		13,310			318.6	
Southwest	<i>Unchanged</i>	2	13,409	13,409	0%	(*)	712.0	
Gafsa, Kebili, Tozeur	<i>Expansion</i>	16	21,101	22,265	15%	(*)	827.7	
	<i>New</i>	10		10,480			642.7	

* Geographic area estimates for 2014 present an upper bound, based on adding together the areas of all sectors that had some communal population within each municipality in 2014; they will overestimate size in cases where these sectors had significant rural populations, and in the Southern regions where sectors are large with sparse populations. For this reason, 2014 areas are not reported for the Southeast and Southwest.

** "Unchanged" is the Ministry of Local Affairs designation in 2016; however, as of 2018 a few of these municipalities had changed or lost sectors.

Source : 2014 Census (INS) and Ministry of Local Affairs (2016).

Conclusion

The incorporation of more than a third of the Tunisian population into local politics has important implications for democracy. In addition, the significant increase in many existing municipalities' geographic space and population impacts their capacity to meet the heightened expectations for service delivery under the new constitution and municipal code. However, the lack of official geospatial data on these changes makes it difficult to quantify or systematically study this process or its impact. The dataset described in this note attempts to fill this gap by synthesizing approximate municipal boundaries using data from multiple sources. A similar approach may be useful in other countries with shifting administrative units and incomplete data.

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USING HISTORICAL MAPS FOR MENA POLITICAL SCIENCE RESEARCH

By Ashrakat Elshehawy

Historical maps contain a wealth of information. They enable us to access rare data and reveal information that would have been otherwise lost in the archives. Access to historical maps can equip scholars of the politics of the Middle East with new data sources and a toolkit that allows them to address many unique research questions, ranging from implications of historical conflict to the roots of political and economic determinants of development in the Middle East. Historical maps can also help us understand the infrastructure that historically helped social movements develop and the implications of different repression methods on the fabric of the city. Recovering municipal and national boundaries and changes thereof (see Clark's contribution in this symposium) can prove extremely helpful to understanding movement and migration across time and space and their implications. Historical maps can further be highly beneficial for research in the field of Historical Political Economy when researchers face the issue of missing or incomplete data sources such as censuses.

In this article, I showcase the potential of using historical maps by discussing examples of published and ongoing research projects that underline how we can benefit from historical maps and generate data in a variety of research areas. After that, I highlight ways through which we can get access to historical maps of the Middle East. I also discuss challenges and limitations researchers could face with historical maps.

How does Middle East Research employ Historical Maps?

Historical maps have contributed to recent extensive advances in data collection for social mobilization research. Ketchley,⁷⁸ for example, uses historical map sheets dating between 1916 and 1918 to geo-locate telegraphs, telephones, postal, railway, and road networks; the author then uses that data to explain infrastructural drivers of the diffusion of protests in the Egyptian Revolution of 1919. Brooke and Ketchley⁷⁹ also use maps of Egypt to geolocate railways in 1936 to show that the expansion of political Islam was more likely in sub-districts with train stations connected to the Egyptian railway. Such studies have made extensive use of historical maps to extract indicators of early forms of state, economic, and communication infrastructure that could have been otherwise lost in archives.

Scholars researching determinants of state formation and political and economic development have also recently highlighted how historical maps help advance data collection in that field. Blaydes and

⁷⁸ Ketchley, Neil, "Telegraphing Revolt: Protest Diffusion in the 1919 Egyptian Revolution," *Draft*, (2021).

⁷⁹ Brooke, Steven, and Neil Ketchley, "Social and Institutional Origins of Political Islam," *The American Political Science Review* 112, no. 2 (2018): 376-394.

Paik⁸⁰ use maps from Kennedy's⁸¹ *Historical Atlas of Islam* to locate Muslim trade routes. They show that proximity to the Muslim trade routes had a positive impact on urbanization patterns in the year 1200. However, as new trade routes emerge, such as the European discovery of the Cape Route, the authors show a decline in Middle Eastern and Central Asian cities by 1800. Blaydes and Paik⁸² use maps of crusader origins from the EurAtlas project by Nüssli⁸³ to "calculate crusaders who mobilized during the First through Fourth Crusades for each sovereign entity in the map."⁸⁴ Using this crusader variable as a proxy for the degree of crusade mobilization in each location, they find that areas with larger numbers of crusaders have increased political stability, institutional development, and urbanization. Grosjean⁸⁵ uses maps from the *Periodical Historical Atlas of Europe*⁸⁶ to show that areas governed by the Ottoman Empire experience lower levels of financial development in the present.

Scholars researching philanthropy and service delivery in the Middle East have expended remarkable efforts to obtain and employ historical maps in their research. For example, Cansunar⁸⁷ underlines inequalities in access to charitable infrastructure, like public water fountains, across different ethnic and social groups in Ottoman Istanbul. She uses historical maps to support her empirical analysis by geocoding geographic covariates of Istanbul's neighborhoods, such as location of mosques, elevation and distance from the coast, distance to the Imperial Palace, and walking paths from a neighborhood with no fountains to one with fountains. The author shows that elites endowed the majority of the water fountains in Ottoman Istanbul to neighborhoods of other Muslims and elite groups and finds that the physical cost of obtaining water is lower in elite neighborhoods.

Figure 1: Georeferenced maps of Alexandria 1915 - 1930

⁸⁰ Blaydes, Lisa, and Christopher Paik, "Muslim Trade and City Growth before the Nineteenth Century: Comparative Urbanization in Europe, the Middle East and Central Asia," *British Journal of Political Science* 51, no. 2 (2019): 845-868.

⁸¹ Kennedy, Hugh, *An Historical Atlas of Islam* (Leiden: Brill, 2002).

⁸² Blaydes, Lisa, and Christopher Paik, "The Impact of Holy Land Crusades on State Formation: War Mobilization, Trade Integration, and Political Development in Medieval Europe," *International Organization*, (2016): 551-586.

⁸³ Nüssli, Christos, "Digital Historical Cartography of Europe," 2011, <http://www.euratlas.com/about.html>.

⁸⁴ Blaydes and Paik, "The impact of Holy Land Crusades", 566.

⁸⁵ Grosjean, Pauline, "The Institutional Legacy of the Ottoman Empire: Islamic Rule and Financial Development in South Eastern Europe," *Journal of Comparative Economics* 39, no. 1 (2011): 1-16.

⁸⁶ EurAtlas, "Periodical Historical Atlas of Europe," Version 1.2 of 2008.

⁸⁷ Cansunar, Asli, "Distributional Consequences of Philanthropic Contributions to Public Goods: Self-Serving Elite in Ottoman Istanbul," *Journal of Politics*, (Forthcoming).



Maps sources: On the left, the map is obtained from David Rumsey Map Collection, 1915 Alexandria map by Ministry of Finance Egypt⁸⁸. On the right, the map of 1930 is from New York Public Library by Pincus and Princess Firyal Map Division⁸⁹.

My dissertation research focuses on understanding mechanisms of responsiveness of local elites to public service needs in their cities, highlighting highly important patterns and developments of internal self-governance in colonial cities and how they can relate to local economic development. Alexandria provides a good example of how historical maps can help us gain access to important and rare information about the development of a city (Figure 1). In the 19th and early 20th century, Alexandria was well documented by cartographers because of its highly cosmopolitan nature and centrality for trade. Thus, I have been able to collect a series of maps that provide me with neighborhood-level data to investigate under which circumstances local elites of different backgrounds are responsive to some service-related needs but not others, and how those decisions impact economic and social inequalities that persist over time and space.

⁸⁸ Ministry of Finance Egypt, Maslahet el Misahah, Wizarat al-Maliyah, "Sheet 21 Alexandria Map," Dated 1915 in David Rumsey Map Collection, accessed January 2021 <https://www.davidrumsey.com/>.

⁸⁹ Pincus, Lionel, and The New York Public Library Princess Firyal Map Division, "Plan général d'Alexandrie avec ses embellissements récents, 1930; Plan général de Ramleh," Dated 1930 in The New York Public Library Digital Collections, accessed January 2021, <https://digitalcollections.nypl.org/>.

In summary, the work highlighted in this section stresses how geography can be important to understand determinants of political and economic development, provision of charitable endowments and public goods, and also political behavior. Historical maps allow us to test for theories of a spatial nature. They also let us measure proximity directly and show changes over time. Finally, historical maps can be central for researchers to develop measures of segregation⁹⁰ and to understand under which circumstances segregation becomes embedded in the city's fabric. For example, Lévêque and Saleh⁹¹ use historical maps of Cairo to geocode firms in Cairo between 1848 and 1868 to show how industrialization affects religious segregation in the city.

Accessing Historical Maps and the Associated Limitations

These types of valuable historical maps can be obtained from a variety of sources. In this section, I discuss some of these map sources and associated limitations; Table 1 summarizes different public and university libraries, projects, and atlases where historical maps are located. The list is certainly not exhaustive. To use these maps, many will have to be located, checked physically, and scanned, preferably by high-resolution scanners. If those are not available, researchers can also use their phones to take pictures and stitch them together. Unfortunately, because of the COVID-19 pandemic, physical access to libraries, archives, and universities might be restricted or limited at the moment. However, some digital collections can be easily accessed and maps can be downloaded directly. GIS⁹² software such as QGIS and ArcGIS can then be used to georeference these maps. Georeferencing is the process of matching map sheets' locations to the coordinate system of, for example, a current map. We can then extract positions of entities of interest, boundaries, and textual information.

The British Library in London is a great source for finding historical maps – its map collection is one of the largest in the world. Of course, some maps require access to the library's reading rooms; however, there are also scanned maps that can be downloaded online. Also, the National Library of Scotland includes maps of North Africa and some parts of the Levant. The Library of Congress also hosts an extensive collection of maps, partly physical and partly online. The New York Public Library has a digital collection interface that provides access to some Middle East historical maps. Another great source is the Bibliothèque nationale de France (BNF), which includes a large online map collection that permits high-resolution downloads. In Egypt, Bibliotheca Alexandrina has a map collection and atlases with a special focus on Alexandria, Egypt, the Arab world, and the Mediterranean region. The library has a search tool for its map collection that provides information, for example, about which maps have been digitized; that tool can be fully accessed through the library's computers in Alexandria.

In addition, university libraries around the world host collections of Middle East historical maps. The University of Oxford has a great collection of maps. Most of the maps are stored offsite and

⁹⁰ Cho, Wendy K. Tam, and James G. Gimpel, "Geographic Information Systems and the Spatial Dimensions of American Politics," *Annual Review of Political Science* 15, (2012): 443-460.

⁹¹ Lévêque, Christophe, and Mohamed Saleh, "Does Industrialization affect Segregation? Evidence from Nineteenth-century Cairo," *Explorations in Economic History* 67, (2018): 40-61.

⁹² Geographical Information System.

require ordering to the map room. Ketchley⁹³ and Brooke and Ketchley⁹⁴ have used Egyptian historical maps from Princeton and Harvard universities for their recent research. Harvard has a geospatial library⁹⁵ that is a great source for getting raster layers and shapefiles for Middle Eastern cities that demarcate their contemporary and historical administrative divisions. These can also be viewed as layers on interactive maps. The Perry-Castañeda Library Map Collection at the University of Texas at Austin also gives researchers access to a great map collection. Although some institutions offer public online access to at least parts of their collections, there are, of course, institutional licensing restrictions and associated costs that can come with accessing needed maps.

National archives of countries hold many important maps; however, limitations in some countries can include, for example, long wait times for access to these archives. Also, in many countries, national archives and public libraries do not have fully cataloged archives, and this makes it challenging to know in advance what may or may not be available. Another general issue is having map sheets of the same city or country scattered around different institutions across the world. For example, recently, I could find only one sheet for a historical map that I needed for Alexandria, and it was not known in the library where the other parts may be.

It is worth highlighting that scholars from different academic institutions have been making remarkable efforts to set up projects to collect and digitize maps, in some cases also to crowd-source georeferencing efforts of these maps. For example, David Rumsey's map collection is an excellent online resource for locating Middle East maps. Google Earth also has a collaboration with Rumsey: a collection of maps from 1680-1930 are georeferenced online and can be easily viewed by swiping around a world map. Al-Turayyā project was developed by a team from the Universities of Vienna and Leipzig to assist researchers interested in geographical routes. They map the pre-modern Islamic world that consists of 2000 geographical routes and localities ranging "from Andalusia and the Maghreb in the West, to Samarkand and Sind in the East;"⁹⁶ the researchers georeference these routes and localities relying on Cornu.⁹⁷

Last but not least, researchers requiring access to older historical maps of the Middle East, for example, for pre-Islamic, early Islamic, or from Crusaders periods, can find atlases helpful for this task⁹⁸ (The Appendix includes further details for those interested in exploring these resources).

Conclusion

In recent years, scholars of the politics of the Middle East have made notable efforts to obtain historical maps and use them to generate new data that can speak to a variety of research questions. However, there is still space in the field to make use of underutilized historical maps and unlock their full potential in research. In order to truly advance this work, it is essential that GIS skills be

⁹³ Ketchley, "Telegraphing Revolt".

⁹⁴ Brooke and Ketchley, "Social and Institutional Origins".

⁹⁵ This library includes maps from sources outside of Harvard as well.

⁹⁶ al-Turayyā, Project. "A gazetteer (al-Turayyā Gazetteer, or al-Turayyā Gazetteer) and a geospatial model of the early Islamic world," accessed February 2021, <https://althurayya.github.io/>.

⁹⁷ Cornu, George, *Atlas du Monde Arabo-Oslamique à l'époque Classique: IXe-Xe Siècles* (Leiden Brill, 1983).

⁹⁸ Al-bab includes a list of good resources: <https://al-bab.com/reference-section/historical-maps-arab-world>.

integrated into students' curricula. Geographical attributes extracted from historical maps can permit measurements of new variables. Historical maps can also help scholars interested in geospatial implications of temporal events find data sources to test their theories and can help us take advantage of natural experiments based on geography and geographic discontinuities.⁹⁹ Historical maps represent an important source for novel data collection. These maps can help scholars of the politics of the Middle East evade issues tied with contemporary data collection in countries where research data are scarce and allow us to answer research questions in unique new ways.¹⁰⁰

Appendix:

Table 1: Public Libraries, University Libraries, Research Projects, and Historical Atlases for locating Historical Maps

Public Libraries	
British Library	Physical and online access
National Library of Scotland	Physical and online access
Library of Congress	Physical access, some maps online
Bibliothèque Nationale de France	Significant digital collection, other cartographic documents require physical access
Bibliotheca Alexandrina, Egypt	Requires physical access, full information about the map collection can be identified from the library's computers
New York Public Library	Online collection includes some Middle East maps
University Libraries	
University of Oxford, Bodleian Libraries	The majority of the Middle East-related maps require access to Weston library
University of Texas at Austin Perry-Castañeda Library Map Collection	250000 maps available, 20% of them are online
Harvard University	Geospatial library , a physical collection, and scanned maps

⁹⁹ Keele, Luke, and Rocio Titiunik, "Natural Experiments based on Geography," *Political Science Research and Methods* 4, (2016): 65.

¹⁰⁰ Cammett, Melani, and Isabel Kendall, "Political Science Scholarship on the Middle East: A View from the Journals," *PS: Political Science & Politics*, (2021): 1-8; Brooke and Ketchley, "Social and Institutional Origins".

Princeton University	Large map collection, including the Digital Maps and Geospatial Data Portal
University of Chicago	Middle East and North-Africa Map Collection
Projects	
David Rumsey's Map Collection	Probably one of the best collections online for Middle East historical maps
Google Earth	Georeferenced historical maps 1680-1930 based on Rumsey's collection
Old Maps Online	Using a searchable portal you can locate which external sources hold historical maps you need
EURATLAS by Nüssli ¹⁰¹	Collection of Maps for Europe and the Middle East ranging over several centuries
Geacron	Geo-temporal database since 3000 BC
al-Turayyā ¹⁰² Project	Project developing a geospatial model of the early Islamic world
Atlases	
Classical Atlas of Ancient Geography by Findlay ¹⁰³	Ancient Geography in the pre-Islamic period
Historical Atlas of the Muslim Peoples by R. Roolvink ¹⁰⁴	Expansion of Islam
An Historical Atlas of Islam by W.C. Brice edited by Kennedy ¹⁰⁵	Focus on the early Islamic period, includes boundaries and trade routes
Atlas of Islam 1800-2000 by Birken ¹⁰⁶	Muslim world - some maps focus on ethnic and religious presence

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¹⁰¹ Nüssli, "Digital Historical Cartography of Europe".

¹⁰² al-Turayyā, "A gazetteer".

¹⁰³ Findlay, Alexander G., *A Classical Atlas, to Illustrate Ancient Geography: Comprised in Twenty-five Maps, Showing Divisions of the World as Known to the Ancients with an Index of the Ancient and Modern Names* (William Tegg, 1849).

¹⁰⁴ Roolvink, Roelof, *Historical Atlas of the Muslim Peoples* (Routledge, 1957).

¹⁰⁵ Kennedy, *An Historical Atlas of Islam*.

¹⁰⁶ Birken, Andreas, *Atlas of Islam 1800-2000* (Brill, 2010).

CONTESTING HARD-LINE BOUNDARIES: TOWARDS A RECONCEPTUALIZATION OF BEIRUT'S NEIGHBORHOODS

By Ahmad Gharbieh

Geographical boundaries are notoriously unyielding. This may be more glaring in the case of geopolitical borders between nation-states and the hostile guardedness they exhibit, but it is equally true across scales, down to the divisions of neighborhoods that make up the towns and cities we inhabit. Even as they present as more traversable, they too are rigid and inflexible, both in their representational form as literal hard lines on a map and in their hard-line nature as uncompromising and ubiquitous political realities. Separating the land into clearly defined units is after all one of the principal conventions of political maps. The boundaries they harbor are precisely what these 'reference maps' –as they are often called– *refer* to. While the maps might also show infrastructural and natural features such as roads and waterways, their declared interest remains unchanged: to make conspicuous and assert an abstract taxonomy, one that the map deems necessary for it to provide its account of the world.

This is true of all maps and mapping systems. They impose an alien classificatory order upon the human landscape, and, while silently pretending to merely observe and record, they intervene and participate in bringing the landscape into being. Critiques of the map as a socially constructed text with claims of unbiased comprehensiveness are well established by now. Denis Wood provides a useful distinction between the two ways in which maps work to achieve their assertions. The first is that they are operationally efficient, they are able to carry out a task and practically do not fail. But maps also work in the sense of labor, they toil as they apply themselves and ceaselessly reproduce the culture from which they emerge.¹⁰⁷ Distinct sets of features and rules govern the production of the map: *a priori* features and the rules of measurement that govern its technical production and subliminal features and the rules of the social order that govern its cultural production.¹⁰⁸ They act together as the means by which the map figures its measure of the world, separating itself from the territory –the reality we *sense*– while simultaneously speaking about the territory to deliver a reality we *understand*.

The operational efficacy in maps, coupled with the fact that “they are generalized, scientific and seem to present an expert, neutral point of view,”¹⁰⁹ instills in them the kind of credibility that allows their assumptions to pass unnoticed. As these trusted visual devices insist on adhering to preordained configurations such as fixed neighborhood divisions, all the while assuming their detached neutrality, they conceal the lived practices of those whose experiences, although subject to the imposed reality of the hard line, might otherwise unsettle the neatly divided city. Generalized knowledge is necessarily exclusionary, often at the expense of the oppressed, the disenfranchised, and the marginalized. This, of course, is not surprising. Harley reminds us that, historically, both the

¹⁰⁷ Denis Wood, *The Power of Maps* (London; New York: The Guilford Press, 1992), 1.

¹⁰⁸ J. B. Harley, “Deconstructing the Map,” *Cartographica* 26, no. 2 (1989): 6.

¹⁰⁹ Catherine D’Ignazio, “What Would Feminist Data Visualization Look Like?,” *Center for Civic Media* (blog), December 1, 2015. <https://civic.mit.edu/feminist-data-visualization>.

makers and users of maps belonged to a very limited and small elite, and that fusing policy and territory in images was always used as an intellectual apparatus of power.¹¹⁰

It is tempting to think that newly developed and increasingly available mapmaking technologies, at the center of which are GIS and digital visualizations tools, can provide some liberating possibilities. Like citizen journalism, citizen mapping is dependent on access to content production tools and usable dissemination formats facilitated by digital interfaces. And the many synergies that open-source GIS software in particular promotes between multiple types of mappers across the amateur-professional spectrum, as well as the exchange and potential convergences it encourages between their mappings, is an undeniable and serious challenge to the authoritative power historically embedded in cartographic practice. But this could well simply reproduce the basic (but flawed) premise that mapmakers –all mapmakers– are involved in a scientific form of knowledge creation and that the map consequently delivers an objective view of the world, accurate, and value free. Catherine D'Ignazio warns that “[w]hile there is a lot of hype about data visualization, and a lot of new tools for doing it, ... fewer people are thinking critically about the politics and ethics of representation.”¹¹¹ The irony is that, as access to geolocalized maps expands and their producers and consumers diversify, standardization becomes more and more attractive. Not only does a geographical constant facilitate the clear and tangible advantages of “open data,” it also comes to symbolize the noble status of hard-earned democratic shareability, making it increasingly difficult to give up.

And why should we give it up? When readily available, a common technical frame of geographic reference can be vital in contexts plagued by the scarcity, secrecy, and neglect of data in both its raw and visualized forms. What is important to keep in mind is that, in many places, something seemingly as straightforward as an open, georeferenced, detailed, and reliable base map is hard to come by, let alone the datasets that might begin to populate it. It is certainly the case in Lebanon that such digital artifacts are both urgent and precious. The Lebanese state discloses little to no information about its public sector, which is increasingly seen as nontransparent and irredeemably broken amid the unprecedented current financial crisis. And this lack of public data in accessible formats is becoming a hallmark of its corrupt status quo.

If consistent administrative boundaries expedite the sharing and aggregation of data compatibly –equipping citizens, researchers and policy-makers to craft more informed and effective decisions collectively– then the lines’ debatable claims of forming correct and finite representations of neighborhoods can be momentarily overlooked. But it should not be forgiven. The map’s *a priori* and subliminal features that govern its production are not magically undone with a more open cartographic practice; GIS mapping tends to perpetuate the same classificatory systems already carved into the cannon of cartographic convention. And its aesthetics of dispassionate computation further reinforce the big myth of science and the blind ethics of accuracy. A more accessible cartography is essential, but, for it to be more critical, perhaps, as D'Ignazio suggests, “there are ways to do more responsible *representation* [emphasis added].”¹¹²

¹¹⁰ J. B. Harley, “Deconstructing the Map.”

¹¹¹ D'Ignazio, “Feminist Data Visualization.”

¹¹² D'Ignazio, “Feminist Data Visualization.”

In what follows, we will interrogate the role practice could play in the delineation of neighborhoods and the defining of urban boundaries, examine how different areas of Beirut are lived/perceived, and how such socio-spatialities could be represented across digital visualization tools. We will briefly highlight the divergent approaches to classifying the city's neighborhoods as tested through our work on the Beirut Built Environment Database (BBED) at Beirut Urban Lab, and look at examples of previous mapping projects that propose more alternative methods of reading the city such as islands of security, territories of sectarian political signs, and the spatial accounts of deliverymen.

The official division of Municipal Beirut into quarters and sectors can be traced back to a booklet issued by *Electricité du Liban* in 1973, in collaboration with Beirut Municipality as well as the Water and Telephone Companies and the Ministry of Post and Telegraph. As cities are homogenized into a standard idea of what neighborhoods are –what they look like (how they are defined), but also how they come to look the way they do (how they evolve)– it is administrative concerns that fuel these conventions over time. The 1973 example is a clear demonstration of how the conceptualization of neighborhoods, among other hegemonic map tropes, is often set, delivered, and maintained by those who hold the tools of power –cartography itself being one of them. As a group of government agencies, the author(ity) behind the original map of Beirut with its divisions into cadastral zones (quarters) and the more frequently encountered smaller districts (sectors) is a testament to the primary interests behind such jurisdictional impositions on the territory. But while they enable regulatory frameworks such as building law ascription and public service management such as basic fee-collection, the resulting lines are not detached geometric abstractions whose impact is only visible on the level of compartmentalized governance. Firstly, they were roughly informed by the city's physical –natural and infrastructural– features of the time and continue to retain a material familiarity. More importantly, they have lingered as the default defining outlines of Beirut's neighborhoods in cartographic representations since their inception, nourishing an omnipresent geographical description with tangible ramifications, despite them being at odds with the mental maps, practices, and popular designations and appellations of different neighborhoods by city dwellers, even until today.

An unofficial Beirut indeed exists in practice, from the commonly used names of buildings, streets, and public spaces that do not correspond to their official counterparts to enduring ghost boundaries such as the infamous civil war's Green Line to, of course, neighborhood accounts that clash with their manifestations on the map. But as mentioned earlier, hard lines are more than just theoretical shapes on an administrative map; they are political realities that perform myriad expressions of this hardness. For instance, while crossing Beirut's municipal boundary might not feel like 'leaving the city', there will necessarily be more frequent electrical blackouts. The gerrymandering of electoral sectors is another classic case of how even the slightest manipulation of district boundaries can have absolute and lasting effects.

The most concerning discord for us while setting up the BBED platform is how the city's official districts fail to reflect the different physical, environmental, and socioeconomic conditions seen on the ground. As a public online geo-portal with multi-layered social, environmental, and economic

data on building activity in Greater Beirut, one of the database's main objectives is to address the gaps in public information on urban development. In building this database, it was important to visualize, read, and analyze the data on the neighborhood level while remaining sensitive to indicators of class, sect, and urban fabric, to name but a few. In an attempt to address these concerns, and partly as an intuitive act of simple resistance against the troubling qualities of the cadastral map –its finality, disinterested erasures, and insistence on privileging a controlled and arbitrary space discipline– we took an aim at conceptualizing Beirut's neighborhoods in another way [Figure 1].

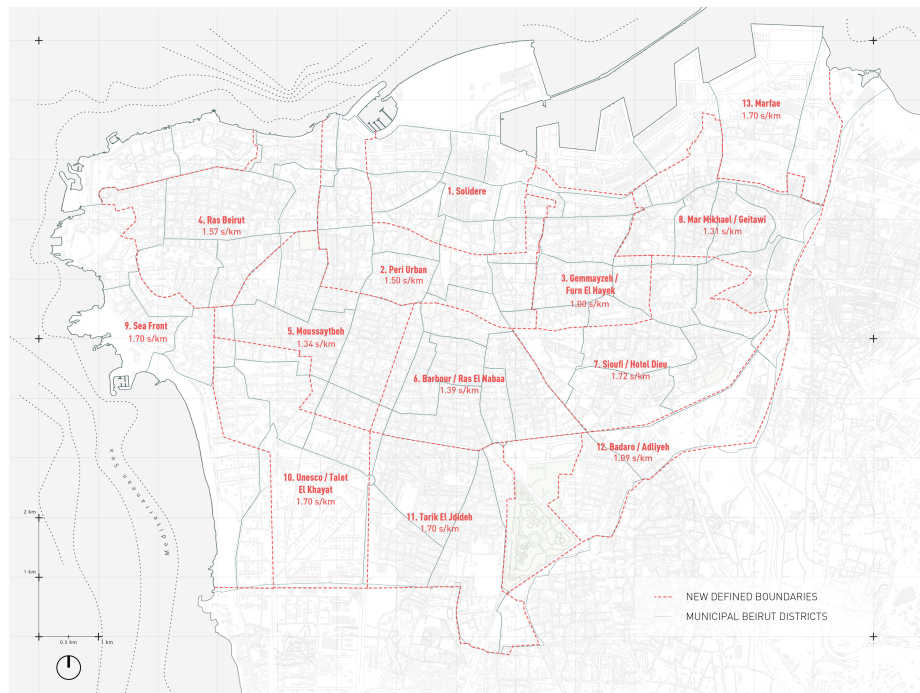


Figure 1: An experiment to divide Beirut's districts into neighborhoods with relatively equal surface areas. Beirut Built Environment Database, Beirut Urban Lab

As exciting as it was, this exercise of drawing our own non-official neighborhoods proved a complicated endeavor that requires more careful considerations. Admittedly, one of the main flaws in our process was that we tried to reconcile this more 'faithful' reconfiguration of Beirut's neighborhoods with an equal-area distribution that we hoped would make for more sound comparative analysis on the mathematical level. Many issues ensued, one of the most obvious being the discrepancy in building and population density across these new zones, which can render an equal-area metric of measurement useless. The more fundamental problem is one faced by all those who use maps to examine the terrain through both a geometric *and* an experiential lens: usually, something has got to give. But the main drive behind abandoning –or at least suspending– this attempt at a more socially aware map of Beirut's neighborhoods was our belief that in the context of the BBED and the role we envision it playing towards a collaborative ecosystem of urban change, a common frame of reference –one that enables an easy exchange between datasets made available by different groups– should trump all.

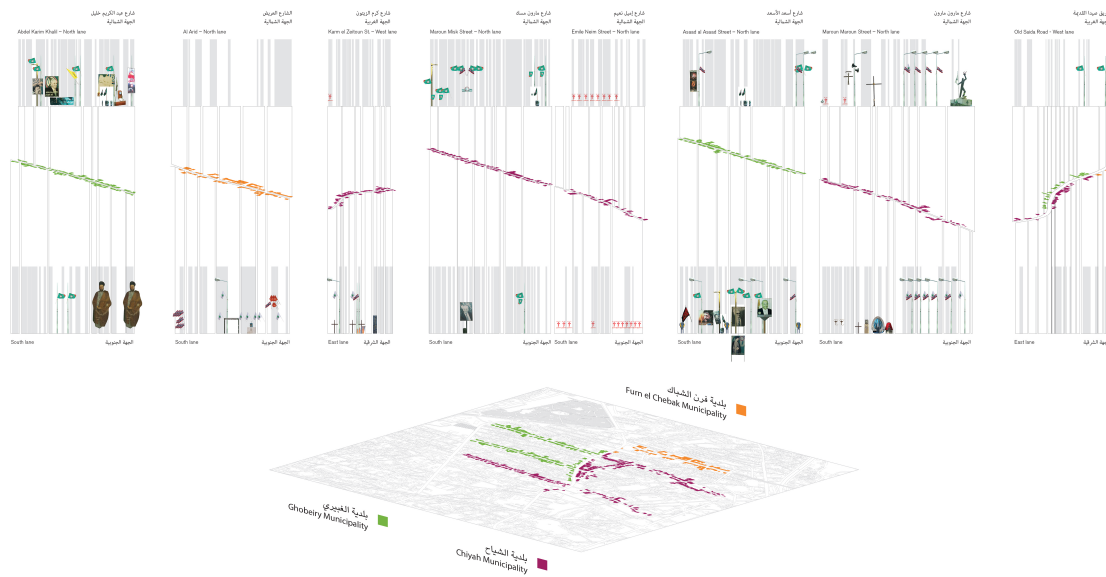


Figure 3: Territorializing the Street. Ahmad Gharbieh and Mona Fawaz, 2015

In another mapping project that investigated strategies of learning and navigating the city among 23 food delivery drivers residing and working in Beirut, the (re)formation of neighborhoods was a primary aim, and the excavation of their forms necessitated inventive methods of data collection and visualization. The interlocutors were asked to name the neighbourhoods that make up the city, as well as all the landmarks that they can list within them. Plotting the location of each mentioned landmark, tracing a derived outline around the individual clusters, and overlapping all the final accounts of neighbourhoods on one map [Figure 4], allowed for a very particular city to emerge, one that exposes intricate patterns of spatial reasoning and elastic boundary negotiations. By comparing the result to a map of Beirut's official sectors [Figure 5], we can clearly see the extent of these divergences. The intricacies and elasticities are even more visible on the micro level, where the complexities behind the delivery drivers' collective neighbourhood accounts can be probed even further. By comparing two Beirut neighborhoods, Hamra and Jeitawi, [Figure 6], for example, we see how the former interlocks with other neighborhoods while the latter is cradled within Achrafieh, itself a container of smaller entities and sub-neighborhoods. This fluidity is a testament to the fact that neighborhoods are seldom perceived in the same strict manner as those of the spatially regimented map, but are always informed by both individual and shared lived experiences and impressions. Interviews with the delivery drivers, who are almost all Syrian refugees, revealed that many factors inform their neighborhood configurations from how safe –or dangerous– a certain area is to how generous its inhabitants' tipping practices.¹¹³

¹¹³ Mona Fawaz, Dounia Salamé and Isabela Serhan, "Seeing the City as a Delivery Driver: Practices of Syrian Men in Beirut, Lebanon," in Fawaz et al., *Refugees as City-Makers*, 60–81.

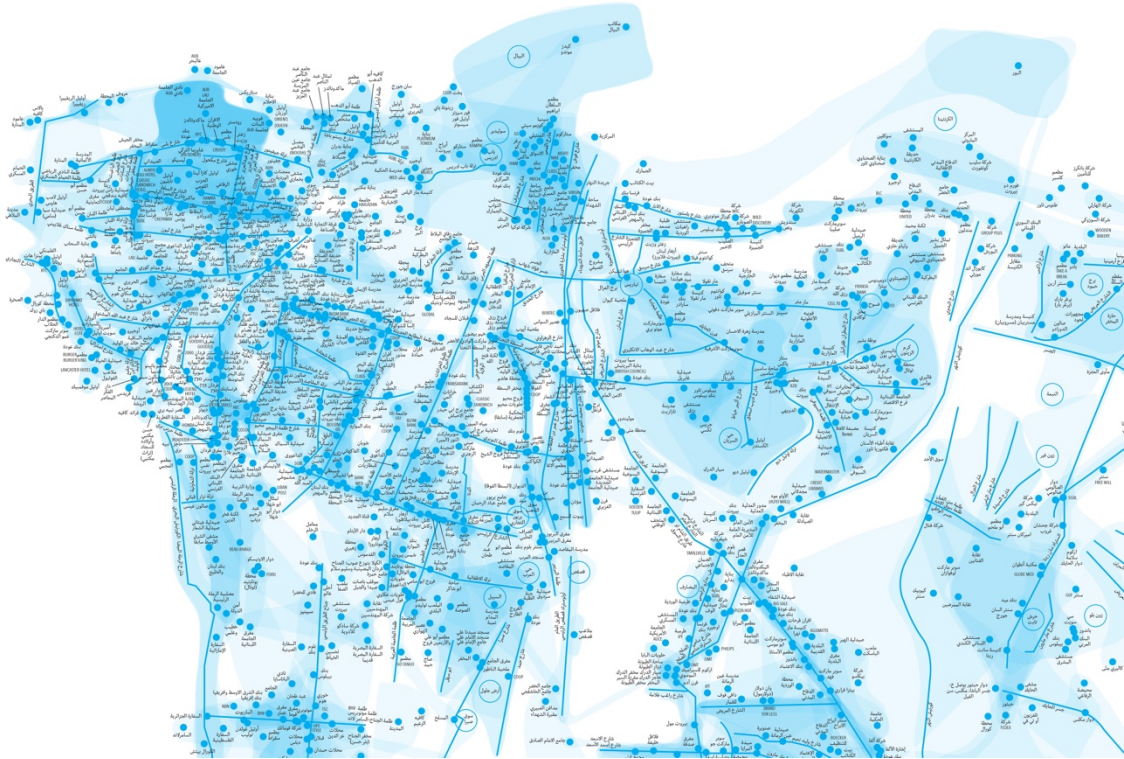


Figure 4: Delivery Drivers' Landmarks and Accounts of Beirut's Neighborhoods. Ahmad Gharbieh, Mona Fawaz, Monica Basbous, and Dounia Salamé, 2018

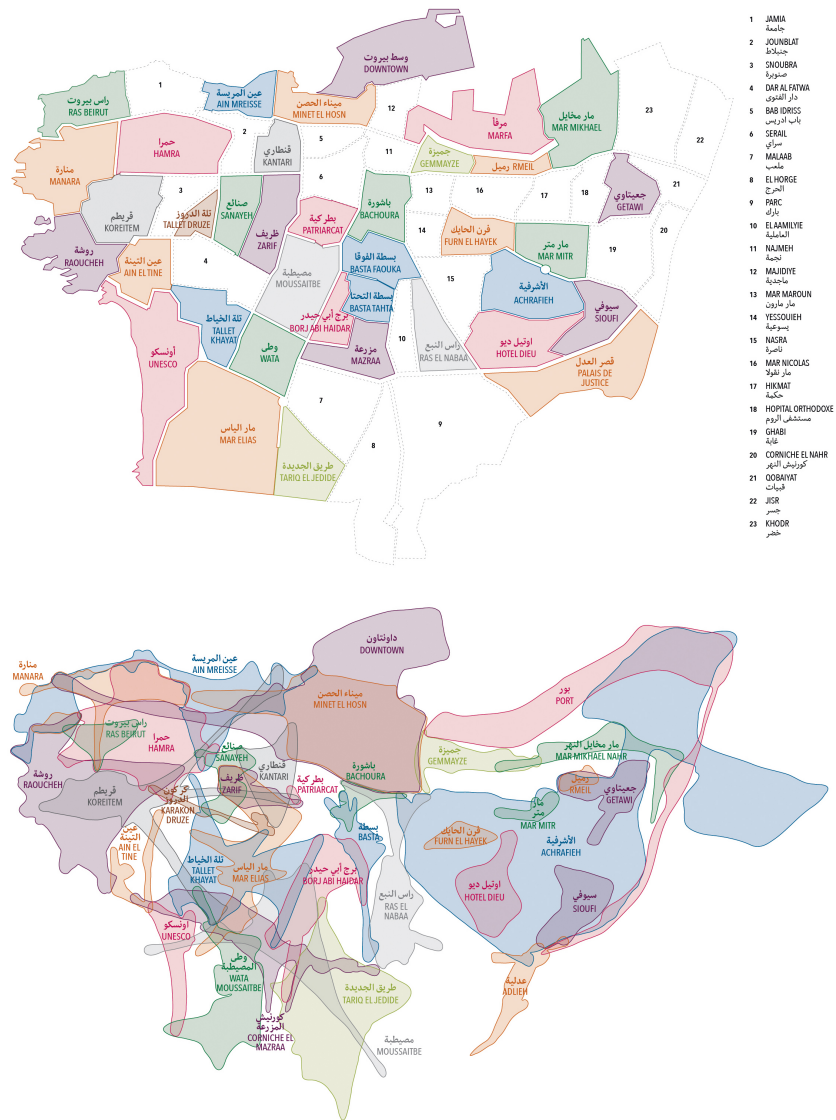


Figure 5: Administrative Sectors vs. Combined Delivery Drivers' Accounts of Neighborhoods. Ahmad Gharbieh, Mona Fawaz, Monica Basbous, and Dounia Salamé, 2018

The above mappings illustrate how contesting the fixity of hard lines must consider the more complex manner in which the city is reproduced through practices of everyday life. Especially as times of crisis reinscribe the need to rely on pre-existing demarcations, we need not dismiss the more authoritative, formal, and ultimately more conservative geographical boundaries but should try to be mindful of their utility as well as their overbearing presence and the implications of their finality. We need to use them selectively, propose critical ways through which they are visualized, and more importantly, engage mapping explorations that challenge both the method and result of their delineation, generating radically different neighborhood representations in the process.

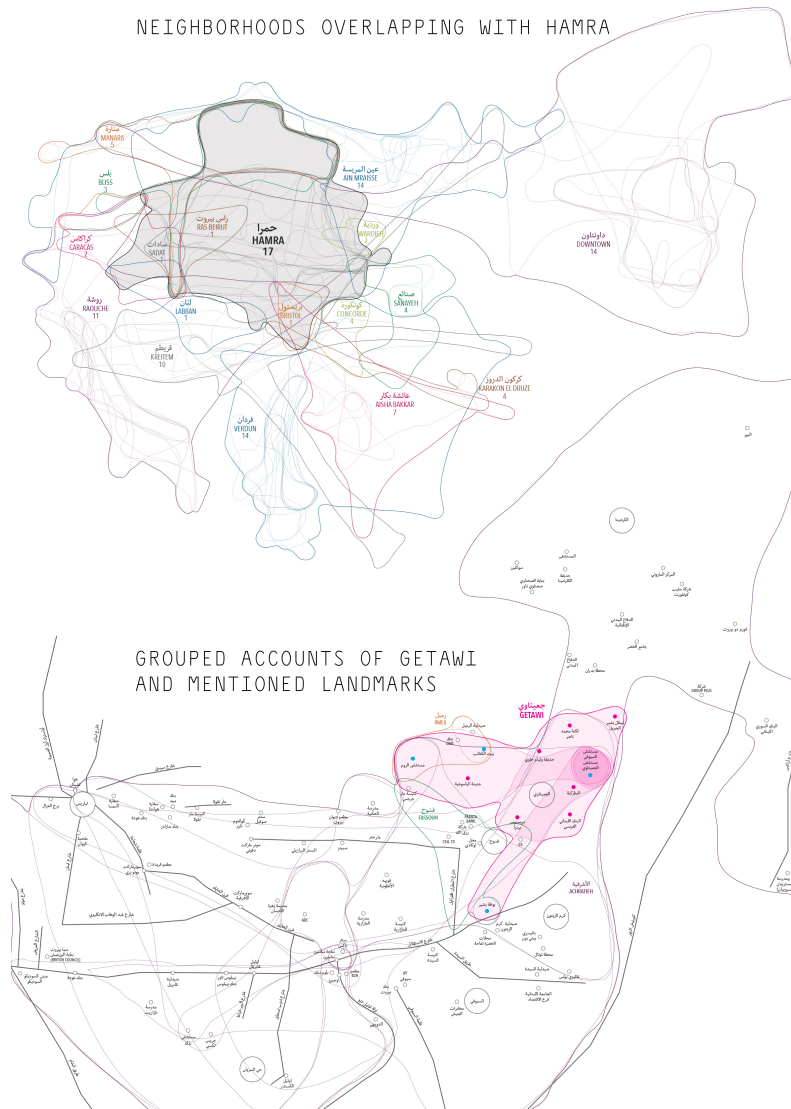


Figure 6: Delivery Drivers' Accounts of Hamra and Getawi Neighborhoods. Ahmad Gharbieh, Mona Fawaz, Monica Basbous, and Dounia Salamé, 2018

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SPATIAL APPROACHES TO THE STUDY OF LOCAL GOVERNANCE AND SERVICE PROVISION IN THE MIDDLE EAST

By Christiana Parreira¹¹⁴

How does civil war change patterns of electricity access at the neighborhood level? Does local electoral competition affect the quality of infrastructure? Where and how do non-state actors provide crucial social services if the state fails to do so? Remote sensing and other forms of spatial data constitute vital tools for answering questions like these – particularly in the Middle East and North Africa (MENA), where states frequently fail to collect systematic, micro-level data that is free and accessible to the public.¹¹⁵ In the MENA region and elsewhere, spatial data on electricity, road quality, infrastructural construction, and even pollution have been used to evaluate the micro-level roots of broader, state-level patterns of institutional durability and change.¹¹⁶

Here, I first describe how various spatial data sources have been used to understand distributive politics and local governance in the MENA region, with a focus on post-conflict contexts. I then discuss the methodological limitations of using spatial data, highlighting that complementary data must often be collected on-site using survey methods and/or qualitative fieldwork. I conclude with potential applications of spatial data analysis for scholars and policymakers interested in decentralization and local capacity-building.

Using spatial data to study local distributive politics

Scholars of Middle Eastern politics have grown increasingly interested in the study of sub-national distributive outcomes. Recent work links the quality of social service at the municipal or district levels to electoral competition,¹¹⁷ political party affiliation,¹¹⁸ and local institutions facilitating democratic participation.¹¹⁹ In many contexts, however, data on the core distributive outcome(s) of interest is not available from the state or other public sources. States may have an active interest in concealing such data and may hinder non-governmental data collection efforts. In other cases, states simply may not have the capacity to collect finely-grained micro-data, which requires extensive

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¹¹⁵ During my dissertation fieldwork in Lebanon, for example, I found that a variety of quantitative data – including data on voter registration – were only officially available for purchase, often for several hundred USD or more.

¹¹⁶ For examples outside the MENA, see Min, Brian, and Miriam Golden. “Electoral Cycles in Electricity Losses in India.” *Energy Policy* 65 (February 1, 2014): 619–25; Carlitz, Ruth D. “Who Gets What—and How Efficiently? Assessing the Spatial Allocation of Public Goods.” *Research & Politics* 6, no. 3 (2019): 1–6.

¹¹⁷ Gao, Eleanor. “Tribal Mobilization, Fragmented Groups, and Public Goods Provision in Jordan.” *Comparative Political Studies* 49, no. 10 (2016): 1372–1403.

¹¹⁸ Pellicer, Miquel, and Eva Wegner. “Socio-Economic Voter Profile and Motives for Islamist Support in Morocco.” *Party Politics* 20, no. 1 (2012): 116–33.

¹¹⁹ Volpi, Frédéric, Fabio Merone, and Chiara Loschi. “Local (R)Evolution in Tunisia, 2011–2014: Reconstructing Municipal Political Authority.” *The Middle East Journal* 70, no. 3 (2016): 365–81.

interfacing with municipal and/or regional institutions. These local institutions, similarly, may themselves lack the capacity to produce regular data on service provision.¹²⁰

In many instances, survey research can be fruitfully used to account for distributive outcomes.¹²¹ That said, there are a variety of reasons why survey data may not be feasible or preferable. First, surveys are often prohibitively costly to conduct, particularly for graduate students and when the analysis requires a repeated panel approach. Second, even if a survey is feasible, it may not be appropriate for the analysis of specifically local outcomes. Obtaining a sufficient sample size across a large number of localities – as opposed to a standard, nationally-representative sample – may make alternative approaches preferable where possible. Finally, in a variety of conflict and recent post-conflict contexts, surveys – either in-person or via phone – may be unsafe or fail to generate a sufficiently representative respondent pool.¹²² In any of these cases, spatial approaches may offer comparatively better, more accessible data.

Spatial data have frequently been incorporated into the study of micro-level distributive outcomes in the MENA region, particularly in conflict contexts.¹²³ One key variant of spatial data used is the DMSP-OLS “nighttime lights” data, which are publicly available and contain time-series imagery since 1992. The “nighttime lights” data have chiefly been used to understand patterns of electricity provision and population displacement; they have also been employed as a measure of local socioeconomic status.¹²⁴ De La Cruz et al. (2007) use the “nighttime lights” to evaluate infrastructural damage incurred the 2006 Israel-Lebanon conflict, an outcome of key interest to scholars of post-conflict reconstruction.

Other work has used this dataset to probe questions of distributive favoritism by the state and non-state actors. De Juan and Bath (2015), for example, show that areas of Syria favored by the Ba’athist regime subsequently experienced better-quality electricity provision and fewer blackouts during the country’s civil war.¹²⁵ In recently published work, I use the “nighttime lights” data to show how affiliation with non-state political movements affected local access to electricity in post-invasion Baghdad.¹²⁶ I argue that one non-state actor, the Sadrist Movement, leveraged local ties to redirect electricity at the neighborhood level to its areas of core support.

¹²⁰ Administrative capacity in local governments is often much lower than at the national level. In Lebanon, for example, 87% of municipalities have fewer than six employees, and about a third only have one. See Atallah, Sami. “About Administrative Decentralization in Lebanon.” Beirut: Lebanese Center for Policy Studies, 2015.

¹²¹ For a discussion of survey methodology in the MENA region, see Benstead, Lindsay. “Survey Research in the Arab World: Challenges and Opportunities.” *PS: Political Science & Politics* 51, no. 3 (2018): 535–42.

¹²² For a discussion of survey techniques in hard-to-survey populations, see Khoury, Rana B. “Hard-to-Survey Populations and Respondent-Driven Sampling: Expanding the Political Science Toolbox.” *Perspectives on Politics* 18, no. 2 (2020): 509–26.

¹²³ For more on using spatial data in conflict settings, see Alexei Abrahams and Diana Greenwald’s contribution to this symposium.

¹²⁴ For the latter in MENA research, see Bozçaga, Tugba, and Fotini Christia. “Imams and Businessmen: Islamist Service Provision in Turkey.” *Working Paper* (2020).

¹²⁵ De Juan, Alexander, and Andre Bank. “The Ba’athist Blackout? Selective Goods Provision and Political Violence in the Syrian Civil War.” *Journal of Peace Research* 52, no. 1 (2015): 91–104.

¹²⁶ Parreira, Christiana. “Power Politics: Armed Non-State Actors and the Capture of Public Electricity in Post-Invasion Baghdad.” *Journal of Peace Research*, OnlineFirst (2020).

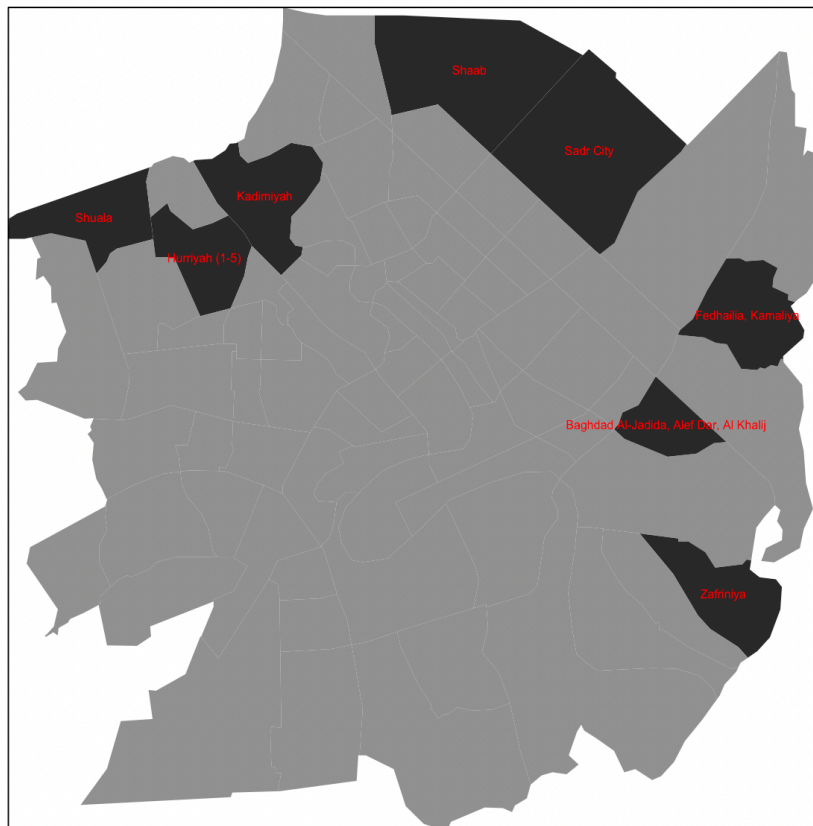


Figure 1: Sadr Office locations by neighborhood in Baghdad, 2003–06

Other creative approaches to spatial data have also been used to understand patterns of local governance and service delivery in the MENA region. Shapiro and Weidmann (2015) use spatial analysis of cell phone data in Iraq to associate cell phone use with a decrease in sectarian violence.¹²⁷ Cammett (2014) develops an original geolocated dataset of brick-and-mortar welfare institutions in Lebanon to demonstrate party tactics for delivering clientelism that vary at the local level.¹²⁸ A recent study by the American University of Beirut’s Issam Fares Institute creatively assessed the relationship between ambient levels of pollution and spatial patterns of electricity generator use in Beirut during blackouts.¹²⁹ These analyses demonstrate the wide range of data sources that can be used to generate insights into local governance and service delivery.

Tools for analysis of spatial data and associated challenges

¹²⁷ Shapiro, Jacob N, and Nils B Weidmann. “Is the Phone Mightier Than the Sword? Cellphones and Insurgent Violence in Iraq.” *International Organization* 69, no. 2 (2015): 247–74.

¹²⁸ Cammett, Melani. *Compassionate Communalism: Welfare and Sectarianism in Lebanon*. Ithaca, NY: Cornell University Press, 2014.

¹²⁹ Shihadeh, Alan, Marc Helou, Najat Saliba, Sara Jaber, Nader Alaeddine, Elias Ibrahim, Zahra Salahieh, and Maher Chitt. “Effect of Distributed Electric Power Generation on Household Exposure to Airborne Carcinogens in Beirut.” Issam Fares Institute for Public Policy, American University of Beirut, 2013.

Several key tools for collection and analysis of spatial data are particularly relevant for scholars of local and/or distributive politics. The DMSP-OLS data¹³⁰ on “nighttime lights” contains time-series data that can be downloaded and analyzed in GIS software, both ArcGIS and the open-source QGIS. While “nighttime lights” are sometimes used to proxy for population density, as well as electricity quality, the East View LandScan¹³¹ data are an alternative source of population data, also updated annually. DMSP-OLS data can also be accessed at a more frequent time interval (weekly, monthly, etc.), though this data is not free to the general public. Once collected, the “nighttime lights” and other analogous spatial data are compatible with several useful R packages, which may complement or substitute for common GIS software. These include *sp*,¹³² *rgdal*,¹³³ *classInt*,¹³⁴ *raster*,¹³⁵ *mapproj*,¹³⁶ *RColorBrewer*,¹³⁷ and *ggplot2*,¹³⁸ the last of which also provides tools for enabling Google services via R.

Additionally, a key resource for contemporary data on local infrastructure is Google Earth, which provides detailed satellite images that lend insights into reconstruction, infrastructural damage, public works, and road quality.¹³⁹ Analysis of such imagery has been used to understand local variation in distributive outcomes in other regions of the developing world, like sub-Saharan Africa,¹⁴⁰ but has not been (to my knowledge) used in scholarly work on the MENA region. There are some challenges associated with Google’s data, notably that it does not extend far back in time for much of the world. The use of this data, therefore, is likely to require or be complemented by historical mapping approaches or other data collected on-site.¹⁴¹

Challenges and limitations

A key limitation of spatial data in the study of distributive politics is that it rarely provides key insights independent of other data sources, which often must be collected on the ground. In my paper on electricity provision in Baghdad, for example, I use remote-sensing data in tandem with other data on the location of Sadrist Movement offices in the city, which was collected by a research team in Iraq in the post-invasion period.¹⁴² Work by Levin et al. (2018) combines remote-sensing data and social media data to understand how periods of violent conflict affect migration

¹³⁰ <https://ngdc.noaa.gov/eog/dmsp/downloadV4composites.html>

¹³¹ <https://www.eastview.com/resources/e-collections/landscan/>

¹³² <https://CRAN.R-project.org/package=sp>

¹³³ <https://CRAN.R-project.org/package=rgdal>

¹³⁴ <https://CRAN.R-project.org/package=classInt>

¹³⁵ <https://CRAN.R-project.org/package=raster>

¹³⁶ <https://CRAN.R-project.org/package=mapproj>

¹³⁷ <https://CRAN.R-project.org/package=RColorBrewer>

¹³⁸ <https://CRAN.R-project.org/package=ggplot2>

¹³⁹ See the piece by Abrahams and Greenwald in this symposium.

¹⁴⁰ Burgess, Robin, Edward Miguel, Remi Jedwab, and Ameet Morjaria. “The Value of Democracy: Evidence from Road Building in Kenya.” *American Economic Review* 105, no. 6 (2015): 1817–51.

¹⁴¹ See the piece by Elshehawy in this symposium for more on historical maps.

¹⁴² Data was collected by the International Crisis Group in collaboration with Melani Cammett; see Parreira (2020) for further details.

throughout the MENA region.¹⁴³ Other studies that relate remote-sensing data on service delivery to other variables, like ethnicity, party affiliation, or electoral behavior require similarly diverse approaches to data collection.

Though scholars may rely on pre-fabricated datasets to complement spatial approaches to distributive outcomes, much of this data is ultimately only possible with on-site fieldwork and local knowledge. At the very least, this type of data collection should be appropriately sourced and acknowledged by scholars, even when paired with remotely collected data. As Gharbieh's contribution to this symposium discusses more at length, this applies even to the "baseline" data that often provides the foundations for more extensive analysis, like GIS shapefiles with administrative borders and/or basic population characteristics. Such data, while commonplace in some contexts, is frequently hard to find or subject to rapid change in the MENA region. During my dissertation fieldwork on local governance in Lebanon, for example, I was unable to find up-to-date shapefiles at the municipal level, where boundaries frequently change as new municipalities are created. I instead relied on a variety of data made available through other researchers and the UNHCR to interpolate municipal boundaries.

Recent initiatives by MENA scholars have gathered remote-sensing and other spatial data collected on-site into more cohesive formats that are publicly accessible and available to other scholars. The Empirical Studies of Conflict (ESOC) initiative, for example, provides a variety of spatial data on conflict, demographics, borders, and post-conflict reconstruction – though the only MENA country they provide such data for (at this point) is Iraq.¹⁴⁴ Similarly, the Mapping Cairo initiative provides electoral and demographic spatial data for the city, disaggregated in many cases down to the neighborhood level.¹⁴⁵ Such integrative approaches are particularly promising for future scholarship.

Policy applications and conclusion

The development of local political institutions into vehicles of citizen inclusion and better service provisions have been core goals of activists and scholars in the MENA region.¹⁴⁶ In a broader comparative perspective, decentralization and empowerment of local institutions are perennial recommendations among social scientists and policymakers alike. Ideally, such interventions allow for citizen engagement and elite accountability, particularly in recently democratized and/or post-conflict contexts.¹⁴⁷ With that said, ties between central and local political institutions often evolve

¹⁴³ Levin, Noam, Saleem Ali, and David Crandall. "Utilizing Remote Sensing and Big Data to Quantify Conflict Intensity: The Arab Spring as a Case Study." *Applied Geography* 94 (2018): 1–17.

¹⁴⁴ <https://esoc.princeton.edu/country/iraq>

¹⁴⁵ <https://www.alexandrablackman.com/mapping-cairo>

¹⁴⁶ Sleiman, André. "Reforming Decentralization in Lebanon: The State of Play." Beirut: Democracy Reporting International, 2017; Blackman, Alexandra, Julia Clark, and Aytug Sasmaz. "Local Political Priorities during Tunisia's First Democratic Municipal Elections." *Working Paper* (2020).

¹⁴⁷ Myerson, Roger. "Federalism and Incentives for Success of Democracy." *Quarterly Journal of Political Science* 1, no. 1 (2006): 3–23; Tosun, Mehmet Serkan, and Serdar Yilmaz. "Centralization, Decentralization, and Conflict in the Middle East and North Africa." The World Bank, 2008.

in order to retrench elite interests, rather than improve the quality of governance.¹⁴⁸ Obtaining micro-level data on social service delivery, infrastructural quality, and other distributive outcomes is crucial to understanding the evolution of center-local ties – who wins and loses from different institutional arrangements

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¹⁴⁸ Clark, Janine A. *Local Politics in Jordan and Morocco: Strategies of Centralization and Decentralization*. Columbia University Press, 2018; Parreira, Christiana. “The Art of Not Governing: Local Politics in Postwar Lebanon.” Dissertation: Stanford University, 2020.

USING GIS TO UNDERSTAND HOW HUMANITARIAN AID MOVES

By Emily K. M. Scott

Over the last three decades, an increasingly formal and bureaucratic aid industry seeking stronger empirical grounds for their distribution and denial of aid in the Middle East has turned to geospatial data. Geographic information systems have been used to support flood preparedness, food security operations, shelter placement, and identify populations underserved by existing health services. As the Covid-19 pandemic highlights and exacerbates existing political and social inequalities in the politics of care and control, there are opportunities to learn from efforts to map hazard, exposure, and vulnerability by humanitarians, as well as scholars of health and conflict. In this piece, I describe how geospatial analysis and mapping are being used to explore humanitarian health response in the Middle East and amongst refugees more particularly. I identify pathways to collecting and analysing spatial data in response to three challenges political scientists might face: difficulty measuring baseline needs or specifying vulnerable groups, gathering data sub-nationally, and incorporating non-geographic features into spatial analysis. I then discuss the ethical implications of an accelerated mapping of vulnerable groups ‘from above’ due to the global pandemic.

Using GIS to Understand Need

Research on health during humanitarian crises has historically been limited, particularly in the Middle East where conflict and population displacement complicate data collection.¹⁴⁹ Scholars trying to measure the initial health status and needs of displaced populations and to specify vulnerable populations in conflict settings and during flight can face difficulties establishing a baseline understanding of humanitarian health needs. Such a baseline can be vital in the evaluation of health interventions and analysis of aid accountability and effectiveness, since meeting these needs should be the aim of organisations working in the health sector.

In the context of response to Syrian refugee needs in Lebanon, one approach to overcoming these challenges has been to use the United Nations High Commissioner for Refugees registration and vulnerability assessments in combination with convenience sampling to identify those who need care.¹⁵⁰ However, this method can exclude some of the most vulnerable people of concern from study, including

¹⁴⁹ Karl Blanchet et al., “Evidence on Public Health Interventions in Humanitarian Crises,” *The Lancet* 390, no. 10109 (November 2017): 2287–96; Francesco Checchi et al., “Public Health Information in Crisis-Affected Populations: A Review of Methods and Their Use for Advocacy and Action,” *The Lancet* 390, no. 10109 (November 2017): 2297–2313; Udani Samarasekera and Richard Horton, “Improving Evidence for Health in Humanitarian Crises,” *Lancet (London, England)* 390, no. 10109 (2017): 2223–24; Ronald J Waldman and Michael J Toole, “Where Is the Science in Humanitarian Health?,” *The Lancet* 390, no. 10109 (2017): 2224–26; Sandro Colombo and Enrico Pavignani, “Recurrent Failings of Medical Humanitarianism: Intractable, Ignored, or Just Exaggerated?,” *The Lancet* 390, no. 10109 (2017): 2314–24.

¹⁵⁰ UNHCR, UNICEF, and WFP, “VASYSR 2019 - Vulnerability Assessment of Syrian Refugees in Lebanon” (UNHCR, Government of Lebanon, 2019); Emily Lyles et al., “Health Service Utilization and Access to Medicines among Syrian Refugee and Host Community Children in Lebanon,” *Journal of International Humanitarian Action* 1, no. 1 (2016): 1–13; Nupur Kukrety and Sarah Al-Jamal, “Poverty, Inequality, and Social Protection in Lebanon,” *Social Justice and Development Policy in the Arab World*, 2016.

unregistered refugees and those whose vulnerabilities are less visible.¹⁵¹ It also relies on a vulnerability assessment and scale, designed by the UNHCR and its partners in Jordan and Lebanon, that assesses needs based on these organisations' perceptions and values surrounding those whose needs and exposure to potential harm matter.

GIS sampling using aerial tools and population data, as opposed to government or international organization registries, is a promising alternative to using UNHCR-assessed need as a baseline. It increases the probability of including unregistered groups in studies and allows scholars to develop their own proxies for measuring need. It has been used to improve sampling where there is no census, populations move, or where in-person surveys are dangerous.¹⁵² Scholars of health and conflict have generated gridded population counts and surveyed mortality using spatial population data to study the impact of conflict on health in Iraq.¹⁵³ Others have drawn on aerial geographic information, using LandScan, WorldPop, or UNOSAT services, to assess degrees of coverage in the delivery of health care¹⁵⁴ and gaps in utilization of health care services in Lebanon.¹⁵⁵

Collecting Geospatial Data

Due to humanitarian interest in more empirically grounded practice, as well as efforts to make operations and outcomes more quantifiable and legible to outside funders, geospatial data for humanitarian sectors is increasingly available. Scholars of health, conflict, and aid can explore UNOSAT (UN Operational Satellite Applications Programme), UN OCHA's Humanitarian Data Exchange and Humanitarian Response, WHO, and UNHCR geocoded data. They can also consult experts at the UN Open GIS Initiative.¹⁵⁶

¹⁵¹ Maja Janmyr and Lama Mourad, "Categorising Syrians in Lebanon as 'Vulnerable'," *Forced Migration Review*, no. 57 (2018): 19–21.

¹⁵² Stephanie Eckman and K. Himelein, "Methods of Geo-Spatial Sampling," in *Data Collection in Fragile States Innovations from Africa and Beyond*, ed. Johannes Hoogeveen and Utz Pape (Washington, DC: Palgrave Macmillan, 2020), Chapter 7: 103-128.

¹⁵³ Lp Galway et al., "A Two-Stage Cluster Sampling Method Using Gridded Population Data, a GIS, and Google Earth™ Imagery in a Population-Based Mortality Survey in Iraq," *International Journal of Health Geographics* 11, no. 1 (2012): 12.

¹⁵⁴ Enrica Leresche et al., "Conducting Operational Research in Humanitarian Settings: Is There a Shared Path for Humanitarians, National Public Health Authorities and Academics?" *Conflict and Health* 14, no. 1 (December 2020): 25; Claudia Truppa et al., "Utilization of Primary Health Care Services among Syrian Refugee and Lebanese Women Targeted by the ICRC Program in Lebanon: A Cross-Sectional Study," *Conflict and Health* 13, no. 1 (December 2019): 7.

¹⁵⁵ Truppa et al., "Utilization of Primary Health Care Services among Syrian Refugee and Lebanese Women Targeted by the ICRC Program in Lebanon."

¹⁵⁶ UNOSAT, "UNITAR Operational Satellite Applications Programme (UNOSAT)," United Nations Office for Outer Space Affairs / UN-SPIDER, 2000, <https://www.un-spider.org/space-application/emergency-mechanisms/unitar-operational-satellite-applications-programme-unosat>; OCHA Services, "The Humanitarian Data Exchange," HDX, n.d., <https://data.humdata.org/>; OCHA Services, "Humanitarian Response," OCHA Services, n.d., <https://www.humanitarianresponse.info/>; WHO, "The Global Health Observatory," World Health Organization, n.d., <https://www.who.int/data/gho/map-gallery>; UNHCR, "Geoservices," Operational Portal Refugee Situations, n.d., <https://data2.unhcr.org/en/geoservices/>; UN, "UN Open GIS Initiative," UN Open GIS, n.d., <http://unopengis.org/unopengis/main/main.php>.

However, a second challenge for the study of humanitarian health response arises because of a traditional focus on international and national levels of analysis, as well as data collection efforts that tend to stop at the level of the state. Data available through the United Nations Financial Tracking Service and provided by major donors, such as USAID and the European Union, provides a very limited picture of global aid once it flows *below* the state. This is particularly true in the Middle East, which is not yet included in efforts by groups like Aid Data to disaggregate and geocode data at sub-national levels.

Political scientists interested in analysis below the state may need to collect their own geospatial data. In health and humanitarianism, there has been an uptick in the use of volunteered geographic information (VGI). For example, hand-held GPS technology has been used to support response to complex emergencies,¹⁵⁷ including in refugee camp settings.¹⁵⁸ The UNHCR's RefuGIS project supported refugee creation of GIS data in Zaatari refugee camp in Jordan.¹⁵⁹

Alternatively, in my current work, I assess the feasibility of using the location of humanitarian project sites as a proxy for funding flows and as a solution to this level-of-analysis problem. I use systematic content analysis of organizational reports and interviews, focusing on locations of health projects, their movement (opening/closure) over time, as well as budgets, funding sources, and nature of activities to build a geocoded dataset of *where* aid goes.

Not All Politics are Geopolitics

My research focuses on why we see variation in distributions of global health aid within states, with some refugees receiving aid while others are denied. I am interested in the role interactions between humanitarian, sovereign, and non-state actors play in shaping these patterns. My preliminary research indicates that aid workers are more likely to identify and respond to needs where they have preferred relationships with state and non-state actors and that these preferences vary across organizations. For example, my ethnographic and interview-based research in Lebanon and Jordan shows aid workers at one INGO were more likely to take on new activities among populations who had lived under Islamic State rule, while at another organization aid workers did more to justify activities where the Jordanian state was strongest.

However, a third challenge to using GIS emerges in analysing geographic features—like the spatial distribution of global health aid—alongside non-geographic factors—such as relationships amongst state and non-state health service providers. Scholars have been warned not to use GIS to “over-territorialize” analysis,¹⁶⁰ by representing interactions between people in networks or alliances as if they occupy an area

¹⁵⁷ Firoz Verjee, “The Application of Geomatics in Complex Humanitarian Emergencies,” 2005.

¹⁵⁸ Delf Rothe, Christiane Fröhlich, and Juan Miguel Rodriguez Lopez, “Digital Humanitarianism and the Visual Politics of the Refugee Camp: (Un)Seeing Control,” *International Political Sociology*, October 27, 2020; Petra Füreder et al., “Earth Observation and GIS to Support Humanitarian Operations in Refugee/IDP Camps,” 2015.

¹⁵⁹ Brian Tomaszewski et al., “Using Geographic Information Systems (GIS) in Za’atari Refugee Camp, Jordan for Refugee Community Information Management and Mobilization: The RefuGIS Project,” in *2017 IEEE Global Humanitarian Technology Conference (GHTC)* (2017 IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA: IEEE, 2017), 1–10.

¹⁶⁰ Jordan Branch, “Geographic Information Systems (GIS) in International Relations,” *International Organization* 70, no. 4 (2016): 854.

with closed boundaries (using polygons) or borders as if they are hard where they are porous (using lines). There are strong examples of scholarship that avoids this trap. Starr disaggregates borders to analyze how they constrain and facilitate interaction and shape territorial disputes.¹⁶¹ Tomaszewski points to the role GIS can play in analysing the spatial configuration of refugee camps and relationships to institutions and environments.¹⁶²

Cluster Analysis and Hotspots

I turn to cluster analysis to bring geographic features “back in” to political science and help to integrate geographic and non-geographic features in my analysis. This type of analysis has the potential to answer questions about where aid goes, how closely aid follows the movement of populations that are most in need, the extent to which aid dollars flow beyond capital and major cities, and more. Cluster analysis supports the collection of spatial data and the development of understandings and/or hypotheses about geographic patterns. It can also reveal processes or mechanisms underlying geographic distributions.

A cluster can be thought of as an excess of events (such as a higher concentration of population or illness) or values (like a higher concentration of drought conditions) in a particular location.¹⁶³ Spatial clusters “pinpoint locations of statistically significant high- and low-value clusters of a phenomenon of interest” by assessing how likely it is that features are shared in neighbouring locations.¹⁶⁴

Cluster analysis allows for scholars to scan their data for spatial autocorrelation (using Global Moran’s I or Global Getis-Ord General G in ArcMap) and determine if characteristics are geographically linked. Areas are identified as statistically different from an assumed random geographic assortment of data or can be compared to a geographic control feature, such as the distribution of population. Should a phenomenon be found to have a geographic component, one can then identify the most relevant neighbourhoods, where particular phenomena are prevalent or absent (using Local Moran’s I or Local Getis-Ord G_i^*). These methods have been used to identify risk “hotspots” where populations are vulnerable to hazards¹⁶⁵ or exposed to environmental, demographic, and cultural factors.¹⁶⁶

In my work, I am exploring aid distribution in Lebanon as hot spots, cold spots, and spatial outliers and their spatial proximity to factors I expect to drive that distribution. For example, I look at how closely aid

¹⁶¹ Harvey Starr, “Opportunity, Willingness and Geographic Information Systems (GIS): Reconceptualizing Borders in International Relations,” *Political Geography* 21, no. 2 (2002): 243–61.

¹⁶² Brian Tomaszewski, *Geographic Information Systems (GIS) for Disaster Management* (Routledge, 2020).

¹⁶³ Geoffrey M Jacquez, “Spatial Cluster Analysis,” in *The Handbook of Geographic Information Science*, ed. S. Fotheringham and J. Wilson (Blackwell Publishing, 2008), 395–416; Lance A Waller and Geoffrey M Jacquez, “Disease Models Implicit in Statistical Tests of Disease Clustering,” *Epidemiology*, 1995, 584–90.

¹⁶⁴ Thomas J. Stopka et al., “Use of Spatial Epidemiology and Hot Spot Analysis to Target Women Eligible for Prenatal Women, Infants, and Children Services,” *American Journal of Public Health* 104, no. S1 (February 2014): 183; J. K. Ord and Arthur Getis, “Local Spatial Autocorrelation Statistics: Distributional Issues and an Application,” *Geographical Analysis* 27, no. 4 (September 3, 2010): 286–306.

¹⁶⁵ David A Ortiz, “Geographic Information Systems (GIS) in Humanitarian Assistance: A Meta-Analysis,” *Pathways: A Journal of Humanistic and Social Inquiry* 1, no. 2 (2019): 4.

¹⁶⁶ Sudipto Banerjee, “Spatial Data Analysis,” *Annual Review of Public Health* 37, no. 1 (March 18, 2016): 47–60; P. Gregg Greenough and Erica L. Nelson, “Beyond Mapping: A Case for Geospatial Analytics in Humanitarian Health,” *Conflict and Health* 13, no. 1 (December 2019): 50.

aligns with distributions of populations in need, the presence of other service providers, histories of violence, or patterns of state or non-state control. By comparing this with the possibility that aid is distributed as if randomly amongst refugees around the country, I aim to determine the factors most relevant to questions of *where* humanitarian actors engage in a politics of care and control.

The Ethics of Mapping in Light of the Covid-19 Pandemic

As Covid-19 strikes countries in the Middle East that are already suffering through long-term humanitarian crises, mapping of vulnerable populations is accelerating. Like other countries in the region, Lebanon and its Ministry of Public Health have responded by partnering with ESRI Lebanon and the World Health Organization to map the spread of Covid-19 and its movement across districts.¹⁶⁷ Humanitarian organizations pursuing additional funds are also contributing to a growing use of GIS. It can help them to make activities more quantifiable and externally verifiable to state donor agencies, like the European Union, USAID, or UKAID.¹⁶⁸

Proponents suggest GIS will help with monitoring humanitarian needs and issues of access from a distance,¹⁶⁹ which is becoming even more common because of the global pandemic. However, mapping can also exacerbate existing inequalities¹⁷⁰ between those who create knowledge and those who are made subjects. It can become data-centric, fail to represent local, lived realities¹⁷¹ or make events like migration or war appear technical.¹⁷² It can give the appearance of thoroughness by wrapping up complex social, economic, and political processes in the neat little bows of borders.¹⁷³ What is more, efforts to predict the movement of people or to identify the locations of aid activities can be made into political tools and endanger people in flight or in need of care. This information in the wrong hands could be used, for example, to direct armed forces to locations where refugees are likely to be or to help redirect migrants to unsafe areas.

For these reasons, GIS is often best used as a complement to field-driven research.¹⁷⁴ Field work can provide researchers with the contextualized knowledge they need to ask better questions, collect better data, and draw more interesting and measured conclusions. Additionally, it can help them identify and

¹⁶⁷ Mohammad Hammoud, "Lebanon MoPH Creates COVID-19 Public Portal," Kapcite, 2020.

¹⁶⁸ Dan Honig, *Navigation by Judgment: Why and When Top down Management of Foreign Aid Doesn't Work* (Oxford University Press, 2018).

¹⁶⁹ Kristin Bergtora Sandvik et al., "Humanitarian Technology: A Critical Research Agenda," *International Review of the Red Cross* 96, no. 893 (2014): 219–42; Patrick Meier, "New Information Technologies and Their Impact on the Humanitarian Sector," *Int'l Rev. Red Cross* 93 (2011): 1239.

¹⁷⁰ David Campbell, "Satellite Images, Security and the Geopolitical Imagination," in *From Above*, ed. Peter Adey, Mark Whitehead, and Alison Williams (Oxford: Oxford University Press, 2014), 289–98; Mark Duffield, "The Resilience of the Ruins: Towards a Critique of Digital Humanitarianism," *Resilience* 4, no. 3 (2016): 147–65.

¹⁷¹ Delf Rothe and David Shim, "Sensing the Ground: On the Global Politics of Satellite-Based Activism," *Review of International Studies* 44, no. 3 (2018): 414. This issue is also discussed at length in Ahmad Gharbieh's contribution to this symposium.

¹⁷² Huub Dijkstra, "Migration Tracking Is a Mess," *Nature News* 543, no. 7643 (2017): 32; Ryan Burns, "Rethinking Big Data in Digital Humanitarianism: Practices, Epistemologies, and Social Relations," *GeoJournal* 80, no. 4 (2015): 477–90.

¹⁷³ Branch, "Geographic Information Systems (GIS) in International Relations."

¹⁷⁴ Chris Brennan-Horley et al., "GIS, Ethnography, and Cultural Research: Putting Maps Back into Ethnographic Mapping," *The Information Society* 26, no. 2 (February 18, 2010): 92–103.

address the ethical stumbling blocks that accompany the making of maps. As Covid-19 limits opportunities to conduct field work and encourages increased use of geographic information gathered from afar, scholars will need to be more transparent and guard more carefully against these limitations.

Conclusion

Geocoded data and geographic information systems offer a valuable way to explore how health care and aid resources are distributed in the Middle East. It has the potential to improve analysis of the geographic factors that shape aid accountability and effectiveness, particularly as a complement to other field-based methods. The use of geocoded data is challenging and has limitations, particularly when that data is collected by practitioners who see and represent people, crises, and needs in particular ways. Yet, GIS also has the potential to help political scientists understand how global aid moves through local spaces and areas of conflict and crisis.

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RESEARCH SYMPOSIUM: COVID-19 AND MENA POLITICAL SCIENCE

INTRODUCTION: COVID-19 AND MENA POLITICAL SCIENCE: IMPACTS ON RESEARCH AND REGION

By Nermin Allam, Justin Gengler, Lisel Hintz, and Noora Lori

The outbreak of the COVID-19 pandemic has exacerbated existing challenges and created new barriers to research in the Middle East and North Africa (MENA) region. Scholars studying the MENA region will face far more challenges relating to conducting research and fieldwork compared to those studying less autocratic settings.¹⁷⁵ In addition, budget cuts to already scarce research funds in MENA states will have short- and long-term effects on the career advancement and research agendas of scholars based in the region. Indeed, recent reports highlight the considerable effects of the pandemic on further limiting research resources, accessibility, and funding,¹⁷⁶ as well as adversely affecting the quality of instruction¹⁷⁷ in academic institutions. Shifting the focus from research to the region, a number of important studies highlight the adverse effects of the pandemic on residents across the MENA region, including women,¹⁷⁸ migrants and foreign workers,¹⁷⁹ and other vulnerable populations.

This symposium builds on these studies by collecting perspectives on how both researchers and the populations they study have been affected by the pandemic. First, Sultan Alamer, Rana Mamdouh, and Nathan Brown examine the experiences of Egypt and Saudi Arabia to demonstrate that differences in technological advancements, institutional infrastructure (the “muscle memory” of state behavior), and relationships with healthcare workers influenced these authoritarian regimes’ response to the pandemic and shaped their policy outcomes.

¹⁷⁵ See Nermin Allam, Gail Buttorff and Marwa Shalaby, “COVID-19 Pandemic Compounds Challenges Facing MENA Research,” *APSA MENA Politics Newsletter*, 2020; Gail Buttorff, Marwa Shalaby, and Nermin Allam, “A Survey Reveals How the Pandemic Has Hurt MENA Research,” *Al-Fanar Media*, 13 September 23, 2020; and Caroline Krafft, “Academic Challenges in the Time of COVID-19: Arab Social Scientists and Humanities in Focus,” Arab Council for Social Sciences, 2020.

¹⁷⁶ Melanie Swan and Tarek Abd Al-Galil, “Health and Economic Crises Threaten Arab Funding for Research.” *Al Fanar*, 7 July 7 2020: <https://www.al-fanarmedia.org/2020/07/health-and-economic-crises-threaten-arab-funding-for-research/>

¹⁷⁷ See Ahmed Abdel-Tawwab, “Covid-19 and Education,” *Ahram Online*, 1 May 2020: <https://english.ahram.org.eg/NewsContentP/4/368212/Opinion/Covid-and-education.aspx>; and Zohra Lassoued, Mohammed Alhendawi, and Raed Bashitialshaer, “An Exploratory Study of the Obstacles for Achieving Quality in Distance Learning during the COVID-19 Pandemic,” *Journal of Education Sciences*, Vol 10, No. 9, 2020.

¹⁷⁸ Aseel Alayli, “COVID-19 Magnifies Pre-Existing Gender Inequalities in MENA,” Arab Barometer, 1 December 2020: <https://www.arabbarometer.org/2020/12/covid-19-magnifies-pre-existing-gender-inequalities-in-mena/>.

¹⁷⁹ Omer Karasapan, “Pandemic Highlights the Vulnerability of Migrant Workers in the Middle East,” *Brookings* (blog), September 17, 2020, <https://www.brookings.edu/blog/future-development/2020/09/17/pandemic-highlights-the-vulnerability-of-migrant-workers-in-the-middle-east/>.

Başak Yavçan adds a local politics perspective to studies of Syrian asylum-seekers in Turkey during COVID, finding vast variation based on their host municipality's connections to international donor networks. Yavçan demonstrates how municipalities that had already established policy implementation networks through the 2016 EU-Turkey Migration Deal led them to develop response mechanisms for addressing vulnerable populations such as LGBTQI+ and disabled individuals, leaving them better equipped to respond during the pandemic in protecting both Syrian migrants and host communities. By focusing on the meso-level of analysis, her research shows how local municipalities, international donors, and civil society networks play a key role in shaping subnational variation in health outcomes and pandemic responses.

Aida Essaid similarly adds an important perspective to scholarship on the effects of the pandemic on vulnerable MENA populations. Drawing upon her role as Director of the Information and Research Center at Jordan's King Hussein Foundation, Essaid cautions that it is problematic to attempt to measure the impact of COVID on refugee populations independently from vulnerable members of the host population. She presents preliminary findings from a longitudinal study of child marriages among Syrian and Jordanian girls to suggest that the pandemic quickly reversed the effects of an intervention designed to decrease child marriages for both populations. Essaid also explains how and why vulnerable members of the host society were left with fewer resources for weathering the pandemic than refugees.

Finally, Robert Kubinec illustrates one perhaps unexpected benefit of the forced adaptation to the realities of COVID-19: the heightened awareness and appreciation of the utility of online modes of data collection. Drawing on recent experience implementing surveys using Facebook ad targeting, Kubinec details the increasingly popular technique of multilevel regression with post-stratification (MRP), which researchers can use to adjust online surveys to correct for known biases.

These contributions on the effects of COVID on both the MENA region and the researchers who study it demonstrate the many questions the pandemic raises for political scientists. How can MENA scholars, particularly those who engage in fieldwork, effectively pivot to leverage alternative methods of gathering and analyzing data? From a different perspective, can this be an opportunity to amplify voices from the region that are sometimes overshadowed by scholars at Western academic institutions? How should universities, journal editorial boards, and platforms like this newsletter respond to the heightened challenges that all these scholars face? Given the current research focusing on the effects of the pandemic on vulnerable populations, how can scholars conduct what Sarah Parkinson and Milli Lake term "methodologically robust, ethical, context-sensitive research"¹⁸⁰ that avoids burdening over-researched groups such as refugees and victims of violence? Researchers have long contemplated these logistical issues and ethical dilemmas in their studies of and in the region, but the outbreak of pandemic pushes them to the forefront.

¹⁸⁰ See Sarah Parkinson and Milli Lake's Advancing Research on Conflict Consortium: <https://advancingconflictresearch.com/aboutus>. On the impact of the pandemic on research assistants of color, see Aymar Nyenzi Bisoka, "Disturbing the Aesthetics of Power: Why Covid-19 Is Not an 'Event' for Fieldwork-based Social Scientists," Social Science Research Council, 28 May 2020: <https://items.ssrc.org/covid-19-and-the-social-sciences/social-research-and-insecurity/disturbing-the-aesthetics-of-power-why-covid-19-is-not-an-event-for-fieldwork-based-social-scientists/>.

Further, the vast variance in official and public responses to the pandemic – from initial precautionary measures (not) taken to vaccine accessibility – also presents opportunities for comparative analysis from the international to the local level. As political scientists and the people we study emerge from the pandemic, as we reckon with losses incurred and perspectives gained, the creativity, connectivity, and conscientiousness developed in the face of COVID's challenges can better position us to tackle the many important puzzles the MENA region continues to pose.

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DEPLOYING AUTHORITY: SAUDI ARABIA AND EGYPT STRIVE TO RESPOND TO COVID-19

By Sultan Alamer, Rana Mamdouh, and Nathan J. Brown

How have states in the Arab world handled the enormous challenges posed by the COVID pandemic? While the threats to public health and welfare have been daunting, the menu of possible responses is actually fairly short. Most states throughout the world have reacted over the past year with some mixture of restrictions on public space and movement, palliative economic steps, and public health measures. Yet if the menu for officials to choose from is short, permutations and emphases vary considerably. Sometimes it is simply a matter of state capacity: Yemen and Libya are likely to react differently from Saudi Arabia or Egypt. But even among states with some coherence and infrastructural capacity, there is still considerable variation. And while political scientists increasingly define their inquiries in terms of explaining variations in outcome, those who study authoritarianism often risk depriving themselves of a key tool of doing so: by casting much of authoritarian politics in terms of rulers or regimes seeking to maintain themselves, much of the variation in how states behave can be difficult to explain.

Those who studied Arab politics over the past two decades have given the broader discipline real insights into how authoritarianism operates (and not merely how it emerges or collapses). In this short article, we use the experience of Egypt and Saudi Arabia to probe variations in authoritarian responses. While both are indeed governed by deeply authoritarian regimes, the two cases are also characterized by different patterns of state formation and current structures. And they are presiding over different societies. In probing how these two states have attempted to manage the pandemic's challenges, we seek to supplement our tools of understanding policy outcomes beyond simply focusing on regime motivations for survival. To be sure, in both cases, regime maintenance strategies have been very much evident. But we also offer some observations—mostly derived from inductive study—on other factors that have shaped policy outcome: institutional infrastructure (the “muscle memory” of state behavior), technological advancement, and relationship with healthcare workers.

By purely quantitative measures, Saudi Arabia's response to the pandemic was more effective than Egypt's. As of now, Saudi Arabia has 393,377 confirmed cases, 6,704 deaths, 15.4 million tests. On the other hand, Egypt has 205,732 confirmed cases, 12,210 deaths, 2.5 million tests. This means that Saudi Arabia tested 45% of its population whereas Egypt tested 2.5%. The percentage of deaths per case in Egypt is 6% whereas in Saudi Arabia it is 1.7%. With regards to vaccination, Saudi Arabia administered 5 million doses of COVID vaccines and Egypt has administered 148,987 vaccines. We suggest that the recent Saudi experience with Middle East Respiratory Syndrome Coronavirus (MERS-CoV), its investment in technological advancement, and its control over the health sector workers made it relatively more prepared than Egypt.

Muscle Memory

Egypt and Saudi Arabia confronted the pandemic by turning to the mechanisms they had at hand, deploying and developing them for new circumstances as rapidly as they could. In both countries, state formation and public health have been intertwined for many decades. Concerns about plagues, pilgrimage, and international travel were powerful factors in shaping political systems in the nineteenth and twentieth centuries. And in both cases, provision of public health became a major burden assumed by states, especially in the second half of the twentieth century—however unevenly the burden was met. So, both states entered the current crisis with a long institutional history related to public health, particularly in the area of infectious disease. But recent political changes left them in different positions to respond once hit with the rapid emergence of the pandemic—with Saudi Arabia focusing on rapidly deploying resources to monitor and control spread, and Egypt less able in that regard but experienced with deploying treatment. In its 2019 report, The Global Health Security Index which measures the health preparedness of each country ranked Egypt 87 out of 195 which is a much lower rank than Saudi Arabia which scored 47.¹⁸¹

In Saudi Arabia, the recent experience with Middle East Respiratory Syndrome Coronavirus (MERS-CoV) helped facilitate more coordinated and centralized responses to COVID-19. MERS was first globally reported in Jeddah in Saudi Arabia in September 2012.¹⁸² Although it spread to more than 25 other countries, 80% of its reported cases have taken place in Saudi Arabia.¹⁸³ This performance—in which Saudi Arabia remained the epicenter of a global health crisis—finally led to the dismissing of then Health minister ‘Abdullāh al-Rabī‘ah in April 2014. He was replaced by the rising bureaucratic star ‘Adil Faqīh, who had been handling the unemployment challenge at the Ministry of Labor.¹⁸⁴ Shortly after his appointment, Faqīh established a new command-and-control center, the Saudi Center of Disease and Control (SCDC).¹⁸⁵ The Ministry of Health then began to enforce a strict infection prevention and control system, designating two dozen hospitals across the country for the isolation and treatment of the MERS patients. These institutional changes within the Saudi health system in response to MERS left it with a memory and capacity for fast action that most other countries (with occasional exceptions of other transit countries that had learned hard lessons, like Kuwait) were unable to draw on when the COVID-19 pandemic arrived so quickly.¹⁸⁶

Egypt’s recent experience with Hepatitis C similarly shaped the way the state was equipped to respond, but that crisis led to a focus on provision of treatment rather than prevention through restrictions on public gatherings and activities. When dealing with the current pandemic, the muscle memory of the Egyptian state was built upon dealing with Hepatitis C—ironically a crisis that itself had an origin in state health policy. In the period between the 1950s-1980s, the Egyptian Ministry of Health, with guidance from World Health Organization, implemented a

¹⁸¹ “2019 Global Health Security Index,” October 2019. <https://www.ghsindex.org/>.

¹⁸² Zaki, Ali M et al. “Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia.” *The New England journal of medicine* vol. 367,19 (2012): 1814-20. doi:10.1056/NEJMoa1211721

¹⁸³ “Middle East Respiratory Syndrome Coronavirus (MERS-CoV).” World Health Organization, March 11, 2019.

[https://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-\(mers-cov\)](https://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov)).

¹⁸⁴ “Saudi Health Minister Dismissed.” *Al-Sharq al-Awsat*, April 22, 2014. <https://aawsat.com/home/article/81606>.

¹⁸⁵ “Ministry of Health Launches New Health Control Center.” Ministry of Health, June 1, 2014.

<https://www.moh.gov.sa/en/Ministry/MediaCenter/News/Pages/News-2014-06-01-002.aspx>.

¹⁸⁶ Hagagy, Stephen Kalin, Ahmed. “Hard Times Shape Speedy Saudi and Kuwaiti Coronavirus Response.” *Reuters*, March 30, 2020. <https://www.reuters.com/article/us-health-coronavirus-saudi-kuwait-idUSKBN21H2BT>.

large scale antischistosomal treatment that led to a widespread infection of Hepatitis C among the population, primarily through the use of shared and reused needles. In 2008, a survey showed that 14.7% of the Egyptian population was infected.¹⁸⁷ In 2006, the Egyptian National Committee for the Control of Viral Hepatitis was established and developed a 4-year strategy (2008-2012) to cure the patients. However, the strategy did not achieve its goals, largely due to the unavailability of funds and poor health care conditions in hospitals. But in 2014, a global change on how medicines were distributed allowed Egypt to acquire a large number of the needed medicine at a 99% discount and with funds provided from the World Bank. Since 2014, many patients were treated by the new medicine.¹⁸⁸ In 2018, Egypt launched a new campaign to test and treat more than 20 million individuals, one of the world's largest pre-COVID experiences with mass testing. In July 2020, Egypt announced its victory over Hepatitis C.¹⁸⁹

The response to Hepatitis C shaped the response to COVID even though the means of transmission for the two diseases are very different. In handling Hepatitis C, Egyptian authorities were less focused on developing capacities in the area of infection control and more on testing and delivering medicines. This, to a large extent, explains why Egypt adopted the *Ta'āyush* (Coexistence) Policy in fighting Covid-19. After an uncertain period of curfews, lockdowns, and suspension of travel, work, prayers and schools—measures that were difficult to sustain and enforce—the new policy was launched on May 13. Its aims have included achieving a balance between the continuation of economic life with restrictive measures on public activity. It drew a plan for opening up the country—a process gradually allowed over the summer of 2020. The effective policy resembles—in effect, if not in intent—one based on something like herd immunity, but with testing lagging far behind spread (and thus an enormous number of unrecorded cases), it is impossible to say with precision what the results are.

Technology

Both Saudi Arabia and Egypt witnessed centralization of power under a strong current leader-- Crown Prince Muhammed Bin Salman (MBS) in Saudi Arabia and President Sisi in Egypt. However, this similarity is not mirrored when it comes to the technological capabilities. Before the rise of MBS, the Saudi bureaucratic system was characterized as “hierarchical, vertically hub-and-spoke system” with weak horizontal communication between its ministries and agencies.¹⁹⁰ However, in the period between 2012-2017, several powerful senior princes either died or were ousted, leaving power concentrated in the hands of MBS who undertook several initiatives to dismantle large ministries and increase the meso-level communication and coordination.

One such initiative proved particularly consequential during Covid: the reconfiguration of surveillance and cybersecurity. On October 31, 2017, a new royal decree was issued declaring the establishment of the National Cybersecurity Authority, as part of an increased push toward

¹⁸⁷ Frank, Christina, et al. "The role of parenteral antischistosomal therapy in the spread of hepatitis C virus in Egypt." *The Lancet* 355.9207 (2000): 887-891.

¹⁸⁸ Hirschler, Maggie Fick, Ben. "Gilead Offers Egypt New Hepatitis C Drug at 99 Percent Discount." *Reuters*, March 21, 2014. <https://www.reuters.com/article/us-hepatitis-egypt-gilead-sciences-idUSBREA2K1VF20140321>.

¹⁸⁹ "Egypt Celebrates Becoming Hepatitis-Free." *Al-Sharq al-Awsat*, July 29, 2020. <https://bit.ly/3a6tSG3>.

¹⁹⁰ Hertog, Steffen. *Princes, brokers, and bureaucrats: Oil and the state in Saudi Arabia*. Cornell University Press, 2011.

cybersecurity institutionalization. NCA is an independent agency “in charge of cybersecurity in the country, and it serves as the national authority on its affairs” and is linked directly to the king.¹⁹¹ It absorbed several institutions from other ministries and agencies such as the Saudi computer Emergency Response Team (Saudi CERT) from the Communications and Information Technology Commission, and the Cybersecurity Center from the Ministry of Interior. Moreover, on August 31, 2019, a royal decree was issued establishing the Saudi Data and Artificial Intelligence Authority (SDAIA). SDAIA is composed of three centers: one of them is the Ministry of Interior’s National Information Center, and the two others are new: National Data Management Office and the National Center of Artificial Intelligence.

As part of the Saudi response to Covid-19, SDAIA developed two smartphone applications: *Tawakkalna* and *Tabaud*. From late February to mid-March, the Saudi government suspended international and domestic travel, mosques, schools and public events. Then, lockdowns in specific cities and neighborhoods and nationwide curfew were declared. The government listed a series of punishments for those who violate these measures. For example, if a person violates the curfew rules, she or he will pay a fee ranging from 10,000 SR (\$2,666) to 100,000 SR (26,666) and/or serve a jailtime between a month to a year. To enhance enforcement of these regulation, the government relied heavily on the app *Tawakkalna*. Any individual who needs to go out of his home is required to file an online request through the app. When the request is granted it specifies the time window and the geographic destination permitted. If the individual stayed longer than the authorized period, or went to a different destination, the location-detection feature in the application notifies law enforcement. When the government started the gradual reopening in late May 2020, it added new features to the app. Among these was the feature to report suspected Covid-19 cases. The app classifies its users into three coded colors: green indicates that the user has not been infected by the virus; red is for the infected; and orange is for those who contacted an infected individual and are required to quarantine at home. It also includes a feature that allows users to request a gathering by filling out the gathering date, location, and purpose. If granted, the host will be provided with a special code to share it with his or her guests, who check in thorough the app before joining the gathering. The other application, *Tabā’ud* (distancing), uses Bluetooth technology to trace the movements of its users and notify them if they were in contact with an infected person within the last fourteen days.

In Egypt, there is one strong parallel with Saudi Arabia: the centralization of authority in the hands of a single figure, in this case the president. But the two countries differ in their technological capabilities and healthcare preparedness. In some sense, the Egyptian response has paralleled the Saudi attempt at monitoring, but with far less technological capability, diminishing its reach. In Egypt, the government, like its Saudi counterpart, issued a list of punitive measures for those who do not abide by the rules and regulations related to Covid-19. The violators of the curfew would be forced to pay 4,000 Egyptian pounds (\$256). However, the government relied mainly on traditional methods of enforcement that most likely limited the ability of the state to generate the desired levels of compliance. In April 2020, the Egyptian government launched an app called *Sehat Masr*. However, this app is not equipped with the

¹⁹¹ “Royal Decree: Establishment of Cybersecurity National Authority.” *Saudi Press Agency*, October 31, 2017. <https://www.spa.gov.sa/1683043>.

same features available in the Saudi ones. Instead, it is restricted to raising awareness and communicating with Ministry of Health.

Relations with Health Workers

Governments do not depend simply on armies or police to fight pandemics, but rather on medical workers. Both Egypt and Saudi Arabia need health workers' knowledge and expertise to fight the coronavirus, but at the same time, fear criticism and noncompliance from them. This situation creates several challenges that the two governments differ in managing. The differences lie in the way professionals are organized (especially in their ability to express collective voices) and have established patterns of dealing with them. Saudi Arabia is wealthier than Egypt and relies heavily on health care workers who are not citizens and have no formal organization, and thus have little ability to collectively press for specific policies or provide alternative sources of information. The Saudi government praised the efforts of its healthcare workers, made them equivalent to the army soldiers fighting in Yemen, and pledged to pay 500,000 SR (\$133,000) to the relatives of healthcare workers who die combatting the virus.

The Egyptian regime did not have such resources and showed more nervousness toward health care professionals, some of whom are organized in professional associations, collectively pressed for specific protections and benefits, and could provide alternative sources of information. Most notable in this regard is the Egyptian Medical Syndicate (EMS), formed in 1940 and with a leadership elected by its around 200,000 members. While the days of Islamist domination are over, the Syndicate (and some other similar, if weaker, professional bodies) still showed some autonomy. Since the beginning of the pandemic crisis in Egypt, the EMS was vocal in its criticism of the Egyptian government's treatment of medical health workers and the crisis in general. It called the Ministry of Health to publish data on health workers' cases, and when the government ignored its request, the EMS started publishing its own data.¹⁹² Later, it asked the government to provide the families of the doctors who died during the pandemic the same aide given to police and military from the Martyrs Fund that was formed in 2018.

The Egyptian authorities resorted to coercion to discipline the EMS. In July 2020, the government arrested several doctors due to their criticism. But while there have been some restrictions, individual and collective structures continue to provide information and even pressure authorities. The professionals have seen few of their demands met, and indeed some of those most vocal in their criticisms (or those held responsible for circulating information the authorities deem false) have not escaped official ire and sanction. But policing cannot erase the severity of the crisis. And indeed, it has not. While there have been some suspicions that officials were underplaying the severity of the health crisis, something more prosaic seems to have been at work: in Egypt, even counting the number of those afflicted with the disease has been beyond official capacity. Official figures reflect only positive tests—and Egypt has not had the capacity to test widely. Unsurprisingly, then, a recent poll (one that received attention within the country, suggesting the authorities were not simply suppressing bad news) indicated a number of self-

¹⁹² Jomah, Ahmed. "Egyptian Medical Syndicate: 3 Doctors Died and 43 Infected." *Masrawy*, April 11, 2020. <https://bit.ly/39OngeZ>.

reported infections far greater than official figures.¹⁹³ More broadly, while the Egyptian regime has found itself falling back on a stick as much as a carrot is still constrained by its reliance on a set of professionals who are confronting a health crisis that simply exceeds the official capacity to meet it.

Conclusion

Saudi Arabia and Egypt have regimes that can be classified as thoroughly authoritarian. Neither regime had faced an existential threat, but when confronted with the COVID-19 pandemic, they still had to scramble into action—albeit with different tools and resources. The state’s muscle memory—what its agencies had the ability to do quickly—coupled with differences in technological capability and in state-society relations led to some very different responses. Saudi Arabia—with its more recent experience with a similar crisis, and with greater resources and technological capabilities—has been able to react more quickly and undertake more effective preventive measures, resulting in a more impressive performance. Egypt went into the crisis with its health system more equipped to administer treatment but with less effective tools to manage prevention or even the politics of the challenge.

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¹⁹³ Taha, Mohammed. “Basirah: 2.9 Million Coronavirus Cases in Egypt in 2020.” *al-Masry al-Yawm*, March 9, 2021. <https://www.almasryalyoum.com/news/details/2278319>.

UNDERSTANDING RESPONSES TO THE COVID-19 PANDEMIC IN TURKEY: POLITICS OF THE LOCAL

By Başak Yavçan

The COVID-19 Pandemic harmed the livelihoods and mobility of vulnerable groups including displaced populations everywhere.¹⁹⁴ Already at risk before the pandemic, displaced people now face new barriers to work, education, food and social protection around the world.¹⁹⁵ Initial attempts to analyze responses to the needs of these migrants¹⁹⁶ focused on the national and, to a lesser extent, international levels (on the EU and UNCHR, for example¹⁹⁷), reflecting the academic literature's predominant focus on national models of integration policy. Responding to this nation-state bias in studies of the politics of migration and integration, however, the recent literature suggests a local turn, pointing to diverging logics of migration at the local level. These approaches suggest that nationally and internationally determined factors such as migrants' status matter less in provision of their needs, and puts the municipalities, NGOs, grassroots mobilization, and migrant groups under the spotlight.¹⁹⁸

The governance of migration at the local level can be both more exclusive¹⁹⁹ and more inclusive²⁰⁰ than the national level due to a variety of factors. Examining local responses to the needs of displaced populations especially during the pandemic offers further avenues for exploring the utility of these new approaches in understanding this variation. This essay will address local responses to the pandemic's effects on displaced populations in Turkey, the country hosting the largest number of forcibly displaced persons in the world.²⁰¹ I differentiate and explain good practice examples from the others, taking cues from the burgeoning literature adopting a local

¹⁹⁴ UN OCHA Global Humanitarian Response Plan: COVID-19 United Nations Coordinated Appeal, April-December 2020 <https://www.unocha.org/sites/unocha/files/Global-Humanitarian-Response-Plan-COVID-19.pdf>

¹⁹⁵ UNHCR Livelihoods, food and futures: COVID-19 and the displaced story map 02/08/2021 <https://storymaps.arcgis.com/stories/4b999f79628644df84ccb7c10a9edd9e>

¹⁹⁶ The term "migrant" is more suited to refer to both forcibly or voluntarily displaced. However, as the focus of the essay will be mostly on Syrians in Turkey referred to by most of the international community as "refugees," the term "refugee" will be used even though Syrians in Turkey do not have refugee status according to international law.

¹⁹⁷ UNHCR Evaluation Brief, Evaluation Brief COVID-19 Response: Lessons from UNHCR's Evaluation Evidence April 2020. <https://reliefweb.int/sites/reliefweb.int/files/resources/5fbd1ee24.pdf>

Sundberg Diez, Olivia; Neidhardt, Alberto; De Somer, Marie; Hahn, Helen., "EPIM Policy Update". European Policy Center. May 2020. <https://www.epc.eu/en/publications/EPIM-Policy-Update-May-2020~338768>

¹⁹⁸ Strang, A., & Ager, A. (2010). Refugee integration: Emerging trends and remaining agendas. *Journal of refugee studies*, 23(4), 589-607.

¹⁹⁹ Ambrosini, Maurizio. 2013. "We are against a multi-ethnic society': policies of exclusion at the urban level in Italy." *Ethnic and Racial Studies* 36(1): 136-155.

²⁰⁰ Caponio, Tiziana, and Maren Borkert. *The local dimension of migration policymaking* (Amsterdam: Amsterdam University Press, 2010)

²⁰¹ UNHCR Turkey Fact Sheet September, 2020:

<https://reliefweb.int/sites/reliefweb.int/files/resources/UNHCR%20Turkey%20General%20Fact%20Sheet%20September%202020.pdf>

turn. I build upon my earlier work on two Istanbul municipalities with Fulya Memişoğlu and share the findings from numerous interviews I conducted over the course of a year and a half, with representatives of municipalities hosting migrants and international institutions catering to the needs.²⁰² In brief, my findings suggest that what explains good practices in response to COVID-generated challenges is these municipalities' higher ability to increase their capacity and funds through pre-existing multilevel networks, established either through relations with the EU or in the course of humanitarian aid efforts as Syrians fleeing the civil war arrived.

The Turkish context constitutes an interesting case as it is neither fully a convention country nor fully outside of it as a country of first asylum. As a signatory of UN Convention on Refugees with a geographical limitation to migrants coming from Europe, Turkey provided temporary protection status to refugees arriving from Syria en masse that granted them basic rights and access to services. This provision falls behind the rights granted to refugees in many signatory countries, especially in relation to employment rights. Nevertheless, this provisionary status allowed Turkey to host 3.6 million Syrians, as indicated numerous times during my interviews with national policy-makers. The more precarious legal status of more than 200,000 Afghans, as well as Iranians and Iraqis, estimated to live in urban centers in Turkey presents many challenges to cities and their host communities regarding integration to the labor market, access to health care and education, as well as social cohesion. Given the high numbers, varied legal statuses, and urban concentrations of Turkey's displaced populations, local responses present an important case to our research on migration governance and politics of integration. At the same time, Turkey poses a "hard case" or good test²⁰³ for local approaches due to the centralized character of its administrative structure. Put differently, if we find evidence of local turn in a country like Turkey, chances are, it should matter in most other contexts.

Turkish Refugee Response, Local Variation, and the COVID Pandemic

In line with Turkey's strong state tradition, state-appointed provincial governors and provincial offices of relevant state agencies are mainly responsible for migration governance. Still, a few years into the migration crisis, municipalities have also been at the forefront of providing public services and support for the socio-economic integration of migrants – as much as the vague and somewhat limited mandate regarding their jurisdiction and budget emanating from the Municipal Law²⁰⁴ allows. The share municipalities get from the national budget is heavily allocated based on the number of Turkish citizens living in their territories.²⁰⁵ This poses major challenges for municipalities such as border province Kilis, where Syrian inhabitants outnumber Turkish citizens.

²⁰² Memişoğlu, F., & Yavçan, B. (2020). Beyond ideology—a comparative analysis of how local governance can expand national integration policy: the case of Syrian refugees in Istanbul. *Journal of Ethnic and Migration Studies*, 1-21.

²⁰³ See King, G., Keohane, R. O., & Verba, S. *Designing social inquiry: Scientific inference in qualitative research* (Princeton, Princeton University Press, 1994), p. 209.

²⁰⁴ Article 13 of the Municipality Law establishes "Townsmanship Law," entitling all individuals residing in the area of jurisdiction to the services offered by the respective municipality. Article 14, on the other hand, conflicts with the previous one by designating the basis of entitlement to municipality services as citizenship, without clearly spelling out its content in terms of Turkish citizenship.

²⁰⁵ The second and fifth articles of the Law No. 5779 regarding the transfer of the resources from the general budget to the local authorities, states that 80% of the budget of a municipality is allocated according to the population and the remaining 20% is allocated according to the level of development of the district.

The policy challenges at the local level have been further exacerbated by the pandemic, which severely affected the livelihoods of Turkey's displaced populations in addition to host communities: approximately 80 percent reported loss of income, mainly due to losses of informal jobs as well as challenges in accessing services such as education and social welfare.²⁰⁶ My recent interviews show that this impoverishment produced a regression to a basic needs approach to be addressed via humanitarian aid. Shortly after the outbreak of the pandemic, a 13 April 2020 presidential decree categorized COVID-19 testing and care as a national healthcare emergency and committed to providing these services free to everyone, even those not covered by social security.²⁰⁷ In response to these needs, as I argue elsewhere with Başak Kale,²⁰⁸ municipalities in different districts and regions provided information and service support, social aid (e.g. food, hygiene kits) as well as financial support. However, local government responses were inconsistent, varying across cities and regions. What explains this differentiation?

Municipal governments' concerns with rising public resentment toward immigrants (especially Syrians), party ideology, and mayoral leadership are certainly potential answers. Furthermore, the aforementioned budgetary limitations of municipalities are increasingly stressed with a rise in the number of people needing assistance in the form of social aid or vocational trainings as a result of the pandemic. This further reduces their material capabilities, a common excuse given by most municipalities with limited or no targeted policies for refugees as suggested in my interviews. Yet interviewees working at international and local institutions focusing on refugee response argue that this is mostly just an excuse for excluding refugees. They note national funds of municipalities are not the only income source if a local government is eager to implement an inclusive refugee integration policy.

Tracing Multilevel Networks of Municipalities in COVID Response

Some Turkish municipalities created near-sanctuary cities, which are welcoming of refugees beyond the national level, as an outgrowth of their previous cooperative projects. These projects had engaged with the international community to address vulnerable populations such as LGBTI+ communities and disabled members of society.²⁰⁹ Some started establishing these networks with arrival of Syrian refugees and received support from national and international NGOs and international organizations such as the UNHCR and IOM (International Organization for Migration) in setting up information centers, migration departments, conducting needs assessments, vocational training centers, implementing cash for work projects and providing social aid. Here I argue that these mechanisms also helped them better respond to the COVID-19 pandemic in

²⁰⁶ Akyıldız, Şenay. 2020. "COVID-19 İşgücü piyasasını nasıl etkiledi?" TEPAV, <https://www.tepav.org.tr/tr/haberler/s/10155>.

²⁰⁷ Özkul, Derya. "COVID-19 Salgını Süreci ve Sonrası İçin Düzensiz Göçmen, Sığınmacı ve Mültecilere Yönelik Politika Önerileri" Istanbul Policy Report, September, 2020: <https://www.istanpol.org/post/policy-recommendations-towards-immigrants-asylum-seekers-and-refugees-for-the-COVID-19-pandemic>.

²⁰⁸ Kale, Başak and Yavçan, Başak. 2021. "COVID-19 Pandemisinin Türkiye'deki Uluslararası Olarak Yerlerinden Edilmiş Topluluklara Etkisi: Çok Düzeyli Bir Yanıt" in Alemdar, Zeynep and Özdemir Sarıgil, Burcu (eds) *Almanak: 2020'de Kadınlar, Dünya Politikası ve Türkiye*: <http://wfp14.org/wp-content/uploads/2021/03/DPK-2020-Almanak-1.pdf>

²⁰⁹ See Memişoğlu and Yavçan 2020 (endnote ix) for more on how Sultanbeyli and Şişli municipalities managed this process.

protecting both the host communities and displaced populations. For instance, many districts and (larger) metropolitan municipalities (MM) seized this opportunity by reaping the fruits of multilevel network mechanisms they put in place earlier.

For example, Ankara, Istanbul and Izmir MMs set up solidarity funds to address the needs of all communities by delivering food packages and providing aid for rent and utilities. Seven municipalities – Adana, Ankara, Kilis, Sisli, Urfa-Haliliye, Izmir-Menemen, and GaziAntep-Sahinbey – also set up Soup Kitchens, serving about 11,500 bowls daily, supported by GIZ, WFP and IOM.²¹⁰ Adana MM’s Meryem Women’s Entrepreneurship and Production Cooperative focused on production and processing of agricultural goods as well as protective materials against COVID with the assistance of GIZ.²¹¹ Bursa-Osmangazi municipality targeted the needs of refugee children with the support of UNICEF. Ankara MM also established a support center for refugee women and youth with the support of UNFPA, along with enrollment campaigns for children with UNHCR. In response to UN reports on increased domestic violence against women in Turkey during the pandemic, Istanbul MM launched a Women’s Support Call Center with a 24/7 service in four languages including Arabic. Having completed a comprehensive needs assessment of women with the support of UNHCR, Izmir-Konak Municipality quickly put together a migration master plan, included its Refugee Council in the decision-making processes, and initiated a women’s cooperative.²¹² Izmir-Buca Municipality distributed food packages and hygiene kits with the support of UNHCR and initiated a language and vocational training program for disabled refugees with the support of Australian Embassy Direct Aid Program.²¹³

What unites these service-providing municipalities is that prior to the pandemic they had established multilevel networks to receive and distribute international funds as part of the 2016 EU-Turkey Migration Deal²¹⁴ that provided fertile ground for cooperation for them and easier access to the field for international donors. Several projects and institutions eased this process by providing knowhow, mutual learning, and links between municipalities and international donors. For instance, the Marmara Municipalities Union established a common platform for its members to formulate regional policies on migration, facilitating knowledge exchange among member municipalities regardless of political affiliation and encouraging their members to enhance capacities and establish international partnerships to mobilize more resources. The Swedish International Development Agency-funded project RESLOG created a network of 12 municipalities,

²¹⁰ Cansu; Avşar Koyuncu, İlderya; Kenanoğlu, Murat; Kadkoy, Omar Güven, Sibel “Zorunlu Göçmenler için Sosyal Eşitlik: Pandemi Sürecinde Yerel Yönetimlerin ve STK’ların Rolü,” December, 2020:

https://www.tepav.org.tr/upload/mce/2021/degerlendirme_notu/zorunlu_gocmenler_icin_sosyal_esitlik_pandemi_s_urecinde_yerel_yonetimlerin_ve_stklar_rolu.pdf.

²¹¹ “Büyükşehir ve ILO, dezavantajlı kadınlar için iş birliği yapıyor,” *Adana Metropolitan Municipality*, 11 February 2021

<https://www.adana.bel.tr/haber/buyuksehir-ve-ilo--dezavantajli-kadinlar-icin-is-birligi-yapiyor>.

²¹² “Konak Belediyesi mülteci ve dar gelirli kadınları güçlendirecek,” *Kazete: Özgür Kadının Sesi*, 8 July 2020 <https://kazete.com.tr/haber/konak-belediyesi-multeci-ve-dar-gelirli-kadinlari-guclendirecek-64008>.

²¹³ “Buca Belediyesi’nden engelli mültecilere pandemi desteği,” *Buca Belediyesi*, 8 January 2021 <http://www.buca.bel.tr/Haberler/2054/buca-belediyesi--nden-engelli-multecilere-pandemi-destegi.html>.

²¹⁴ “The EU Facility for Refugees in Turkey Factsheet,” *The European Commission*, March, 2021 https://ec.europa.eu/neighbourhood-enlargement/sites/default/files/frit_factsheet.pdf.

helping them assess their needs systematically and turning them into full-fledged partnered projects. The Turkish Municipalities Union liaised between the municipalities and the FRIT, the EU agency responsible for the distribution of EU-Turkey Refugee Deal Funds.

Collaborating with municipalities also helps international organizations. Local polities' less-bureaucratic structures provide flexible ground for implementation of international donors' projects. One may argue that negative factors can intervene in these seemingly ad hoc relationships, such as bilateral tensions with donor countries at the national level. Nevertheless, interviews conducted with municipalities and municipality unions attest to the opposite, suggesting that, regardless of these tensions at the international level, projects and programs continue to function and are expected to be long-lived. For instance, as argued by the MBB, the tense relations between the EU and Turkey do not spill over into reluctance to cooperate with EU institutions or its member states for the municipalities in the Marmara Region. In fact, as argued by a representative of RESLOG and two local municipalities, when facing the additional pressures imposed by the pandemic, they are even more eager to collaborate with international NGOs even on small projects. One municipality representative challenged the perspective of partnership for funds and emphasized how these partnerships increase their capacity for a methodological approach and help them speak a common language with the international community. From the donor's perspective, when they have difficulty in getting permissions for their operations at the national level, municipalities facing integration pressures are eager to collaborate with them and bypass the national level. Representatives of IOM, GIZ, Care International elaborated further on this point, describing municipalities as perfect solution partners when NGOs have difficulty in securing partnerships at the national level, getting permits for conducting needs assessments in the field, or bringing aid.

The struggle to respond to the needs of refugees and host communities is a bigger challenge for municipalities with the COVID-19 Pandemic. Even in a country like Turkey with a very centralized character, this response varied greatly at the local level. Some municipalities shined thanks to the expansion of the multilevel networks they had established earlier. That is not to say that political affiliation, social acceptance of voter bases, and leadership of mayors do not matter. They do, but so do the networks municipalities create, so much so that their economic constraints no longer hinder them from building and implementing an inclusive policy framework regarding refugees. The implications are significant not only for municipalities but also international organizations and NGOs with a humanitarian aid focus, as local governments can be natural allies with which they form long-lasting partnerships. It is therefore not surprising to hear a potential larger role foreseen for municipalities in the new EU-Turkey Refugee Deal.

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THE IMPACT OF COVID-19 ON FORCIBLY DISPLACED AND MARGINALIZED COMMUNITIES WITH A FOCUS ON CHILD MARRIAGES IN JORDAN

By Aida Essaid

Jordan presents a puzzling case for studying the still emerging impacts of COVID-19. What began with one of the strictest lockdowns on March 17, 2020 and a successfully controlled spread of the virus during the summer took a sharp turn by the end of 2020. By March 2021, Jordan was reporting several days of 9,000 new positive cases and up to 100 deaths per day. The country counts 600,000 cumulative cases and over 6,000 deaths.²¹⁵ These high numbers, coupled with a devastating economy, overstretched health services and hospitals, and criticism of the government's human rights abuses, especially that of freedom of expression, has let those who were already marginalized before the pandemic feel even more vulnerable. To put it simply, due to COVID-19, the risks and impediments the forcibly displaced and marginalized in Jordan have always suffered from are now exacerbated.

Given Jordan's position as a host state to many refugee populations,²¹⁶ it may be tempting to focus on the impact of the pandemic on displaced populations only. In this paper I draw upon the work of our organization, the Information and Research Center, King Hussein Foundation (IRCKHF),²¹⁷ to explain why attempts to analytically separate refugee populations from vulnerable members of the host population are problematic for policy responses, development programs, and scholarly understanding. I highlight how COVID-19 compounded preexisting structural inequalities, particularly gender inequalities, by examining the issue of child marriages in Jordan.

As an NGO research center in Jordan, we have the advantage of being in the liminal center between scientific social research and that of practitioners and development programs in Jordan. Over the last few years, IRCKHF has worked closely with international partners including academic institutions in the US and the UK as well as grassroots organizations focusing on gender and social justice in the various governorates of Jordan. IRCKHF has worked with some of the most marginalized and/or stigmatized populations in Jordan, including youth, girls (including homebound girls), women, people with disabilities, children of Jordanian mothers and foreign fathers who are denied Jordanian citizenship, stigmatized children, and youth born out of wedlock.

²¹⁵ "COVID-19 Statistical Report – Jordan 18/03/2021," Ministry of Health, Hashemite Kingdom of Jordan, <https://corona.moh.gov.jo/en>.

²¹⁶ In addition to Palestinian, Iraqi, and Syrian refugees, Jordan also hosts Yemeni, Somali, and Sudanese refugees. More information about registered refugees can be found at the UNHCR data portal (<https://data2.unhcr.org/>).

²¹⁷ IRCKHF is a non-governmental organization in Jordan that serves as a catalyst for socio-economic development by conducting inclusive research, evidence-based advocacy, and knowledge sharing with practitioners, policymakers, and civil society on issues of human rights, gender, and social justice. IRCKHF was initially launched in 1995 as part of the National Task Force for Children, today IRCKHF promotes the welfare of children, youth, women, families, communities, and vulnerable groups by providing objective, multidisciplinary research and analysis to practitioners and policymakers in Jordan and the region, enabling effective socio-economic planning and decision-making. For more information: www.irckhf.org

Our approach has always been to focus on the most marginalized, which in Jordan prompts most to think about refugees. However, our research demonstrates that while forced displacement does cause vulnerability, the extent of it cannot be assessed unless contextualized with the situation of the host community and other vulnerable populations.

For example, while Syrian refugees in Jordan are vulnerable, our research with Arab women refugees indicates Palestinian refugees may be even more so, as they lack the international concern and support for their well-being that foreign countries and iNGOs provide to Syrians.²¹⁸ Further, according to the World Bank, while the socio-economic crises caused by COVID increased poverty among Syrian refugees by 18 percentage points, poverty among Jordanians increased by 38 percentage points.²¹⁹ As the baseline for Syrian refugees in Jordan was below the poverty line before the pandemic began, they fell relatively less in comparison to Jordanians,²²⁰ and were more able to cushion this fall with regular access to basic needs, health services, and livelihood opportunities provided through UN agencies, iNGOs, and donor-funded programs.

Research that only includes a refugee population in its sample is not contextualized and therefore may assume its issues of study are caused by displacement. However, when just 30% of the research sample includes Jordanians, as demonstrated in studies we conducted with the University of Plymouth,²²¹ it quickly becomes apparent that Jordan's wider socio-political dynamics, rather than solely refugee status, are at work. Here, the exacerbating impact of COVID on child marriages in Jordan provides compelling evidence for widening the study of marginalized populations affected by COVID beyond refugees.

Studying Vulnerable Populations in Jordan During a Pandemic

On March 17, 2020, the Government of Jordan instituted a full lock-down that only began to ease on April 30. During this time, the IRCKHF research team was able to remotely contact some of the most marginalized populations through its grassroots networks.²²² What quickly became apparent to our research team was that those remaining underserved were those who did not fall under the auspices of the iNGO or NGO radar of beneficiaries, including people with disabilities, the extremely poor, and youth deprived of family ties. Governmental outlets and larger NGOs were not reaching them, and it was only thanks to the small community-based organizations and local volunteers that

²¹⁸ [Poverty alleviation and Arab women refugees in Jordan: empowerment through grassroots micro-entrepreneurship?](#) 2019, Study Report.

²¹⁹ Joint Data Center on Forced Displacement, World Bank Group, and UNHCR (December 2020). *Compounding Misfortunes: Changes in Poverty since the onset of COVID-19 on Syrian Refugees and Host Communities in Jordan, the Kurdistan Region of Iraq and Lebanon*.

²²⁰ Batool Ghaith, "Jordan 'an exemplary host country' for Syrian refugees — UN official," *The Jordan Times* (Jordan), 16 March 2021, <https://www.jordantimes.com/news/local/jordan-%E2%80%98-exemplary-host-country%E2%80%99-syrian-refugees-%E2%80%94-un-official.>; Joint Data Center on Forced Displacement, World Bank Group, and UNHCR (December 2020). *Compounding Misfortunes: Changes in Poverty since the onset of COVID-19 on Syrian Refugees and Host Communities in Jordan, the Kurdistan Region of Iraq and Lebanon*.

²²¹ Al-Dajani, Haya, Essaid, Aida, Abu Taleb, Hala, and Abu Azzam, Majed (2018). Policy Brief: Jordanian and Syrian Refugee Artisans and Cultural Heritage Entrepreneurship in Jordan. <http://haqqi.info/en/haqqi/research/policy-brief-jordanian-and-syrian-refugee-artisans-and-cultural-heritage>

²²² Information and Research Center – King Hussein Foundation (2020). [Glimpses of Hope in the Era of Corona: Our Stories from Jordan](#) (series of 25 stories from March 27 until May 21, 2020),.

they were able to survive. This made us realize the importance of the well-being and resilience of those who serve refugee and vulnerable populations. Front-line workers in the practitioner field continued to serve their beneficiaries virtually during the lockdown, as did volunteers who used every means necessary to get their beneficiaries the food and medicine they needed in order to survive.

During the lockdown, we reassessed all our research projects and provided donors and partners with two options. Purely qualitative research designs were converted to mixed-methods studies that included quantitative components that could be carried out online or over the phone. This was only done for projects where the research topic was not controversial or could put any respondent in harm's way. All focus group discussions were converted to in-depth individual interviews to minimize the risks of spreading the virus, and there was a short window during the summer of 2020 where it was safe enough to carry out both focus group discussions and in-depth interviews. However, all research pertaining to gender-based violence, sexual and reproductive health rights and access to services, and other gender-sensitive research had to be postponed in order for it to be carried out face-to-face. We hope that current efforts to vaccinate the Jordanian population and refugees will allow us to recommence this research in May 2021.²²³

When carrying out research with vulnerable populations, the risks are greater. In a patriarchal society such as that of Jordan, much of the gender-sensitive research takes place in spaces and venues where the respondent not only feels safe but is able to access easily, such as a community-based organization. With the lockdown, restricted mobility left many gender-based violence (GBV) victims trapped with their perpetrators with no access to protection, rehabilitation, or support services. For those who were able to access or seek help, it was clear the amount of GBV increased, even though not all cases could be reported. A study conducted by UNFPA and local organizations with 360 Jordanians and Syrians showed that 69% of respondents agreed that GBV had increased since the start of the pandemic. The most common types of GBV mentioned were emotional and physical abuse.²²⁴

As with all sectors, civil society organizations such as ours have tried to continue working even under the volatile circumstances. While the many of our research methodologies were modified from purely qualitative research to mixed-methods where possible, with vulnerable populations it is not as straightforward. The priority is to ensure that no harm comes to any individuals who participate in the research, but also to ensure the safety of the researchers themselves. For example, even when conducting research that was not concerning "sensitive" issues, while obtaining the informed consent over the phone, an "exit word" is established with the respondent in case they felt they needed to stop the interview.²²⁵

²²³ "Jordan has become one of the world's first countries to start vaccinations for UNHCR-registered refugees," UNHCR (14 January 2021). [First refugee COVID-19 vaccinations commence in Jordan](#).

²²⁴ UNFPA, Institute for Family Health – Noor Al Hussein Foundation, Plan Jordan, (2020), [Daring to Ask, Listen and Act: A Snapshot of the Impacts of COVID-19 on Women and Girls' Rights and Sexual and Reproductive Health](#)

²²⁵ Similar safety protocols were also taken in another research project in partnership with the University of Berkley's Human Rights Center, which focused on child marriages and the implications of COVID-19 on Syrian girls in Jordan. For more information, see Freccero, Julie, and Audrey Taylor. *Child Marriage in Humanitarian Crises: A Participatory*

Impacts of COVID on Child Marriage in Jordan

The implications of these problems can be seen in efforts to study and combat the problem of child marriage in Jordan. Even before COVID, a great deal of research was focused on child marriage, and it was often written off as an imported Syrian phenomenon in Jordan.²²⁶ Feminist researchers, human rights advocates, and social protection practitioners are all in agreement that child marriage is impacted by high levels of poverty and the lack of economic opportunities, resorting to families pressuring girls into a child marriage.²²⁷ Child marriage is a form of GBV and therefore it is no surprise in a patriarchal society, whether Syrian or Jordanian, that when the socio-economic situation worsens, there is an increase in child marriage as one of the many kinds of GBV. According to Demographic Health Survey 2017-2018 figures for Jordan, “more than one in four children are married before the age of 18 and nearly one in 10 are married before the age of 15.”²²⁸ In 2019, the Jordanian Parliament raised the minimum age of a girl for which judges could permit exceptional marriage cases from fifteen to sixteen. However, the pandemic, and particularly the closure of schools, became an obstacle to efforts to combat child marriage. Whether Syrian or Jordanian, one of the key factors that can help prevent her from entering a child marriage is staying in school. When the pandemic began, the situation for girls from poor socio-economic situations not only worsened financially for them and their families, but pushed families into deciding a detrimental future for their daughters as a last resort.

In 2019, with the support of IM Swedish Development Partner, IRCKHF designed a 5-year longitudinal study to capture the transition of marginalized girls (ages 14-19) into adulthood. While all marginalized populations are uniquely vulnerable, this study was designed to research the impact of overlapping vulnerabilities on the challenges these girls face in their journeys into adulthood. As part of IRCKHF’s mission to mobilize knowledge for positive social change, it is hoped that this nuanced research will better inform future programming and policies concerning girls and young women in Jordan.

In 2019 IRCKHF began the baseline study for this project, which was completed in early 2020 just a few weeks before the lockdown began in Jordan. In interviewing 62 girls with varying socio-economic and legal vulnerabilities, what quickly became apparent was the impact of having left school versus being in school.²²⁹

Study of Risk and Protective Factors, Decision-Making, and Community-Driven Solutions. Human Rights Center, 2021. Print.

²²⁶ R. El Arab & M. Sagbakken (2019) Child marriage of female Syrian refugees in Jordan and Lebanon: a literature review, *Global Health Action*, 12:1, DOI: 10.1080/16549716.2019.1585709; Higher Population Council (2017). *A Study on Child Marriage in Jordan*.

²²⁷ Jones, N., Baird, S., Presler-Marshall, E., Malachoswka, A., Kilburn, K., Abu Hamad, B., Essaid, A., Amaireh, W., Sajdi, J., Banioweda, K., Alabbadi, T., Alheiwidi, S., Ashareef, Q., Altal, S., Kharabsheh, W., Abu Taleb, H., Abu Azzam, M. and Abu Hammad, B. (2019) Adolescent well-being in Jordan: exploring gendered capabilities, contexts and change strategies. A synthesis report on GAGE Jordan baseline findings. London: Gender and Adolescence: Global Evidence.

²²⁸ Abu Zaid, Sarah (20 January 2021). [Child marriage on the rise again — survey](#), *The Jordan Times*.

²²⁹ For both the baseline study in 2019-2020 and the rapid assessment in 2020, IRCKHF received IRB approvals for the research tools and methodology from the Jordan University for Science and Technology.

Main Vulnerability	Number of Girls	Of Which are Out of School
Living in Poverty	9	1
Married as Children	11	6
Not Jordanian Citizens because mother is Jordanian and Father is not	7	2
With Disabilities (physical)	8	3
10 (6 Syrians in ITS ²³⁰ ; 4 Jordanians)	10	10
Living in Care Centers	10	0 (5 in school and 5 in vocational training)
Out of School (only)	7	7
Total	62	34

A total of 34 were already out of school and the three main reasons identified for them leaving school were:

- the need to work and support their family
- low academic achievement in an unsupportive environment
- customs and traditions

Of the 29 girls who were in school, 23 hoped to complete their education and continue to higher education. Those girls who were working were actually the ones who expressed the greatest desire to return to school and finish their education in order to be able to change their professions:

“I have to go back. I dream of becoming a teacher when I grow up, to teach. But if I want to teach, I have to study first.” (girl child laborer, age 17).²³¹

Recognizing education as the most significant factor in determining the future of these girls, IRCKHF developed a video to raise public awareness in Jordan about the importance of girls staying in

²³⁰ ITS stands for Informal Tented Settlement, which are informal settlements for those Syrian refugees in Jordan who are either unable or unwilling to reside in a formal refugee camp, or cannot afford to live in residences amongst the host community.

²³¹ Information and Research Center – King Hussein Foundation (2020). [Marginalized Girls in Jordan: Baseline Research Results](#), p. 18.

school.²³² It was inspired by the Girl Effect video, and shows how staying in school can transform the future of the girl child.

As part of a 5-year project with research having been completed in early 2020, we had not planned on further research until 2021 other than interventions to match the girls with the needed social protection services. However, the pandemic and lockdown changed those needs, so the baseline findings were no longer an accurate account of their situation. Fortunately, because the girls knew the research team, our researchers were able to conduct a rapid assessment via telephone in October 2020.

Nevertheless, IRCKHF researchers could only reach 45 of the original 62 girls. The majority did not respond to mobile calls or messages; eight had changed their place of residence; three girls moved after getting married; one moved with her family to a smaller residence due to their financial situation, and one Syrian girl from an Internal Tented Settlement (ITS) moved to a different settlement with her family after their tents caught on fire. Of these 45 girls, 31 said that their families' economic situation worsened over the last year as a result of the pandemic.

“We were not able to buy masks and similar things because we didn’t have money. We were barely able to pay for water and electricity...My brother was the only one working, and he had debts to pay.”

(Girl Child Laborer, age 15)²³³

Of those 45, none had developed COVID-19, but only 23 girls were still in school.²³⁴ Of these 23 girls, 11 were facing challenges with online learning, and only 3 felt that they were able to keep up with school. The assessment showed that one of the main challenges for girls to continue online learning in 2020 was the lack of access to smart phones, computers, and/or the internet. Two girls with physical disabilities said that online learning was a continuous challenge.²³⁵

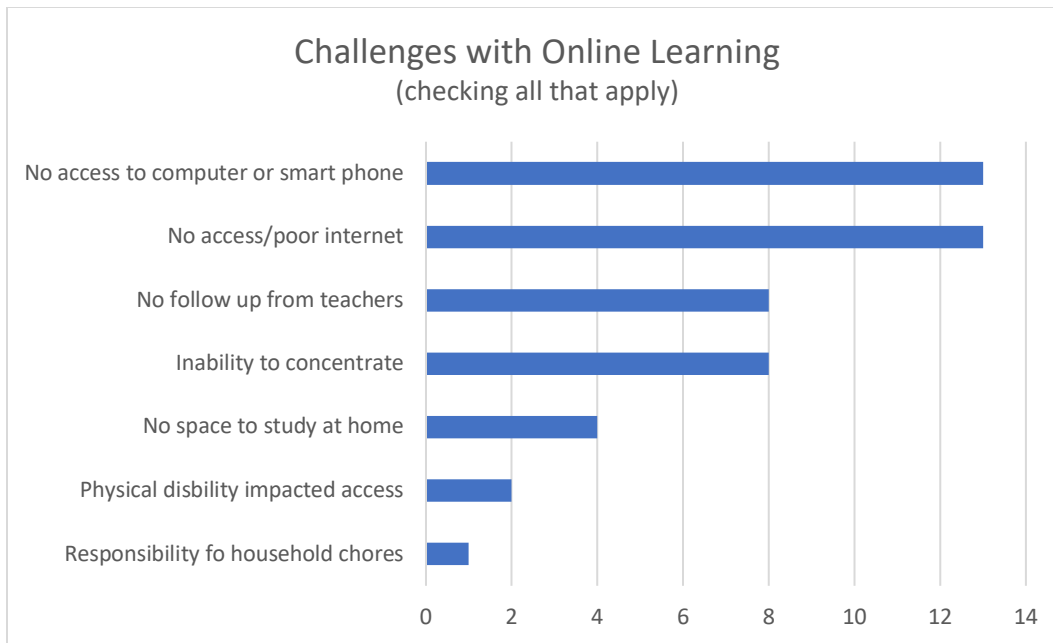
²³² Information and Research Center – King Hussein Foundation (2020). We Have a Story (video),

<https://www.youtube.com/watch?v=oEEoT2VmFLc&list=TLPQMTkxMDIwMjAPFtMhM7m-BA&index=2>.

²³³ Information and Research Center – King Hussein Foundation (2020). [Marginalized Girls in Jordan: Rapid Assessment of the Impact of COVID-19](#), p. 3.

²³⁴ Information and Research Center – King Hussein Foundation (2020). [Marginalized Girls in Jordan: Rapid Assessment of the Impact of COVID-19](#), p. 5.

²³⁵ Information and Research Center – King Hussein Foundation (2020). [Marginalized Girls in Jordan: Rapid Assessment of the Impact of COVID-19](#), p. 2 and 5.



In September 2020, schools re-opened for a brief period of time before switching back to online learning. Only 16 girls registered, and five dropped out. While others may have chosen to continue online learning instead (this remained an option for those who opted not to attend physically), those five who dropped out clearly stated that they had no intention to return. Also, five girls each from a different vulnerability group all either got engaged or married in 2020, one of these five also got divorced. From those that were already married in the baseline study, two had children and another two got divorced, one of whom got remarried. Finally, due to the impact of COVID on their families, all 45 girls can be considered to be now living in poverty.

The number of studies about child marriage in Jordan rose shortly after the Syrian Crisis began. It was clear that it was an increasing issue, but the common narrative amongst those in the development sector in Jordan, as well as the public, was that this was something Syrians did back in Syria, and that it was not necessarily an issue for Jordanians. However as more and more studies were done where a small sample of the research respondents would include Jordanians, it became clear it was not only a Syrian problem in Jordan but a Jordanian one as well. As economic hardship drove the families further into poverty, education became less of a priority for daughters, and parents resorted to child marriage as part of the solution in the hopes of financial security and economic support for the family. For the daughter though, in addition to all the identified consequences that come with a child marriage, she becomes stuck in a cycle of poverty. Other studies have shown will resort to her one day also depending on marrying her daughter off before becoming of adult age.²³⁶ So as soon as schools shut down in Jordan, it set back what the development sector has been working on for almost a decade now: keeping girls in school and

²³⁶ Information and Research Center - King Hussein Foundation (2013). Homebound Girls in Jordan, <http://haqqi.info/en/haqqi/research/homebound-girls-jordan>.

preventing girl child marriages. The rate at which child marriages have increased in 2020 alone, based on the studies mentioned above, shows that as the economy becomes less stable and schools remain closed, we will continue to see more child marriages for both Syrian and Jordanian girls.

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PANDEMIC-SAFE RESEARCH WITH ONLINE SURVEYS

By Robert Kubinec

In this article I argue that a possible silver lining of the COVID-19 pandemic, which has required wrenching changes of the MENA research community (Allam, Buttorff, and Shalaby 2020), is that it has increased awareness of the utility of online survey research. Scholarly research in the MENA region, and developing countries more generally, would benefit over the long term from an increased openness to online-only research designs that reach MENA residents where they increasingly interact with one another: on social media. Separate from the pandemic, online-only research has the added advantage of reducing potential harm to respondents and research assistants, whose online activity within social media sites can only be imperfectly observed by domestic authorities.²³⁷

Online Surveys via Social Media Ads

I draw, in this article, from my own and my colleagues' recent experience implementing surveys using Facebook ad targeting. Facebook is probably the most useful social media platform in the MENA region as its usage vastly exceeds the scope of other popular social media platforms.²³⁸ The lack of censorship of Facebook by MENA countries, even in highly authoritarian regimes, makes it an attractive means to reach residents directly. Facebook usage in the region, reaching 74 percent of all internet users according to the Arab Barometer's most recent data, has yet to peak (Wee and Li 2019, 7). In addition, those who have social media accounts tend to spend a significant percent of their time on the medium, with an astonishing 94 percent spending 2 hours or more on a social media site (Wee and Li 2019, 8). These adoption rates mean that social media is close to supplanting television as a primary source for Arabs' news (Wee and Li 2019, 10).

Given the high utilization rate of Facebook in the region, it is no surprise that most online survey research likewise employs Facebook, or one of its subsidiary sites like Instagram, in some way. The major commercial provider of online survey research, YouGov, relies on Facebook ads to recruit users into its panels, from which it draws samples for academic research.²³⁹ Scholars can take one of three approaches in obtaining samples that can be ranked in terms of their involvement in subject recruitment: (1) sign up for a marketing account and target their own ads

²³⁷ While activists in the MENA region are increasingly targeted by so-called "phishing" campaigns designed to give intelligence services direct access to their devices, without such access it can be difficult for telecom regulators or intelligence services to directly monitor Facebook traffic because it uses encrypted protocols (i.e., https). It is for this reason that China, for example, bans Facebook entirely rather than attempt to screen traffic within the site.

²³⁸ While this is true for most MENA countries, there are exceptions. In Qatar, for example, Facebook usage remains low due of Facebook's requirement that users have profile pictures and real names. However, other Facebook-owned sites like Instagram maintain strong followings, including in Qatar, which can also be used for ad targeting.

²³⁹ Based on a conversation with a YouGov representative at the Middle East Studies Association Conference in the fall of 2019.

at Facebook users; (2) recruit a social media marketing firm to target ads on their behalf,²⁴⁰ or (3) purchase a sample from YouGov.

Recent research has produced important findings from both direct targeting by scholars and via YouGov. In a recent paper with Tessa Thornton, we recruited 1,573 respondents in the West Bank in the spring and summer of 2020 to better understand the relationship between Palestinians and the growing presence of Israeli settlements by employing Facebook ads targeted at different age and gender demographics (Thornton and Kubinec 2020). In a separate project with Andrey Tomashevskiy and Haillie Lee that employed direct ad targeting, we show that Egyptian companies without political connections were much more likely to shut down due to COVID-19 restrictions relative to companies without these connections (Kubinec, Lee, and Tomashevskiy 2020). Williamson et al. (2020) analyzed a massive sample purchased from YouGov to understand in much more detail how support for Islamist political candidates varies across MENA countries. Guiler (2020) employed a sample recruited directly via Facebook ads to probe how Turkish citizens evaluated electoral candidates with and without prison experience. Finally, in ongoing research, Sharan Grewal, Tahir Kilavuz and I use Facebook targeting to closely monitor Algeria's Hirak protest movement, revealing the nature of protester demands and the drivers of movement longevity (Grewal, Kilavuz, and Kubinec 2019).

Addressing Skepticism toward Online Surveys

Despite increasing usage, skepticism remains among the scholarly community about the utility of online survey research, and Facebook ad targeting in particular, as a means of learning about political and social attitudes. It is true that neither Facebook usage nor internet connectivity is randomly distributed within and across MENA countries, with poorer countries like Yemen having less than 50% of the population connected and rural areas showing less connectivity even within countries with high penetration overall (Hoogeveen, Rodriguez, and Aziz 2020). In an interesting sociological trend for the region, men tend to be more likely to use Facebook than women (Fatehkia, Kashyap, and Weber 2018), which could be in part due to cultural norms against posting profile pictures.

These known biases may convince scholars that they should not trust data collection to a site over which they have relatively little control. However, the question is not whether Facebook is a flawless method of subject recruitment, but rather *how it compares to other data-gathering methods in the region*. Comparing online surveys to the mythical simple random sample in which the researcher draws balls from Polya's urn, as many learn in graduate school, does not adequately capture a situation in which the balls are sentient human beings. For example, the Arab Barometer, which has the widest scope and coverage of any survey research in the region, includes weights in all its surveys because even its direct household interviewing methods do not

²⁴⁰ This method's primary advantage is both to minimize the time needed to learn Facebook's arcane ad targeting system, and can also help to avoid having the researcher's ads falling under Facebook's misinformation policies, which scrutinize ads that mention social or political issues and do not have any mechanism to differentiate academic research.

return samples that match population totals, requiring the use of weights to account for demographic imbalance.

Adjusting for Bias in Online Surveys Using MRP

Nonetheless, it is not easy to know how to best adjust an online survey to account for known biases. Online survey research has become increasingly popular in opinion polling research because it is ideally suited for a relatively novel adjustment technique known as multilevel regression with post-stratification (MRP) (Park, Gelman, and Bafumi 2004). The method became more prominent after Wang et al. (2014) successfully employed the technique to correct an online survey of Xbox users to more accurately predict the result of the 2012 U.S. election than conventional polling methods.

To employ MRP, the analyst needs access to a contingency table (usually derived from census data, although large surveys are a secondary option) that gives the population distribution of relevant demographic criteria, such as the distribution of citizens across urban/rural areas and by gender. To correct a survey for population imbalance, it is necessary to fit a model regressing the survey outcome on binary indicators for these same criteria within the survey, e.g., the gender and urban or rural location of the survey respondent. The model can then predict the average survey response by each combination of these criteria, and the model predictions can be re-weighted using the census-derived contingency table to match what the population looks like. Thornton and I employ this method to derive an estimate for the average distance that a Palestinian lives from an Israeli settlement—14 kilometers—despite the fact that our sample is heavily male-skewed (80% of the sample), by separately calculating the distance for all cells of a contingency table of the West Bank population by gender, district and age and summing to produce a weighted average.

Employing MRP effectively requires rethinking the survey design. First, it is important to know ahead of time what kind of census or large survey information is available to construct a contingency table, and questions in the survey must match the coding used in the census. Second, the survey collection design should focus on maximizing the size of the sample rather than balance per se. For example, in our Palestine survey, we targeted more ads at women than men to help address known imbalances, but we did not exclude male respondents as MRP works best with larger samples. An older male respondent can help correct for age imbalance, for instance, even if not gender imbalance. The important sampling criterion is the total degree of diversity in responses rather than maintaining even quotas.

Finally, it is important to note that the population re-weighting procedure is only necessary if the aim is population inference, i.e., extrapolating the average survey response to the population. In many cases, scholars want to fit models that focus on the effect of covariates rather than estimating population quantities. In this case, simply including these demographic indicators as control variables is sufficient to account for how these design issues might affect a coefficient of interest in a regression model (Gelman 2007). By maximizing sample size—which is often much cheaper via Facebook ad targeting—and explicitly incorporating indicators that affect population biases, it can be straightforward to collect data that provide representative answers on important questions in MENA countries.

The Future of Online Surveys in the MENA Region

It does not seem that, following the end of the pandemic, online activity will decrease in the region. Rather, the increased reliance on online media for work, enjoyment and communication is likely to make social media an even more important domain for researchers to be active in. For example, the United Arab Emirates recently launched new visa programs to attract remote workers and help boost hotel and tourism revenues.²⁴¹

In one hopeful example, the Arab Barometer's success in implementing its most recent round of surveys with online methods should help us understand how online methods compare to traditional household surveys. While face-to-face research can never be replaced, becoming more proficient at online research can make our research more inclusive of online communities and less vulnerable to regional instability and unforeseen events like pandemics.

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²⁴¹ *The National*, "UAE to Issue Residency Visas for Remote Work," March 21, 2021.

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