

Assessing Relative Influence for Peace and Development Programming

A DT Institute Research Methodology Report

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Ben Connable
Senior Research Advisor

SUMMARY

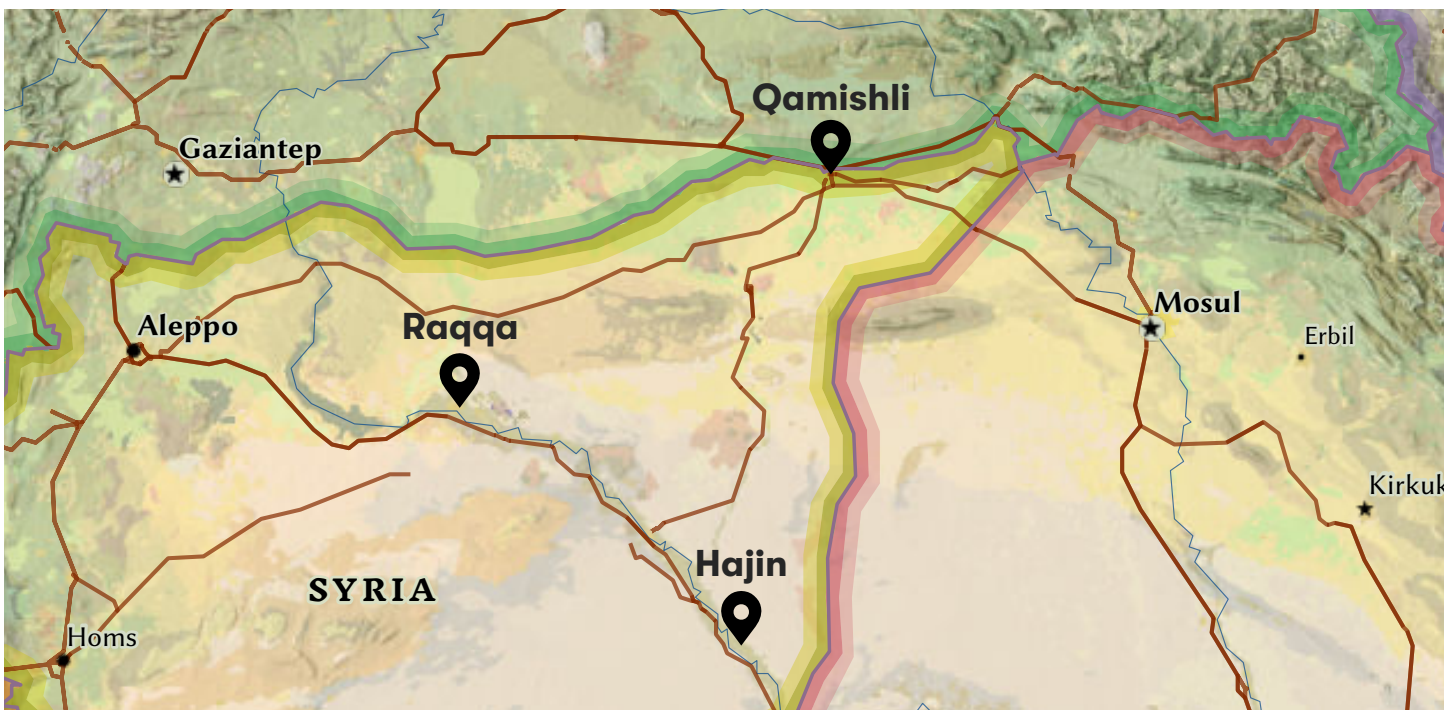
This report presents findings from an exploratory research effort to improve understanding of relative influence in conflict areas. It provides the international peace and development community with an evidence-driven prototype assessment instrument, as well as summary findings from a more detailed assessment conducted in mid-2020 of relative governmental and nongovernmental influence in three municipalities in northeastern Syria: Qamishli, Raqqa, Hajin. This approach is expressly intended to identify areas which are more or less suitable for the delivery of international humanitarian aid and, over the longer term, development programming delivery.

ABOUT DT INSTITUTE

Established in 2019, DT Institute is a 501(c)(3) non-profit organization committed to “doing development differently.” Our mission is to partner with communities and leaders to help build and preserve more resilient, equitable, inclusive, and democratic societies. We implement complex global development programs in conflict, fragile, and closed environments. We also fund thought leadership initiatives and development projects that drive innovation and improve lives through evidence-based programming. Headquartered in Washington, DC, DT Institute has programs and partnerships in more than 40 countries globally, with offices in Germany (Berlin) and Iraq (Baghdad, Erbil) and representation in Spain (Madrid).

NORTHEASTERN SYRIA: GEOGRAPHY AND MAJOR GROUPS

Testing of the prototype relative influence assessment tool described in this report took place in northeastern Syria. DT Institute engaged Syrian enumerators to conduct interviews with Syrian citizens in three cities: Qamishli, Raqqa, and Hajin. This map shows the location of the three cities in northeastern Syria, each marked by a blue square in the inset chip and a transparent blue square on the larger map image. Qamishli is in the north along the Turkish border. Raqqa is located to the southwest of Qamishli along the Euphrates River. Hajin is located to the southeast of Raqqa along the Iraqi border.



EXECUTIVE SUMMARY

This report presents findings from an exploratory research effort to improve understanding of relative influence in conflict areas. It provides the international peace and development community with an evidence-driven prototype assessment instrument, as well as summary findings from a more detailed assessment of relative governmental and nongovernmental influence conducted in mid-2020 in three municipalities in northeastern Syria: Qamishli, Raqqqa, Hajin. This approach is expressly intended to identify areas which are more or less suitable for the delivery of international humanitarian aid and, over the longer term, development programming delivery. This research was supported by a generous grant from the German Federal Foreign Office.

Why Does Understanding Influence Matter for Peace and Development Programming?

Peace and development donors, implementers, and partners in conflict areas seek to deliver humanitarian aid or development programming to areas where it will have the most positive impact *and* where the risks of having support diverted to malign actors can be safely managed. Influence is, briefly, the degree to which group actors have built and sustained authority in a given area. Accurate understanding of local group influence can safeguard programming and staff.

In the case of northeastern Syria, aid organizations sought to prevent their donated support from being siphoned off by the Government of Syria or by violent extremist groups like the Islamic State. Assessing influence allowed them to determine which groups controlled villages and municipalities so they could avoid losing goods or endangering staff or aid recipients.

Accurate assessments of influence are more likely to help peace and development organizations deliver services to the people they intend to help in Syria and in all cases, globally. Accuracy can only be achieved with a combination of high-quality inputs (data), effective analysis (method), and a sound theory of influence in conflict zones. Our review of existing literature suggests theories currently in use lead to oversimplified, binary assessments that are too often inaccurate.

Key Findings on Relative Influence Assessment Methods

Our initial literature review showed that many existing efforts to measure or assess influence—commonly referred to as control—inaccurately presented winner-take-all results or represented the influence of a single group on an ordinal scale. In both cases, one group was depicted as having total or partial local control, while all competing groups appeared to have no control or were represented as a secondary variable on a zero-sum ratio or ordinal scale. In other words, representations of influence are overgeneralized.

These unrealistic, binary representations are too often both inaccurate and misleading. They might influence donors to make errant aid or development delivery decisions. Given these concerns, a more realistic assessment would show influence as a continuous, relative competition between local governmental and nongovernmental groups. We propose the following hypothesis:¹

In conflict zones, multiple groups are in constant, relative competition for local influence. Local influence is (1) nonbinary; (2) relative; (3) complex; and (4) dynamic.

¹ Briefly, a hybrid governance system exists when civil society and government share responsibility and capacity to govern in a given space. See Section 1 for further explanation.

We designed our prototype assessment method to assess influence as a pluralistic, relative, complex, and dynamic condition. Instead of attempting to identify a single dominant group in a given area, we collected qualitative evidence on several key governmental and nongovernmental factions in that area and described their relative influence. Table E.1 depicts the generalized categories (column headers) and factors (table cells) we used to generate our semi-structured interview questions. Darker gray cells in the table indicate factors that were not applied for this prototype test due to their lack of applicability to municipalities in northeastern Syria.

Table E.1 Initial Set of Categories and Factors Related to Influence

Governance Factors	Security Factors	Economic Factors	Civil Society Factors	Information Factors
Fiscal Management	Arms Transfers	Trade Agreements	Registration & Licensing	Methods
Administration	Control of Boundaries	Volume of Trade	Inclusion & Participation	Access
Leadership	Security Force Control	Trade Dependency	Sources of Funding	Receptivity
Service Delivery	Competence	Aid Dependency	Political Consensus	Resonance
Justice & Rule of Law	Threat Suppression	Employment	Crackdowns & Arrests	Retransmission
Legitimacy	Inclusiveness	Opportunity	Human Security	Consistency
Infrastructure	Integrity	Economic Security	Education	Correlation

Our preliminary findings based on the prototype test in northeastern Syria supported the first three parts of our hypothesis: in each exploratory case, our interviews suggested that influence was pluralistic, relative, and complex. Longitudinal testing in the same localities, or other localities, can be used to examine the dynamism of influence over time.

If further testing and application of this prototype method supports our hypothesis, then future assessments of influence should all reflect the relative, nonbinary, complex, and dynamic nature of influence in hybrid governance conditions.

Key Findings on Relative Influence in Northeastern Syria

This report is a companion report to *Relative Influence in Northeastern Syria: Assessment of Syrian Regime Control in Qamishli, Raqqqa, and Hajin in Mid-2020* (Salma Alwan and Dan Wilkofsky, DT Institute, 2022). That report provides detailed field collection and analysis results focused on understanding the influence of regime control in northeastern Syria.

DT Institute implemented a semi-structured interview protocol in three municipalities in northeastern Syria: Qamishli, Raqqqa, and Hajin. A total of 51 of the 60 interviews conducted in July 2020 provided useful qualitative data on influence factors related to governance, security, economics, civil society, and information. Each interview consisted of 31 general questions and some localized questions tailored to understand specific influence issues in each of the three locales.

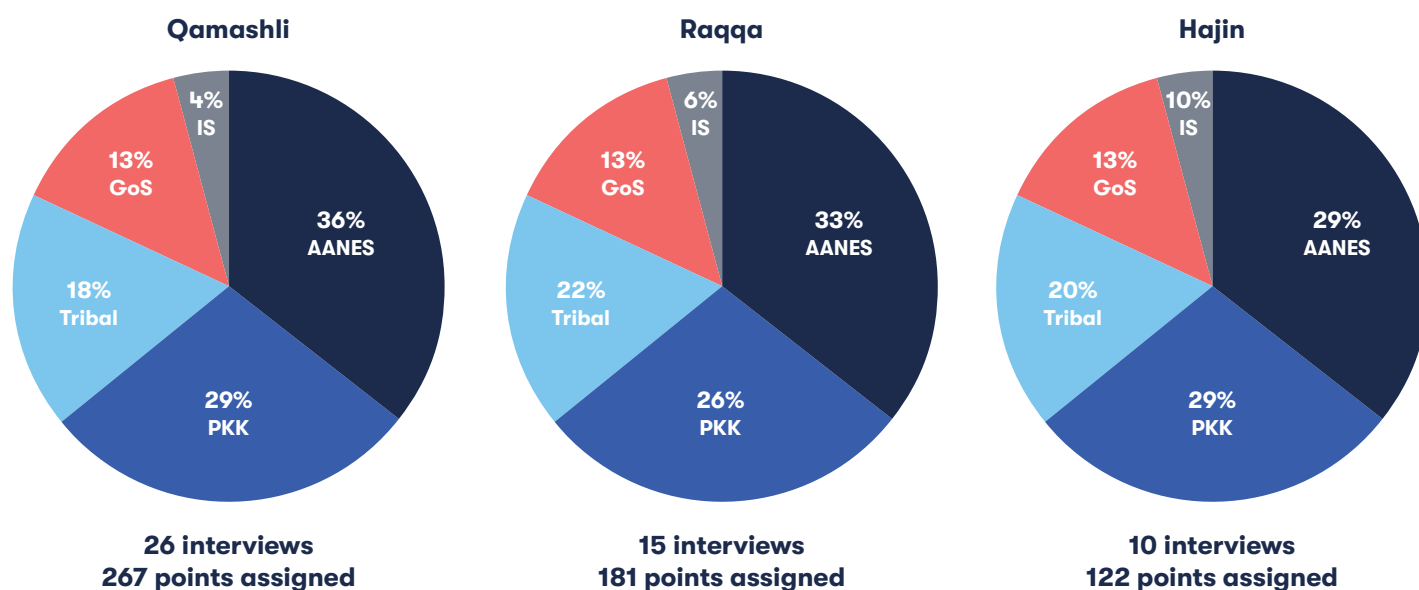
Interviewees were also asked to assign an influence rating of 1-4 for each of the major groups in the given area: (1) The Autonomous Administration of Northeastern Syria—AANES (along with the Syrian Democratic Forces, or SDF); (2) the Government of Syria; (3) the Kurdistan Workers' Party—PKK; (4) local tribal elders and notables; and (5) the Islamic State—IS.²

² They could assign any number of points from 1-4 to each group and give multiple groups equal scores if appropriate. In other words, they could give all groups a score of 4 each, or 1 each, or any mix in between. We summed the scores for all responses in each area, assigned point totals to each of the five groups, and then calculated the percentage of relative influence in that area from the sum of all assigned points.

FINDING: The Government of Syria (GoS) had relatively little influence in key northeastern municipalities in mid-2020. Dominant groups in Qamishli, Raqqa, and Hajin are the AANES, then the PKK, then tribal leaders, then the GoS, and then the Islamic State. GoS influence represented 12-13% of total influence in each area in comparison to 26-36% each for the PKK and AANES.

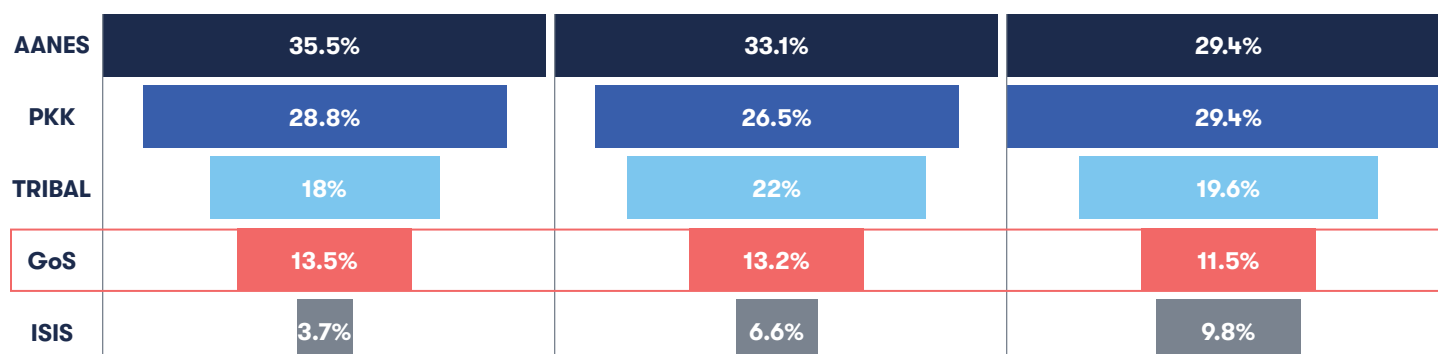
Figure E.1 depicts the results from these prototype interview protocol ratings. Relative influence dynamics in each area were similar. The AANES held a plurality of influence or was equal with the PKK, but no one group came close to holding a standalone majority of influence in any of these areas based on these exploratory interviews. Responses to the 31 questions on group influence closely corresponded with these influence ratios. For example, interviewees who gave the AANES the highest influence scores also tended to attribute the most influence in governance, economics, security, civil society, and information activities to the AANES.

Figure E.1 Exploratory Relative Influence in Three Syrian Municipalities: Pie Chart View



Only 26 of the 51 interviewees (51% of all interviewees) scored one group as clearly dominant in any of the three areas. The other half of the interviewees gave equally high ratings to two or more groups; in their views, no group held dominant influence in their municipality. For example, in Raqqa, 40% of interviewees scored the AANES with the maximum of 4 influence points, with all other groups receiving 3 or fewer points. The other 60% of interviewees scored the AANES and PKK or tribal leaders as having equally high influence. These results suggest a tight competition for influence rather than a decisive binary.

Figure E.2 depicts the same prototype interview results from a different perspective, showing the group(s) given the most influence points at the top, and groups receiving fewer total points listed in descending order. Note that collaboration between only two of the less dominant groups would create a bloc that could surpass or strongly challenge the influence of the dominant group.

Figure E.2 Regime Influence Across Qamishli, Raqqa, and Hajin: Waterfall View

This assessment showed that the regime has little influence in these three key municipalities in northeastern Syria. It also suggested that relative influence assessment could be more accurate and more informative than binary or single-entity ratio or ordinal scale assessments. Further data collection and analysis will be needed to reinforce, or perhaps confound, this exploratory finding and to improve understanding of relative influence in Syria. Table E.2 recommends follow on research. General improvements can also be applied to the Syria case.

Table E.2 Opportunities to Improve Syria Research and General Influence Assessment

Syria Analysis: Gap or Opportunity	Proposed Action	Desired Outcome
Three municipalities, limited insight	Add municipalities	Generate findings for additional locations
Collection needs repetition	Repeat interviews	Generate longitudinal data
Questions need greater specificity	Improve questions	Improve accuracy and precision
U.S.-led coalition not represented	Add coalition	Improve understanding of relative influence
Local boundaries may not be identical from interviewee to interviewee	Have interviewees draw boundaries on a map	Refine understanding of local influence, identify areas for further collection, and improve accuracy
Improve General Method	Proposed Action	Desired Outcome
Findings based on interviews	Add data sources	Increase holism to increase depth, accuracy
Categories, factors not empirical	Further research	Improve reliability and empiricism
Testing in one location insufficient	Add country tests	Determine if approach works outside of Syria
Literature review was limited	Further research	Improve reliability and empiricism

1

INTRODUCTION

This report presents findings from DT Institute’s exploratory research into relative influence assessment. It provides summary information of our northeastern Syria case study. Details of the case can be found in a companion report, *Relative Influence in Northeastern Syria: Assessment of Syrian Regime Control in Qamishli, Raqqa, and Hajin in Mid-2020* (Salma Alwan and Dan Wilkofsky, DT Institute, 2022).

Our analysis is intended to inform the international peace and development community to help improve aid and development delivery. This report explains the research and design process behind the method applied to understand regime influence in northeastern Syria. It includes findings from a review of existing influence assessment methods; the design of a prototype instrument for assessing and analyzing local influence; and results from the assessment in northeastern Syria in June and July 2020.

Our donor for this effort, the German Federal Foreign Office, was primarily concerned with understanding red lines for aid distribution in local areas in northeastern Syria, with a focus on the influence or control of the regime in relation to other groups. They asked DT Institute to determine which groups controlled selected areas to help identify those areas more or less appropriate for aid distribution. We identified the need to modify broadly accepted approaches to influence assessment in order to most effectively support the FFO’s immediate requirements. Our research team focused on designing and implementing interviews in northeastern Syria. This research was conducted in parallel to help design the interview questions and shape the analysis.

The central question driving this exploratory research effort was: How can influence assessment be improved to support the decisionmaking of international donors and aid groups operating in conflict areas?

This supporting effort had three purposes:

1. Improve general understanding and practice of influence assessment
2. Design and test a prototype influence assessment instrument
3. Provide insight into local influence in selected areas in northeastern Syria

The next sections of this report describe the research challenge and the test case in northeastern Syria. Following sections describe insights from the literature review; the development of the prototype instrument; and opportunities to improve the instrument over time.

Challenge: Assess Influence in Conflict Areas

As the cited works in this report show, understanding the nature of influence and determining which groups have more or less influence in conflict areas is difficult. Influence is a notoriously ephemeral concept: it defies universal definition, it cannot be easily measured, and to greater or lesser extents it is constantly shifting. Many previous efforts to apply influence assessment in conflict areas have resorted to dangerous oversimplifications. Assessing relative influence has been particularly difficult in small municipal or rural areas and in cases with multiple competing actors of diverse sizes and types applying diverse methods of influence.

Influence: For the purposes of this report, *influence* describes the degree to which group actors have built and sustained authority in a given area. It includes the abilities of these actors, their activities, and their relative successes in comparison to each other. The actors themselves include nation states, military organizations, local councils, tribes, and the like. While there inevitably are instances of influence without competition, most case studies show influence to be competitive in nature.

Existing research on conflict recognizes that local governance in places like Yemen, Libya, Colombia, Somalia, and Syria is typically hybridized. In a hybrid governing system, state and formal non-state governing organizations with provincial or national-level influence share authorities and responsibilities with communal, tribal, ethnic, sectarian, and other civil society groups.

Hybrid governance further complicates efforts to assess local influence. In many nonconflict areas, governments have relatively clear responsibilities for applying laws, securing the peace, and providing services. In areas of hybrid governance in which the government shares those responsibilities with civil society groups, relative influence is more diffuse, often less visible to outsiders, and harder to assess.

Hybrid Governance: For the purposes of this report, a hybrid governance system exists when civil society and government share responsibility and capacity to govern. Hybridity emerges as a compromise-driven solution to governance. It is partly decentralized and firmly grounded in local socio-political context. Within this local context, a hybrid system works most effectively when formal and informal systems are mutually supporting, and when both government and local leaders agree on the balance between centralized and decentralized governance.

Given local-level complexities and variability in conflict areas, many conflict analysts have pursued a reductionist approach to understanding influence. Our review of influence assessment methods shows extensive use of binary influence representation. In these analyses, one actor appears to dominate a given area and other actors appear—in narratives, maps, and charts—to have no relative influence.

While this binary condition may be present in a few cases, influence is rarely dichotomous. Even when physical space is controlled by a powerful group like a state military force or armed militia, far less powerful groups can exert influence through information activities. Individual identities, beliefs, motivations, experiences, and support cannot be made uniform across even a single village.

There is inherent danger in reducing the understanding of influence in hybrid governance systems—or in any conflict area—to a winner-takes-all outcome. A binary approach ignores the compelling possibility of a plurality of influence, with one actor only slightly edging out several other actors who might collectively have greater influence. It also hides the inherent lack of accuracy in influence assessment with excessive precision. We explore all of these issues below.

Test Case: Northeastern Syria

Syria has been in a state of civil war since the onset of the Arab Spring in 2011. Violence in Syria has displaced millions of civilians, caused (at least) hundreds of thousands of deaths, spread poverty and social injustice, and

traumatized most of Syrian society. As of mid-2020, the Government of Syria exerted prevailing influence over much of western and southern Syria. Other parts of Syria were primarily controlled by extremist organizations. In the northeast, the Kurdish-led Autonomous Administration of North and East Syria (AANES), along with the Syrian Democratic Forces (SDF), exerted considerable influence.³

A review of several geospatial visualization products intended to show influence (often overstated as “control”) in northeastern Syria suggests dominance by either the Government or the AANES in various areas, with other groups holding small pockets or stretches of roadway.⁴ Many of these visualization products display influence as a binary condition: They suggest that groups in northeastern Syria either dominate or have no influence. In actuality, influence and control—particularly along the roughly-drawn conflict boundaries—are sometimes nuanced, often fleeting, and generally hybridized.

In this hybrid state, the Government, the AANES, local community leaders, tribal leaders, and extremist organizations often compete for influence in the same area. Misleadingly precise binary maps of northeastern Syria might influence donors and aid organizations to curtail support in areas that might be receptive. Inversely, aid might be subverted by regime or extremist actors in areas that appear to be under the dominant influence of vetted political organizations. Violence, population displacement, and disrupted freedom of movement exacerbate the assessment challenges.

Given these conditions, effective assessment requires an understanding of influence and control as a *plurality*. Key questions that need to be addressed in such a formulation include: Which organizations have the most influence compared to, but not exclusive of the others? Is the plurality sufficient to manage and maintain control over aid program delivery, for better or for worse? Is this plurality sustainable over the course of program delivery? What factors might help sustain or undermine influence, and how might aid (and eventually, development) delivery change local influence?

A common way to manage this complexity is to apply a set of generalized factors and indicators. Generalization helps to anchor the inherent subjectivity in the kinds of qualitative data essential to aid assessment. But sharp variation in conditions across both locality and time—even within the small space of northeastern Syria—increases the likelihood that generalized assessment factors and indicators will fail to capture the most important, locally-relevant insights.

TESTING THE RELATIVE INFLUENCE APPROACH IN NORTHEASTERN SYRIA

This focused assessment of influence in northeastern Syria offers an opportunity to overcome the two essential challenges outlined above: (1) the dangers and misleading precision inherent in binary influence mapping; and (2) the limits of generalized factors and indicators in conflict assessment. The primary purpose of this prototype test was to support the sponsor objectives in northeastern Syria. The secondary purpose was to apply a mixed-method approach to data collection and analysis to develop an instrument suitable for detailed assessment of influence in conflict areas. Field testing of the prototype instrument will inform future iterations and applications in Syria and elsewhere.

³ While the AANES and SDF are not necessarily a single organization, for the purposes of this assessment we refer to them collectively as the AANES throughout the remainder of this document.

⁴ See the literature review, below, for citations and examples.

APPROACH FOR INITIAL PROTOTYPE TEST

In order to build high-quality and transparent deliverables over the three-month period of performance, we took a four-step approach:⁵

1. Identify the best methods and factors to understand local influence and control
2. Conduct research and key informant interviews to identify suitable local indicators
3. Collect local survey information through structured field collection methods
4. Integrate all available information and analyze it to generate findings and map products

Table 1.1 depicts our phased approach to capture and integrate indicators of local relevance into the primary interview instrument prior to the main collection activity in each of the three selected areas. This two-step approach to selecting indicators, along with the use of a relative local influence scale, form the basis for the prototype method.

Table 1.1 Program Approach

Phase 1 Month 1-Month 2	Phase 2 Month 1-Month 2	Phase 3 Month 2-Month 3	Phase 4 Month 3
<ul style="list-style-type: none"> • Develop general factors • Draft possible indicators • Select field sites • Identify key informants • Recruit key informants • Initial training 	<ul style="list-style-type: none"> • Initial interviews • Refine indicators • Refine collection plan • Build questionnaires • Schedule interviews • Complete training 	<ul style="list-style-type: none"> • Key informant interviews • Parallel research • Quality checks on data 	<ul style="list-style-type: none"> • Analyze field data • Integrate data + research • Write narrative report • Build initial map product

Given the scope and timeline of this project, data collection and analysis constituted initial wave prototype testing. Accuracy and reliability would necessarily be increased with additional waves.⁶

Limitations of this research: This is exploratory research applied to a small-*n* case of three municipalities in a single conflict state. It is derived from a single data collection wave consisting of 51 structured interview surveys and a smaller number of semi-structured interviews. Literature review was limited by both time and resources and should not be considered comprehensive. Our team recognized that additional data sources (e.g., direct observation by the research team, confirming or confounding official data or research reports) would be needed to optimize results.

⁵ Step 2, refining local indicators, will be taken if time and resources allow. See Table 1, below.

⁶ As of mid-2020, when this research was conducted, DT Institute did not have an institutional review board (IRB) to help address human subject protection concerns. In the absence of IRB guidance, the author—a CITI HSP certified researcher—reviewed and instructed the research team to observe protocols described in the Belmont Report, 32 CFR 219, 22 CFR 225, 45 CFR 46, and the USAID Acquisition Regulation sections regarding human subject protection. Given donor interests, the author also reviewed German ethical guidelines for the protection of human subjects, including the 1947 Nuremberg Code. Most German HSP regulations deal directly with medical research and were not directly applicable to this study. See: Department of Health, Education, and Welfare, *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*, April 18, 1979; U.S. Government, *Protection of Human Subjects*, U.S. law Title 32, Subtitle A, Chapter I, Subchapter M, Part 219 (32 CFR 219), as of June 25, 2020a; U.S. Agency for International Development, *Protection of Human Subjects*, Title 22, Chapter II, Part 225, April 1, 2003; U.S. Department of Health and Human Services, *Protection of Human Subjects*, U.S. law Title 45, Subtitle A, Subchapter A, Part 46 (45 CFR 46), as of January 17, 2020b; “The Nuremberg Code (1947),” *British Medical Journal*, Vol. 313, No. 7070, p. 1448, December 7, 1996. Also see: U.S. Department of Health and Human Services, *International Compilation of Human Research Standards*, Washington, D.C.: Office for Human Research Protections, 2018 Edition.

Organization of this Report

Section 2 presents a discussion of influence assessment and the findings from the review of influence assessment literature. Section 3 proposes a set of categories, factors, and indicators that can be generalized as one part of the two-part influence assessment prototype. It lists all of the general questions asked in the semi-structured interview protocol applied in northeastern Syria. Section 4 describes the process and results of the prototype test in northeastern Syria. Section 5 proposes follow-on research to both improve the prototype and to develop practical, longitudinal, and broader-scope relative influence assessment in Syria.

2

PRELIMINARY REVIEW OF EXTANT THEORIES & METHODS

Successful assessment of influence in northeastern Syria required a substantive modification to existing approaches to conflict zone influence assessment. This modified approach is informed by existing methods for assessing influence, some of which are novel and some of which have been applied.⁷ The initial review was conducted by a small team of research assistants using Google Scholar, focusing on political science and international relations publications. The author later supplemented this literature as we identified and pursued deeper questions. All references are cited in the footnotes throughout this report. We identified four broad sets of literature on the assessment of competing influence:

1. political science
2. decision-support stakeholder analysis
3. general conflict monitoring and evaluation
4. military geographic influence assessments

All of these fields of analysis and practice overlap to some extent. No narrow set of literature appears to offer a holistic and immediately testable hypothesis, theory, method, or sets of categories, factors, or indicators applicable to influence assessment.⁸ However, an initial review across these four fields allowed us to build an aggregated set of categories, factors, methods, and indicators suitable for an initial field test.

Informed by Political Science

Political scientists often focus on dyadic (pairwise) comparisons to depict relative influence between nation-states or large organizations. The extraordinary depth of political science literature and the detailed peer review associated with the best-respected publications lend considerable legitimacy to political scientists' selection of state-level influence categories, factors, and indicators.

7 See additional footnotes in this section for additional sources reviewed. Jonathan Moyer, Tim Sweijts, Mathew J. Burrows, and Hugo Van Manen, *Power and Influence in a Globalized World*, Washington, D.C.: The Atlantic Council, 2018; Bas Arts and Piet Verschuren, "New Developments in International Institutions and Organizations," *International Political Science Review*, Vol. 20, No. 4, October 1999, pp. 411-424; Andreas Ladner, Nicolas Keuffer, and Harald Baldersheim, "Measuring Local Autonomy in 39 Countries (1990-2014)," *Regional and Federal Studies*, Vol. 26, no. 3, 2016, pp. 321-357; Vanessa Corlazzoli and Jonathan White, *Measuring the Un-Measurable: Solutions to Measurement Challenges in Fragile and Conflict-affected Environments*, U.K. Aid, Department for International Development, March 2013; James Mayers and Jonja Vermeulen, *Stakeholder Influence Mapping*, International Institute for Environment and Development, March 2005; Robert Nash, Alan Hudson, and Cecilia Luttrell, *Mapping Political Context: A Toolkit for Civil Society Organizations*, Overseas Development Institute, July 2006; Jim Smith, *An Introduction to Influence Maps: Foundations, Constructions, and Use*, presented at the NDIA Systems Engineering Conference, 2009, October 29, 2009; Stuart Burge, *The Systems Engineering Tool Box*, Warwickshire, U.K.: Burge Hughes Walsh, 2011; Elias Berg, "A Note on Power and Influence," *Political Theory*, Vol. 3, No. 2, May, 1975, pp. 216-224; "A New Deal for Engagement in Fragile States," International Dialogue on Peacebuilding and Statebuilding, undated; *Tribal Tribulations: Tribal Mapping and State Actor Influence in Northeastern Syria*, Center for Operational Analysis and Research, May 6, 2019; *Security Archipelago: Security Fragmentation in Dar'a Governorate*, Center for Operational Analysis and Research, undated; Ben Connable, *Embracing the Fog of War: Assessment and Metrics in Counterinsurgency*, Santa Monica, Calif.: RAND Corporation, 2012; Christopher Paul and Miriam Matthews, *The Language of Inform, Influence, and Persuade: Assessment Lexicon and Usage Guide for U.S. European Command Efforts*, Santa Monica, Calif.: RAND Corporation, 2018; Arturo Munoz, *U.S. Military Information Operations in Afghanistan: Effectiveness of Psychological Operations 2001-2010*, Santa Monica, Calif.: RAND Corporation, 2012; U.S. Army, *Information Operations*, Field Manual 3-13, Washington, D.C.: Headquarters Department of the Army, December 2016; German Federal Foreign Office, *The German Humanitarian Assistance Abroad: Country Study Uganda*, Federal Ministry for Economic Cooperation and Development, 2011; Asim Ijaz Khwaja, "Measuring Empowerment at the Community Level: An Economist's Perspective," in: Deepa Narayan, ed., *Measuring Empowerment: Cross-Disciplinary Perspectives*, Washington, D.C.: The World Bank, 2005, pp. 267-284; Robert Goodin and John Dryzek, "Rational Participation: The Politics of Relative Power," *British Journal of Political Science*, Vol. 10, No. 3, 1980, pp. 273-292.

8 Definitions of these terms vary slightly across various fields of scientific practice. For the purposes of this report, a hypothesis is an untested assumption about a specific phenomenon like local influence; a theory is a broad explanation of a wide range of phenomena, in this case including governance, security, identity, and influence, supported by existing research; a method is a procedure or set of procedures designed to test a hypothesis, apply a theory, or simply to gather and analyze data; a category (e.g. governance) is a broad set of relevant factors; factors are specific issues to examine, like rule of law or education; and indicators are types and sources of data used to inform assessment.

However, at the local level, dyadic comparisons can be overly precise and may be rendered ineffective by complexity and inconsistency in data availability. Many indicators from the political science literature are not generally relevant at local levels. Risks of applying an overly structured, reductionist, quantitative comparison increase along with the degrees of granularity, complexity, and the concentration of different influential actors in a given local space.

Table 2.1 depicts an example of a pairwise comparison of national-level factors and data applied by Moyer, et al. (2018). Pairwise, or dyadic, comparisons are made between states across many different factors in an effort to generate a more holistic understanding of power and influence. Here Moyer, et al. examine the relationships between bandwidth and dependence, or the comparative capacity and relative influence between states for a given factor (here, trade).

Table 2.1 Example of Political Science Influence Analysis

DIMENSION	Description	Security	Political
Bandwidth	Total trade	Total arms transfers	Level of representation
	Trade agreements	Military alliances	Intergovernmental membership
	Trade, % of total trade	Arms imports, % of total arms imports	
Dependence	Trade, % of GDP	Arms imports, % of military spending	
	Aid, % of total aid		
	Aid, % of GDP		

Source: Moyer, et al., 2018

While influence over international trade agreements might help to explain international influence, it would require a significant stretch to translate that factor to a municipality of 30,000 people, or a village of 1,000 people. Cited literature on local influence assessment shows that factors like leadership, service delivery, and control of security forces translate directly with some necessary modification for scope and scale.

We used the limited sample of political science literature to explore theories of influence and to design methods that could be explored in future applications of this prototype instrument. We also used the limited review of this selected political science literature to identify categories of factors from which we could then further refine generalizable factors—and later, indicators—more applicable to local influence assessments.

Informed by Stakeholder Analysis Methods

Stakeholder mapping identifies groups or individuals pursuing influence over a policy decision or (less often) over control of a given area, and then maps their relative influence in relation to an objective like changing a policy or controlling physical or discursive space. As with political science influence methods, stakeholder analysis sometimes centers on a series of dyadic comparisons. Parts of this process—the mapping of competing groups, the various systems designed to rate influence, and a range of problem bounding steps—are useful for local influence.⁹

⁹ In addition to the material cited above, one journal article provided excellent summaries and resources on stakeholder influence analysis and mapping. See: Chase A. Sova, Ariella Helfgott, Abrar S. Chaudhury, David Matthews, Thomas F. Thornton, and Sonha J. Vermeulen, “Multi-Level Stakeholder Influence Mapping: Visualizing Power Relations Across Actor Levels in Nepal’s Agricultural Climate Change Adaptation Regime,” *Systemic Practice and Action Research*, No. 28, 2015, pp. 383–409.

The following table and figure show an example of a stakeholder analysis. Cova, et al. (2014) have identified a policy problem, framed a time period for assessment, identified key influencers, collected data from key informants, and then analyzed and visualized the results in both tables and maps. **Table 2.2** shows how these analysts recorded and adjusted the key informant responses on the relative influence of different actors and groups (rows) and then integrated those responses to generate relative values. These values are visualized in Figure 2.1.

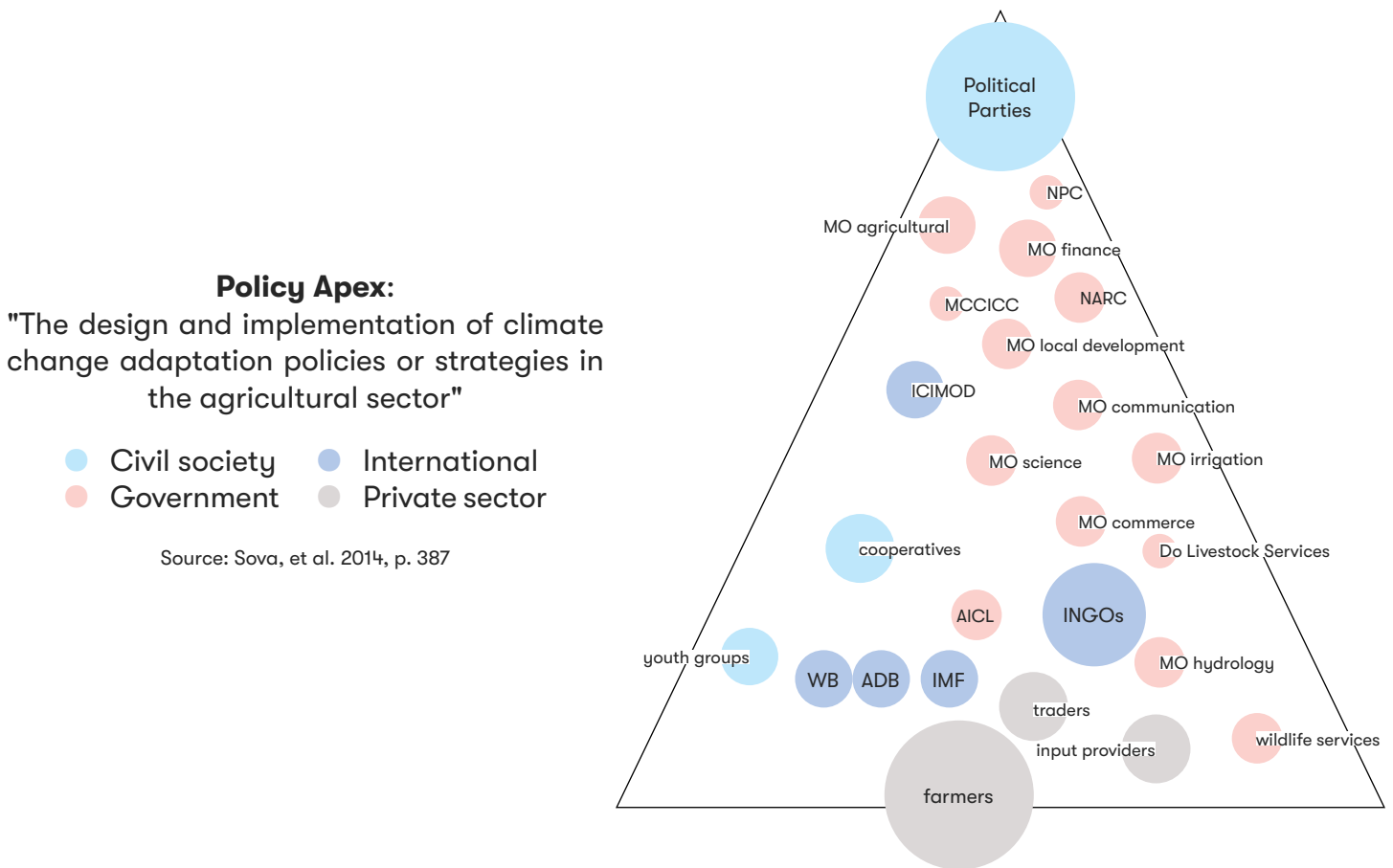
Table 2.2 Example of Stakeholder Analysis Results in Table Form

		Ranking Scores (Relatively and Adjusted) by Respondent									Frequency Ranked (sample size 14)	Average Adjusted Ranking (maximum 14)	Influence Score (cumulative adjusted ranking / sample size)
		Respondent #1	ADJUSTED #14	Respondent #2	ADJUSTED #14	Respondent #3	ADJUSTED #14	Respondent #4	ADJUSTED #14	ETC...			
Actor / Actor Groups	Ministry of Agriculture Development (MoAD)	9	10	12	14	17	13	-	-	→	11	10	7.9
	INGOs (World Vision, IDE, CARE, WWF, Practical Action, Oxfam, Action Aid, etc.)			8	10	7	5	4	6	→	11	8.7	6.8
	Village Development Committee (VDC)	3	3	-	-			9	13	→	11	5.4	4.3
	District Development Committee (DDC)	3	3	-	-					→	10	5.5	3.9
	Ministry of Environment (MoE)	7	8	-	-	16	12			→	9	11.5	7.4
	Traders	8	9	5	6	3	2	8	11	→	9	7	4.5
	Agricultural Cooperatives	6	7	4	5	8	6	1	1	→	9	4.6	3
	National Planning Commission (NPC)	5	5	12	14	18	14			→	8	12	6.9
	Political Parties (NC, CPN-UML, UCPN-Maoist, Madhesi Front, etc.)	11	12	-	-	19	14	6	9	→	8	8	4.5
	ETC...	↓	↓	↓	↓	↓	↓	↓	↓				
# OF RANKING LEVELS (Average = 14)		13	14	12	14	19	14	10	14				

Source: Sova, et al., 2014, p. 409

Figure 2.1, below, shows the visualization of the data from Table 2.2, above. In this figure the results from the key informant interviews (KIs) and analysis presented in Table 2.2 are represented in terms of both relative group size and relative group influence. In this example, while farmers may be the largest group, they also have relatively little influence over this specific agricultural policy.

Although this stakeholder analysis focuses on decisionmaking and not geographic influence, the theory, methods, and relevant data proved useful to inform our understanding of geographic influence analysis. Use of KIs as a common data source makes stakeholder influence literature particularly relevant for the present exploratory research.

Figure 2.1 Example of a Stakeholder Analysis Influence Visualization

Informed by Non-Military Conflict Assessment Experience

Monitoring, evaluation, and learning (MEL) practices in the nonmilitary aid delivery community are well established. Civil literature on program assessment is extensive. In general, MEL methods focus on understanding needs and then assessing outputs of delivery. The various applications of MEL methods, factors, indicators, and data offer many insights into feasible approaches for understanding conflict spaces.¹⁰

Some critical reviews of MEL theories, methods, and reports directly or obliquely question the quantifiability—and therefore, quantitative measurability—of conflict data.¹¹ Most MEL approaches focusing on influence heavily rely on qualitative data collected through interviews, focus groups, and surveys. While results from these methods can be quantified (we do so in our approach through simple comparisons), and while random-sample surveys lend themselves to effective quantitative analysis, these approaches ultimately reflect the opinions of people who may be under significant pressure to shape study results.

¹⁰ In addition to the previously cited references, see: Michael Dziedzic, Barbara Sotirin, and John Agoglia, eds., *Measuring Process in Conflict Environments (MPICE)—A Metrics Framework for Assessing Conflict Transformation and Stabilization*, Washington, D.C.: U.S. Institute of Peace, 2008; James Derleth, *The Tactical Conflict Assessment Framework*, Washington, D.C.: U.S. Agency for International Development, undated; United Nations, *International Covenant on Civil and Political Rights, General Comment No. 27: Freedom of Movement (Article 12)*, November 12, 1999; U.S. Agency for International Development (USAID), *Measuring Fragility: Indicators and Methods for Rating State Performance*, Washington, D.C., June 2005.

¹¹ For example: Corlazzoli and White, 2013; Connable, 2012; Sarah Jane Meharg, *Measuring Effectiveness in Complex Operations: What is Good Enough?*, Calgary, Canada: Canadian Defence and Foreign Affairs Institute, October 2009; et al.

Various practices of MEL generally center on similar categories of relevant information—primarily governance, education, security, rule of law, information, and civil society. These informed our selection of categories and factors for the prototype instrument. However, these same analyses rely on diverse indicators and they rarely focus on relative geographic influence.

The following table and figures provide examples of non-military conflict assessments. **Table 2.3** depicts an aggregated assessment with categories, factors, and indicators relevant to influence. Figure 2.2 and Figure 2.3 show different types of influence maps for Syria.

Table 2.3 aggregates categories, factors, indicators, and assessments from eight sources, including the U.S. Department of State, Navanti Group, and the U.S. European Command—the only represented military organization.¹² The top row depicts a mix of broad categories, like Rule of Law, and more specific factors like local council formation. The columns below show indicators used by these eight organizations to understand the functional capacity of the Raqqa City Council. Many of these are relevant to understanding influence.

Table 2.3 Example of Categories, Factors, and Indicators Applied in Raqqa, Syria

● Overall	Local Council Formation	Public Education and Youth	Rule of Law	Infrastructure	Public Health	Economic	Governance
U.S. Central Command quarterly assessment	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4	Quarter ● ○ ○ ○ B 2 3 4
Evaluation factors Legend ● Insufficient data ● Failing/regression ● Minimal progress ● Moderate progress ● Success Bold items emphasized as key items during updates to commanders, staff, and interagency partners.	● Charter execution ● Leaders identified ● Committees created ● Committee members vetted ● Represents all groups (ethnic, gender, and religious) ● Meeting regularly	● Schools opened ● Teachers trained/utilized ● Funding obtained ● Curriculum established ● Absence of extremist viewpoints ● Enrollment/attendance ● Supplies available ● Youth activities ● Youth mental health	● Raqqa Interior Security Force (RISF) trained ● RISF manned (1400/5000 1 September) ● RISF trained to international standards ● Recognized legal authority ● Approved incarceration facility ● Perception of equal treatment ● Judicial system established	● Explosive remnants of war being addressed ● Water system ● Electrical system ● Sanitation system ● Fuel availability	● Hospitals reopened ● Clinics reopened ● Medicine available ● Hospital staffed ● Clinics staffed ● Adult mental health programs ● Preventative medical programs established	● Food security ● Markets reopened ● Agricultural sector ● Business development ● Donor conference ● Funding received	● Local legitimacy ● Fair treatment ● Popular support ● Turkish acceptance ● Corruption/transparency ● Independent ● International investment ● Open media ● International perception
Current	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND	● ● ● ● DOS* EUCOM GCC Navanti RAND
Previous	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○

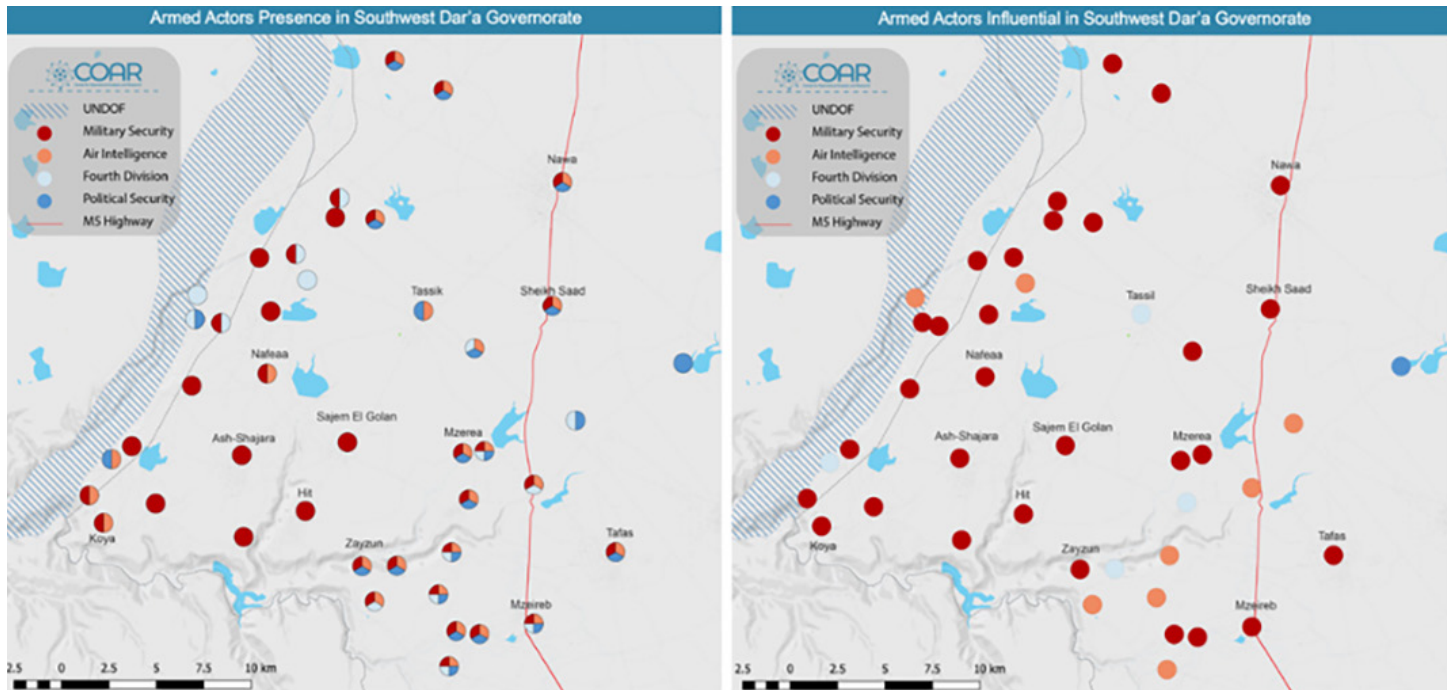
DOS Department of State . EUCOM U.S. European Command . GCC Gulf Cooperation Council . Navanti Navanti Group
 NEA Bureau of Near Eastern Affairs . RAND Rand Corporation . START Syria Transition Assistance and Response Team
 USAID U.S. Agency for International Development . *DOS consolidated response included DOS, NEA, START, and USAID

Source: Brau, 2019, p. 103

12 Peter Brau, “Consolidating Gains in Northeastern Syria: A Whole-of-Government Approach to Evaluating Civil Authority,” *Military Review*, May-June 2019, pp. 96-105.

Figure 2.2 shows an influence map developed by the Center for Operational Analysis and Research (COAR) on behalf of the European Union.¹³ Assessments were drawn from unique field collection (primarily KIIs) tailored to examine regime security force influence in Dar'a Governorate in southwest Syria. The map on the left side of Figure 2.2 shows four competing security services having either sole presence or mixed presence in population centers across the governorate. For example, it shows equal, or perhaps equivalent presence of all four services in Mzeireb, pictured in the lower right corner of the map. The map to the right shows the singular dominant influence of Syrian military security in Mzeireb.

Figure 2.2 Example of an Influence Map in Southwest Syria—Dar'a Governorate

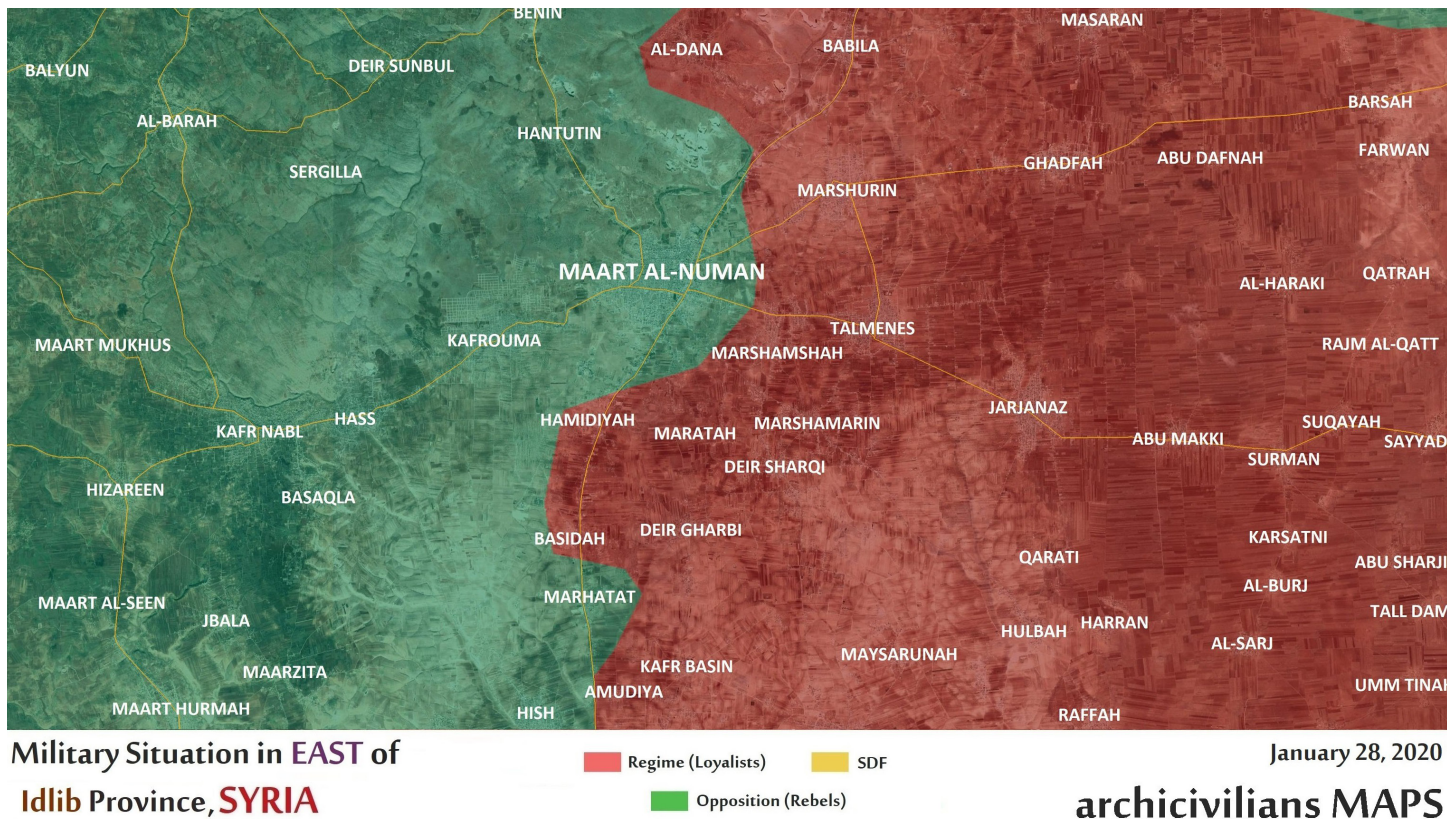


Source: COAR, Northwest Syria Scenario Plans, January 10, 2019.

This detailed assessment is drawn from up-to-date field data. It is informative and might be useful for decision support. However, the study could be improved by providing transparent methods and data sources. The influence map on the right of Figure 2.2 does not show the relative influence of the other three actors, and therefore does not reveal the degree to which Syrian military security has or might sustain dominant influence in Mzeireb.

Showing only the actor perceived to be dominant over one or several other actors may be misleading. In this case, perhaps (notionally) Syrian Air Force Intelligence, the second-most dominant actor across Dar'a according to this analysis, might have 49% influence in Mzeireb compared to 51% influence of military security elements, with the other groups having little or no influence. The margin of error in the collection method might therefore exceed the difference between the reported influence of the various groups. In this notional interpolation of the COAR data, Syrian Air Force Intelligence might actually be dominant in an area which the map shows to be under the primary influence of Syrian military security. Or perhaps in this case, military security dominance is particularly tenuous.

13 Center for Operational Analysis and Research, *Security Archipelago: Security Fragmentation in Dar'a Governorate*, undated.

Figure 2.3 Example of Open Source Geospatial Influence Map

What if, in the same case in Mzeireb, Syrian military security has a 28% plurality compared to Air Force intelligence, the Syrian Fourth Division, and political security officers at 24% each? In this notional case, the three groups with relatively weaker individual influence could collectively wield more influence than Syrian military security. Even a single bilateral arrangement between two of the weaker groups would sharply alter the influence dynamic in Mzeireb. By only representing the actor perceived to be dominant, this influence assessment of Dar'a Governorate conveys precision without necessarily conveying accuracy.

There are other ways of assessing and visualizing influence in hybrid governance areas. **Figure 2.3** shows one of the many hundreds of Syria influence heat maps available online.¹⁴

This map of influence from early November 2019 is generally representative of data aggregation influence mapping practices. Mappers use multiple sources—including news reports and existing conflict maps—to portray areas of control. Some maps show binary control while others try to show nuanced gradations between groups to convey the confusion of frontline battle areas. Mixed influence areas are generally portrayed by a single color or pattern without showing a plurality.

¹⁴ These maps are referred to as *heat maps* because they look like weather heat wave maps. Similar maps are generated and widely available for most conflict areas around the world. Many use programs like Google Maps to provide users with an interactive product. For example, see this map created by Islamic World News (ISWN), ISWN Middle East Conflict Map. As of June 7, 2020: https://www.google.com/maps/d/u/0/viewer?mid=1M_ymjR9xwOK7KMikOcUFSAE1ac&ll=36.25043143845397%2C36.82078753701661&z=9.

Identifying methods and data sources for these products is difficult. Several research organizations publish detailed influence maps but are not transparent regarding methods and data sources.¹⁵ Most of the readily-available online influence maps—including ones frequently used by well-regarded news organizations—are developed by nongovernmental organizations and individuals who provide even less, or in some cases, no insight into their methods or data sources.

This approach towards mapping conflicts and relative influence (or binary control) is increasingly common. In the past several years, geospatial mapping capabilities, methods, and organizations have proliferated. Conflict reporting now routinely includes geospatial representation of collected field data or research data. However, our review of a range of these products from commercial, government, and military sources suggest that maps most often present data as a visualized insight rather than use data to *develop* insight. In other words, many mapping products are simply a visualization of data and not reflective of meaningful analysis. With exceptions, including the COAR product described above, these products also tend to reflect geolocated presence without describing relative influence in detail.

Informed by Military Assessment Experience

Military assessments of conflict areas tend to focus more on understanding relative influence compared to non-military mapping created to support aid delivery. But military organizations' heavy reliance on passive data use and lack of objectivity limit the value of military practice for improving generalizable influence mapping instruments. Recent examples of military influence mapping include the Vietnam War-era Hamlet Evaluation System (HES), the Afghanistan District Assessment Model (DAM), and the U.S. Central Command's Sociocultural Segmentation Methodology (SSM).¹⁶

The HES was developed in the late 1960s by officers from the Central Intelligence Agency, USAID, and the U.S. military to help *measure control* (as opposed to assess influence) of hamlets across the Republic of Vietnam. A hamlet ranges in size from 50 to 20,000 people, and there were anywhere from 11,000 to 13,000 hamlets in the area of analysis when HES was active. HES was a bottom-up, questionnaire-driven process. District Advisors across the 244 districts in southern Vietnam would fill in the questionnaire for approximately 50 hamlets each month and each quarter. Questionnaires were arranged by category and then question. Questions represented indicators (e.g. "Does the enemy collect taxes from hamlet households in or near the hamlet?").¹⁷

While HES was deeply flawed, and while the collection and analysis of HES data undermined the program's original intent, it did offer a range of useful categories, factors, indicators, and questions from which more qualitative assessments could be developed.¹⁸ Categories and factors overlapped somewhat. They included: (1) enemy activity; (2) enemy presence; (3) friendly security; (4) law enforcement; (5) administration; (6) political; (7) information/psychological operations; (8) economic activity; (9) development projects; (10) public health; (11) education; and (12) social welfare.

¹⁵ A range of maps and analytic products can be found at the ISW website (as of June 7, 2020: www.understandingwar.org). Map products do not cite sources or describe methods used to delineate influence.

¹⁶ See Connable, 2012, et al. for more information on HES and DAM. See below for more information on SSM. In addition to the previously cited references, see: Elin Marthinussen, Bard Eggereide, Brode Rutledal, and Alf Christian Hennum, *Progress Assessment in a Multinational Operation—A Norwegian Perspective*, conference paper, presented at the 4th IMA Conference on Analyzing Conflict Transformation, University of Oxford, 2010; Thomas C. Thayer, *War Without Fronts: The American Experience in Vietnam*, Boulder, Colo.: Westview Press, 1985; Ben Connable, Jason Campbell, Bryce Loidolt, and Gail Fisher, *Assessing Freedom of Movement for Counterinsurgency Campaigns*, Santa Monica, Calif.: RAND Corporation, 2012.

¹⁷ Civil Operations and Rural Development Support (CORDS), *Hamlet Evaluation System (HES) Command Manual*, Saigon, Republic of Vietnam: Military Assistance Command—Vietnam, September 1, 1971, p. B-12.

¹⁸ For more on the flaws with HES, see Connable, 2012, Chapter 7.

Are National Police personnel regularly present in this village?

1. No
2. Yes
3. Yes, a National Police substation is located in the village

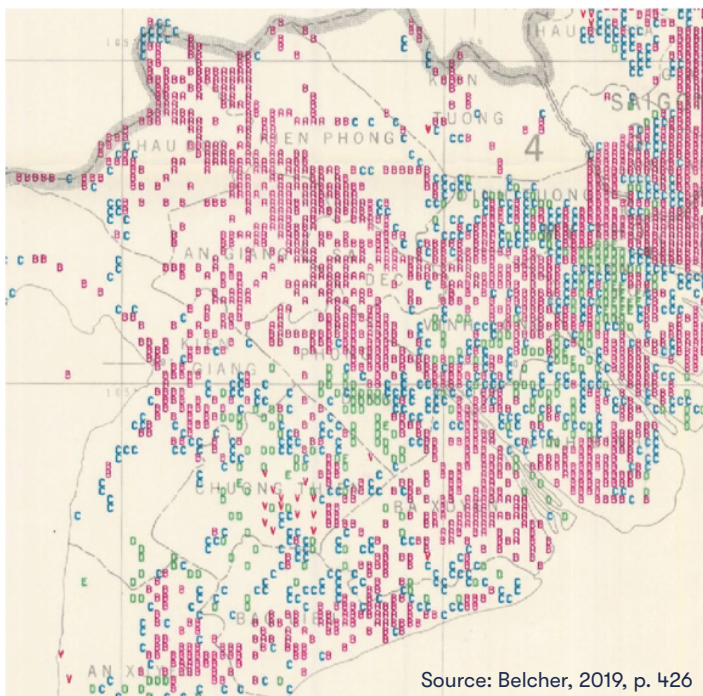
Does the village chief have operational control over National Police personnel working in this village?

1. No, no national police present
2. No, no control
3. Yes, partial control
4. Yes, complete control

Has a curfew been established by Government of Vietnam authority for civilian traffic on the main route leading from this village to nearby communities?

1. No, no friendly presence
2. No, no curfew established
3. Yes, beginning after 11:30 at night
4. Yes, beginning between 9:30 and 11:30 at night
5. Yes, beginning between dusk and 9:30 at night
6. Yes, beginning at dusk or earlier

Figure 2.4 Hamlet Evaluation System Score Map



Each HES question helps to inform the present task. For example, we determined from our review of extant literature that under the category of Governance and the factor Rule of Law, it would be useful to understand which group dominates law enforcement activities. One version of the HES posed eight interrelated law enforcement questions and optional responses. Here are three examples from that set of eight questions:¹⁹

Together, answers to these questions help paint a picture of unilateral rather than relative influence compared to the adversary. Ideally, these responses would have been compared in a thoughtful way to the responses to questions about adversary forces in order to show relative influence. Instead, responses were averaged together, and then averaged again several times to produce a single countrywide HES number.

Computational mapping technology was in its infancy in the early 1970s, but there are some maps of HES data available. **Figure 2.4** shows a HES map with hamlet ratings across the Mekong Delta region in southern Vietnam. A and B scores in red show hamlets primarily under the influence of the Republic of South Vietnam. C-rated hamlets were contested, but often listed as pro-government. D- and E-rated hamlets were under adversary influence, while V-rated hamlets were under control of the Viet Cong insurgents. Keep in mind that these ratings were derived from notoriously unreliable processes and from redundant averaging of dissimilar data.²⁰

Many of the assessment protocols from the Vietnam War were applied piecemeal in the Afghanistan and Iraq wars. When the International Security Assistance Force (ISAF) Joint Command (IJC) was established in Afghanistan in 2009, the staff created the District Assessment Model to help commanders and policymakers track the control of the approximately 400 districts across the country.²¹

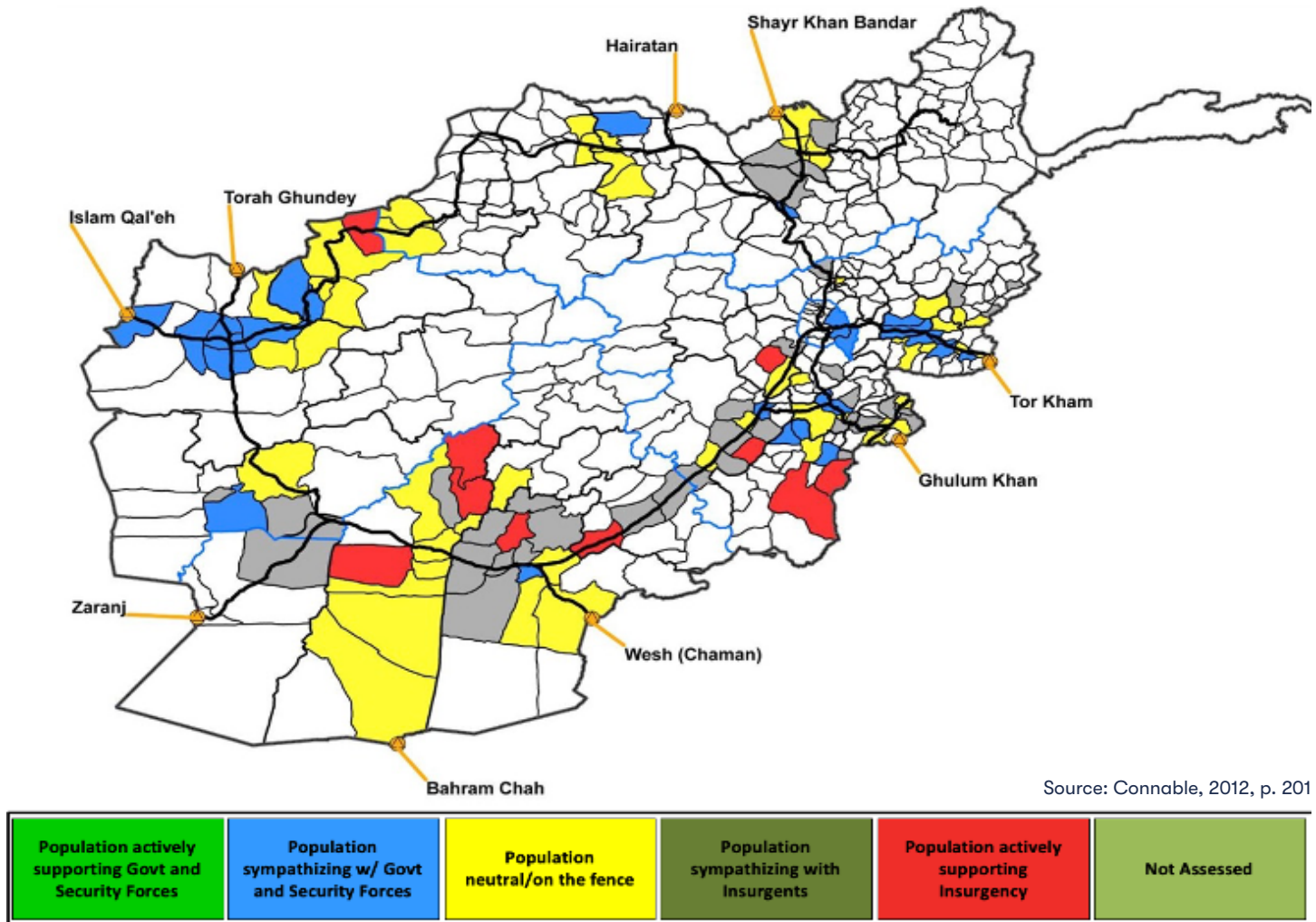
¹⁹ CORDS, 1971, p. B-25.

²⁰ Oliver Belcher, "Sensing, territory, population: Computation, embodied sensors, and hamlet control in the Vietnam War," *Security Dialogue*, Vol. 50, No. 5, 2019, pp. 416-436, p. 426.

²¹ The number is inexact because districts were added or removed during the course of the war, and some Afghan politicians disputed the validity of certain districts and boundaries.

Figure 2.5 depicts an example of a DAM map. It shows all of the Afghan districts, with those districts scored on a six-point scale depicted by color code. From left to right in the legend at the bottom of the map, districts are described as more or less under the influence of the government or insurgents. Influence is represented as popular support for one side or the other.

Figure 2.5 ISAF Joint Command District Assessment Map—Afghanistan



Source: Connable, 2012, p. 201

The DAM represented an earnest attempt to provide an influence map that could be used as a decision-support tool. The rating definition levels, from active support on either end to neutral in the middle, were intended to help guide assessment. Instead, as with the HES, these levels encouraged averaging and generated unintentionally misleading results. For example, in this case many of the districts in Helmand Province (outlined in red) are rated as yellow, with the population in those districts ostensibly being “neutral or on the fence.” That was not the case.

Helmand has always been a deeply divided province, with districts and the villages within those districts disparate extremes of pro-government and (mostly) anti-government sentiment.²² In this case, and in most cases of influence assessment in hybrid governance systems and conflict zones, averaging data even at the district level proved antithetical to the purpose of the assessment.

²² See, for example: Ryan Evans, “The Micro-Level of Civil War: The Case of Central Helmand Province,” *CTC Sentinel*, Vol. 5, No. 9, September 2012, pp. 14-17; Stephen Grey, “Helmand: Anatomy of a Disaster,” *Foreign Policy*, June 15, 2010.

Sociocultural Segmentation Method (SSM)

Perhaps the most interesting but least publicized approach reviewed for this report was the Sociocultural Segmentation Method (SSM), developed for the U.S. Central Command's Human Terrain Analysis Branch (HTAB) by intelligence expert Michael Williams.²³

SSM is a semi-automated approach designed to help define and describe hyper-localized (village-level) tribal, ethnic, sectarian, and other identity influence on two-dimensional maps. Using field intelligence reporting and overhead imagery, analysts identify the centerpoints of villages, apply spatial tessellation algorithms to create reasonable influence areas (Thiessen polygons) between each center point, and then apply more detailed analysis to refine boundaries between points. Landscan population data and other data sources are incorporated during the analytic process.²⁴ A final SSM product would show precise locations of villages and dominant identity groups in that village area, and related sociocultural information to help guide key leader engagements and influence tactics.

Figure 2.6 shows the semi-automated spatial tessellation process. Mapping tessellation, using methods designed by meteorologist Alfred H. Thiessen and Georgy Voronoi, interpolates bisections between a mosaic of points.²⁵ This is a common approach for generating mapping boundaries to (for example) assess annual rainfall in a given area or to model the territoriality of predator fauna. In Figure 2.6, the points are village centers, and the automated tessellation process requires significant manual refinement using multiple sources of data to ensure boundaries reflect sociocultural and geographic dynamics and practicalities. For example, if a tessellated line bisects a cliff face or a river—common geographic boundaries between population areas—the analyst might look closely at other data and then adjust the line to more accurately reflect cumulative data inputs.

Figure 2.6 SSM Spatial Tessellation from Village Center Points

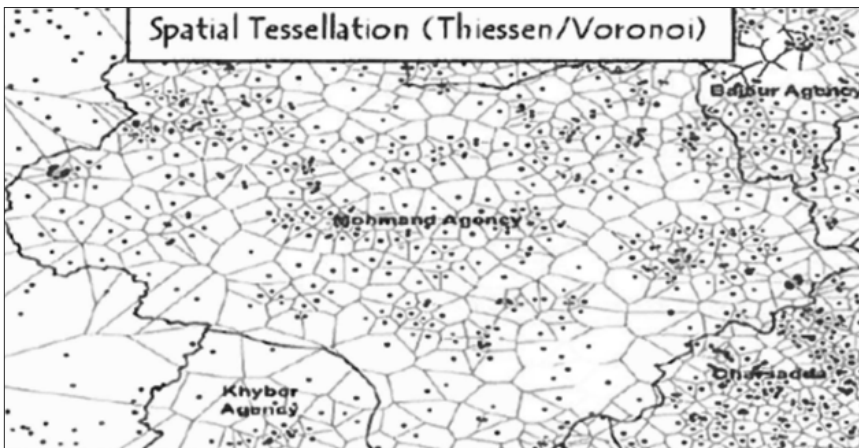


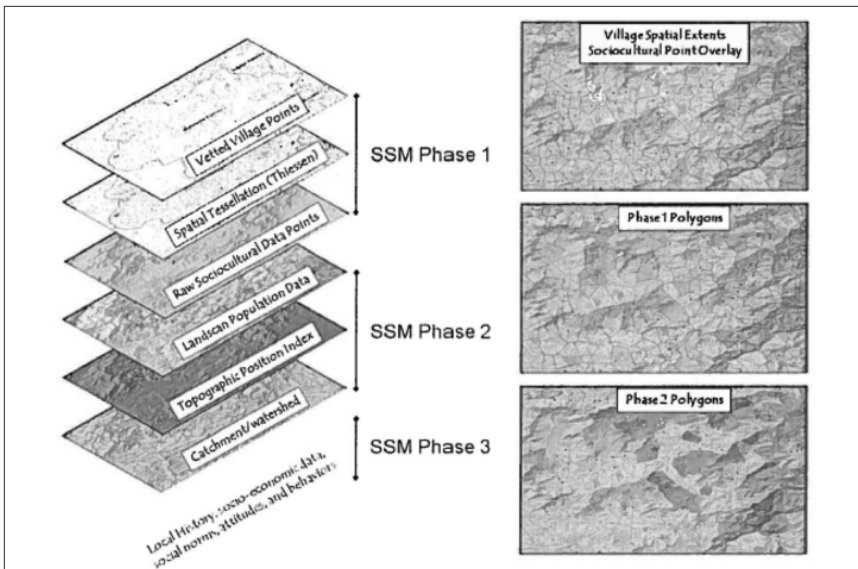
Figure 2.7, below, is an overview of the full SSM process in three phases. In the first phase, analysts acquire baseline socio-economic information to allow them to identify identity groups in the selected area of interest. In the second phase, analysts set a mapping baseline by integrating catchment/watershed data, topographic positioning data, and Landscan population data. In the third phase, analysts create points for tessellation from raw sociocultural data collected in the field by (typically) military personnel. They run the tessellation

and then refine intersecting boundaries and village centerpoints to generate a multi-layered PDF map that can be used to understand local influence.

²³ This summary is derived from an unclassified briefing provided to the author as part of a RAND Corporation research project conducted from 2014–2015 on HTAB. Readers interested in receiving a copy of this briefing can contact DT Institute directly. See the point of contact information provided at the end of this report. Michael Williams, Sociocultural Segmentation Method Briefing, PDF document, MacDill Air Force Base, Florida, undated.

²⁴ For more on LandScan, see: <https://landscan.ornl.gov>.

²⁵ For more on Thiessen and Voronoi (alt.: Voronoy) polygons, see: Alfred H. Thiessen, *Weather Glossary*, Washington, D.C.: U.S. Government Printing Office, 1946; Kurt E. Brassel and Douglas Reif, "A Procedure to Generate Thiessen Polygons," *Geographical Analysis*, Vol. 11, No. 3, July 1979, pp. 289–303; Narendra Ahuja, Byong An, and Bruce Schachter, "Image Representation Using Voronoi Tessellation," *Computer Vision, Graphics, and Image Processing*, Vol. 29, No. 3, March 1985, pp. 286–295; Juon Burkardt, Max Gunzburger, and Hyung-Chun Lee, "Centroidal Voronoi Tessellation-Based Reduced-Order Modeling of Complex Systems," *Society for Industrial and Applied Mathematics Journal on Scientific Computing*, Vol. 28, No. 2, pp. 459–484.

Figure 2.7 SSM Spatial Tessellation from Village Center Points

Source: This unclassified image was provided to the author by the U.S. Central Command in 2014. See Williams, undated, for additional images.

SSM was used effectively by HTAB to help military personnel navigate complex tribal engagements in places like Afghanistan. It offers a useful approach for identifying and defining influence boundaries. However, because it is not designed to portray relative influence between multiple, competing influence groups in the same area—say, two tribes coexisting in the same village—it might generate the kind of binary reductionism this study seeks to avoid. But it can be adjusted to account for this challenge.

Perhaps the most useful aspect of SSM is the step-by-step integration of multiple types of data into a single mapping product. This kind of multi-source analysis would be necessary to provide the kind of refined

accuracy relative influence analysis would need. See Table 5.1 in Section 5 of this report for recommended improvements to the prototype tool described in this report.

Lessons from the Review: Adopting and Adapting Best Practices

With the understanding that this review may have excluded some relevant literature, the cited works suggest that the state of local influence assessment in conflict zones is underdeveloped. Stakeholder analyses provided the most nuanced findings and visual representations of influence. They tend to show relative influence between stakeholders rather than binary influence. But stakeholder analyses generally focus on a single issue. This makes the approach useful but inadequate for conflict zone influence assessment.

Other approaches, including those from political scientists and military analysts, offered good insight into the value of various influence categories, factors, and indicators. But their general focus on binary influence makes them equally inadequate to achieve the level of nuance and accuracy required for aid and development conflict zone influence assessment.

Hypothesis of Nonbinary, Relative, Complex, and Dynamic Influence

This review suggested the hypothesis that fed the development of the prototype relative influence assessment instrument.

Hypothesis: In areas of hybrid governance in conflict zones, multiple groups are in constant, relative competition for local influence. Local influence is (1) nonbinary; (2) relative; (3) complex; and (4) dynamic.

If these statements are true, and the overall hypothesis is valid, then assessments of local influence in areas of hybrid governance in conflict zones should be designed to reflect the nonbinary, relative, complex, and dynamic nature of influence. Our Syria field test constitutes the first effort to test this hypothesis with field research. Section 5 of this report details future actions that can be taken to build upon this initial test.

3

PROTOTYPE DESIGN: GENERALIZED

This section describes the categories, factors, and questions derived from the review presented in Section 3, as well as additional review of conflict assessment literature.²⁶ For the purposes of this report, a *category* is a set of similar influence factors. *Governance* is a category. *Factors* are specific capabilities, actions, or issues relevant to understanding influence, while *service delivery* and the *competence* of security forces are both factors. See Table 3.1, below, for the full list of factors and categories.

Understanding factors requires asking questions and gathering other relevant data, including economic data, third-party reporting, satellite imagery, social media data, etc. Given our emphasis on collecting interview data, we focused this initial design on questions that might be generalized across multiple areas in northeastern Syria, or elsewhere.

Categories, Factors, and Questions

Our first step in the prototype design process was to identify categories and factors relevant to influence from the literature review.²⁷ Based on this review, we identified five broad categories and 35 factors that would help us design questions and, in future efforts, to identify and collect other information for a more holistic assessment. We included categories and factors that appeared in multiple sources. Follow-on research can help to refine these selections with additions, changes, and deletions.

Categories are (1) governance, (2) security, (3) economics, (4) civil society, and (5) information. Factors within the categories are more or less relevant to local influence assessment. Our initial review identified 35 factors, but we determined that only 26 of these were relevant to understanding influence below the state-actor level of analysis.²⁸

In **Table 3.1**, below, we deemphasized (gray tone) those factors we determined to be least relevant to local decisionmaking. The other factors drove the development of the general questions.

26 Volker Boege, M. Anne Brown & Kevin P. Clements, “Hybrid Political Orders, Not Fragile States,” *Peace Review*, Vol. 21, No. 1, 2009, pp. 13-21; International Dialogue on Peacebuilding and Statebuilding, *A New Deal for Engagement in Fragile States*, fact sheet, undated; Robin Luckham and Tom Kirk, “The Two Faces of Security in Hybrid Political Orders: A Framework for Analysis and Research,” *Stability: International Journal of Security and Development*, Vol. 2, No. 2, 2013, pp. 1-30; United Nations, *Application of the Human Security Concept and the United Nations Trust Fund for Human Security*, New York, N.Y.: Office for the Coordination of Humanitarian Affairs, 2009; Moyer, et al.; United Nations, Disarmament, Demobilization, and Reintegration, information web page; Axel Hadenius and Fredrik Uggla, “Making civil society work, promoting democratic development: What can states and donors do?” *World Development*, Vol. 24, No. 10, October 1996, pp. 1621-1639; Jasmin Lorch and Bettina Bunk, “Using civil society as an authoritarian legitimization strategy: Algeria and Mozambique in comparative perspective” *Democratization*, Vol. 24, No. 6, 2017, pp. 987-1005; Ashley Reaves, *The Role of Civil Society in Competitive Authoritarian Legitimation Strategies: An Analysis of Venezuela and Bolivia*, thesis, Chapel Hill, N.C.: University of North Carolina—Chapel Hill, 2018; Bruce Baker, “Linking State and Non-State Security and Justice,” *Development Policy Review*, Vol. 28, No. 5, September 2010, pp. 597-616; Gavin Cawthra and Robin Luckham, eds., *Governing Insecurity: Democratic Control of Military and Security Establishments in Transitional Democracies*, London, UK: Zed Books, 2003; Christopher Paul, Jessica Yeats, Colin P. Clarke, and Miriam Matthews, *Assessing and Evaluating Department of Defense Efforts to Inform, Influence, and Persuade*, Santa Monica, Calif.: RAND Corporation, 2015; Gery W. Ryan, David Catt, Lauren Daviss, J. Luke Irwin, Susan S. Sohler Everingham, *A Systemic Framework for Understanding the Dynamics of Rural Communities in America*, Santa Monica, Calif.: RAND Corporation, 2019; et al.

27 This was an inductive process of coding by the research team. Researchers identified categories and factors as they emerged in the selected literature.

28 We eliminated those factors that were either clearly not relevant at the municipal level (arms transfers, trade agreements, trade dependency, and volume of trade) and those for which data collection and analysis would not yield sufficient insights into relative influence (fiscal management, and information access, retransmission, consistency, correlation).

Table 3.1 Initial Set of Categories and Factors Related to Influence

Governance Factors	Security Factors	Economic Factors	Civil Society Factors	Information Factors
Fiscal Management	Arms Transfers	Trade Agreements	Registration & Licensing	Methods
Administration	Control of Boundaries	Volume of Trade	Inclusion & Participation	Access
Leadership	Security Force Control	Trade Dependency	Sources of Funding	Receptivity
Service Delivery	Competence	Aid Dependency	Political Consensus	Resonance
Justice & Rule of Law	Threat Suppression	Employment	Crackdowns & Arrests	Retransmission
Legitimacy	Inclusiveness	Opportunity	Human Security	Consistency
Infrastructure	Integrity	Economic Security	Education	Correlation

Tables 3.2 through 3.6 depict draft questions associated with each category and factor. These generalizable draft questions are intended to be modified, added to, or set aside to tailor the assessment for each localized application. Ideally, they would be repeated in similar formats in multiple data collection efforts to establish a large set of cases and longitudinal data. The best approach from the standpoint of general knowledge would be to add to, but not eliminate or remove these questions over time, unless specific questions were determined to be irrelevant or otherwise not useful. Our two-step interview protocol helped us add focused questions for each local area; see Table 4.1, below, and Alwan and Wilkofsky, 2022, for a list of localized questions.

Table 3.2 depicts the initial set of general governance questions derived from the six selected governance factors. Each question was either derived from existing, cited literature, or it was drafted through iterative subject-matter expert exchanges amongst and between the DT Institute and DT Global research teams. This same approach was applied to all categories and questions. Note that many questions include follow-on questions in brackets. These are intended to be used by the enumerators to elicit more detailed and informative qualitative information.

Table 3.2 Initial Set of General Interview Questions—Governance

Governance Factors	#	Governance Questions
Administration & Management Leadership Service Delivery Justice & Rule of Law Legitimacy Infrastructure	1	Who sets local priorities and policies in [area]?
	2	What is the demographic and political makeup of the council in control of your area? [Follow: Who actually makes decisions in your area?]
	3	What is the electoral process for local council and municipality members/presidents in your area? [Follow: Who is responsible for appointing these members?]
	4	Who oversees the voting process for local elections? [Follow: Who can run for office in local elections? Are there any restrictions on who can run?]
	5	Which bodies provide and maintain municipal services in your area? [Follow: Are there any cases of cooperation or competition between different political actors over service provision in your area?]
	6	Which political groups are involved in the provision of health care in your area?
	7	Who is in control of the court system in your area?
	8	What are the formal and informal mechanisms for dispute resolution in your area? [Follow: Which actors, like tribal notables, have influence over these mechanisms?]
	9	If you are the victim of a crime or violent act, to whom do you turn for help?

Governance Factors	#	Governance Questions
Administration & Management Leadership Service Delivery Justice & Rule of Law Legitimacy Infrastructure	10	If a person is convicted of a crime in an AA court (either directly or in absentia), is the information shared with the regime court system? [NOTE: Tailored question for interviewees with direct knowledge]
	11	Which flags or politically symbolic objects are used by local public institutions, security forces, and government buildings?
	12	Who controls the municipal budget in your area? [NOTE: Tailored question for interviewees with direct knowledge]
	13	Who collects fees and taxes in your area?
	14	Who pays the teacher and administrative salaries for schools, doctors, nurses, and health care workers?
	15	Does the paying of public sector salaries influence people's perceptions of different political groups? [Follow: Why or why not?]

Table 3.3 depicts the initial security questions derived from the six selected factors.

Table 3.3 Initial Set of General Interview Questions—Security

Governance Factors	#	Governance Questions
Control of Boundaries Control of Security Forces Competence Suppression of Threats Inclusiveness Integrity	16	Which armed groups operate checkpoints in your area? [Follow: To which larger political entities do these groups belong (list AA, regime, tribes, other groups operating in area)?]
	17	Do any armed actors carry out arrests or house raids in your area? [Follow: To which political entities do these groups belong?]
	18	Which armed groups control policing and jails in your area? [Follow: To which political entities do these groups belong?]
	19	Do any groups gather intelligence on potential opponents in your areas? [Follow: To which political groups do these groups belong?]
	20	Are any armed actors recruiting into armed groups in your areas? [Follow: To which political groups do these actors belong? To what extent does employment in these armed groups impact local economy?]

Table 3.4 depicts the initial economics questions derived from the four selected factors.

Table 3.4 Initial Set of General Interview Questions—Economics

Governance Factors	#	Governance Questions
Aid Dependency Employment Opportunity Economic Security	21	Who provides humanitarian aid in your area? [Follow: Where do they get their aid from?]
	22	How dependent are residents on this humanitarian aid?
	23	Which local groups provide employment in your area? [Follow: How reliant is local society on that employment?]
	24	Which group(s) would you say are most influential in the economic well-being of your area's residents? [Follow: Why?]
	25	Who sets prices in your area? [Follow: Do they properly enforce price controls?]

Table 3.5 depicts the initial civil society questions derived from the six selected factors.

Table 3.5 Initial Set of General Interview Questions—Civil Society

Governance Factors	#	Governance Questions
Inclusion and Participation Sources of Funding Values and Political Consensus Crackdowns and Arrests Human Security Education	26	Does any political group have influence over civil society in the area? [Follow: For example, do they interfere in hiring or preventing civil engagement? Please provide details of influence.]
	27	What is the influence of tribal leaders and elders over the community in your area? [Follow: What are the most important tribal groups in the area?]
	28	How do political groups influence tribal communities in the area?
	29	What is the curriculum used in the education system in your area? [Follow: Which political groups are involved in the provision of education?]

Table 3.6 depicts the initial information questions derived from the three selected information factors.

Table 3.6 Initial Set of General Interview Questions—Information

Governance Factors	#	Governance Questions
Method Receptivity Resonance	30	In your area, what is the most widely used medium for sharing and receiving information? [Follow: Social media? Television? Face-to-face? Radio? Other?]
	31	In your area, which political group would you say is dominant on the most widely used medium?

Applying the General Categories, Factors, and Questions

This initial set of general questions is intended to be applied through key informant interviews, surveys, focus groups, and other methods for capturing primary source opinion data. Factors and categories are also intended to support the future development of indicators and the identification of other data sources that can be integrated with qualitative field data to better understand relative influence. Indicators can include the relative size and assessed capabilities of security services; quantifiable voluntary use of services like healthcare or justice administration; revenue collection; and physical space occupied by security forces and/or government personnel. Expansion of the information category can include assessments of the volume, quality, and effectiveness of messaging and other information related capabilities applied by the competing groups.

The next section describes our application of these general questions, along with locally relevant questions, to assess relative influence of key groups in three areas in northeastern Syria.

4

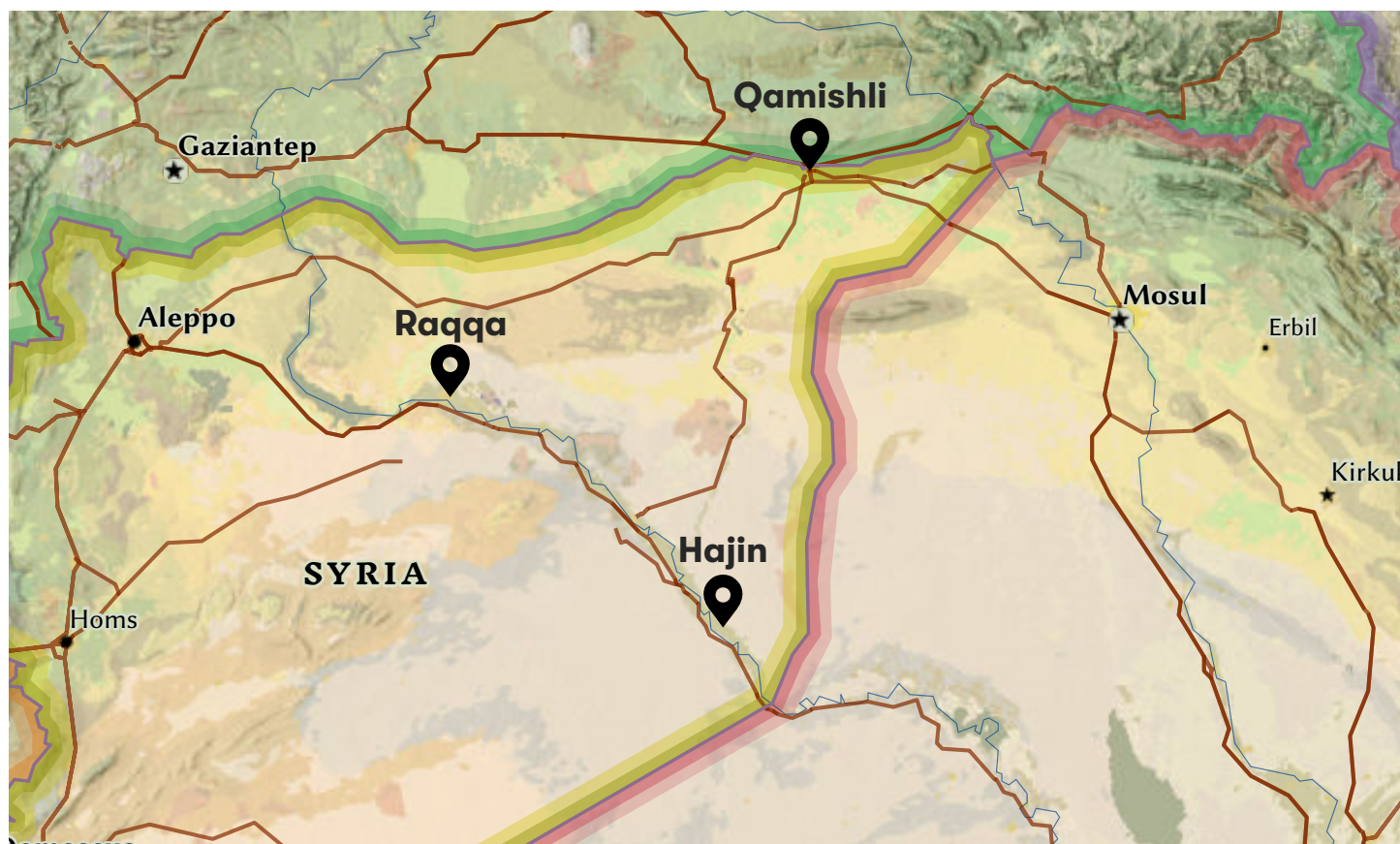
PROTOTYPE TESTING IN NORTHEASTERN SYRIA

This section describes the field collection in northeastern Syria. The first part explains the selection of the three collection areas. The second part provides tables with each set of three local-area questions. The last part presents a summary of the findings from the field test. Full results can be found in *Relative Influence in Northeastern Syria: Assessment of Syrian Regime Control in Qamishli, Raqqa, and Hajin in Mid-2020* (Salma Alwan and Dan Wilkofsky, DT Institute, 2022).

Field Collection Sites for Initial Prototype Test

For this initial prototype test, we collected field survey and interview data on relative influence in three municipal areas in northeastern Syria: Hajin in Deir al-Zour Province; Raqqa City in Raqqa Province; and Qamishli in al-Hasakah Province. Our previous analyses of Syria suggest that these three small urban areas—ranging from approximately 30,000 people reportedly living in Hajin to approximately 175,000 reportedly living in Raqqa—are generally representative of the demographics and political dynamics across their respective provinces.²⁹ The map in **Figure 4.1** depicts these three locations:

Figure 4.1 Field Collection Sites for Initial Prototype Test



Source: Map chip created from the National Geographic map maker (NatGeo Mapmaker Interactive). As of June 6, 2020: <https://mapmaker.nationalgeographic.org>

²⁹ There has been no comprehensive census in Syria since the onset of the Arab Spring in 2011. Population mobility and lack of access due to ongoing violence increase already significant margins of error. These estimates are drawn from 2019 United Nations data: United Nations, *World Population Prospects: The 2019 Revision*, New York, N.Y.: Department of Economic and Social Affairs, Population Division, 2019.

Given the challenges and resource demands of stratified random sampling of key influencers and citizens across northeastern Syria, our collected data should be treated as nonrandom and suitable primarily for the exploratory purposes for which they were collected. Hajin, Qamishli, and Raqqa, provide a generally sufficient representation of the greater northeastern region for exploratory research. Each municipality also has specific relevance to the regime, the AANES, and other actors.

Hajin, Deir ez-Zour: Large oilfields make Deir ez-Zour an area of strategic interest for various actors. Residents of Deir ez-Zour are primarily ethnic Arabs, and most have strong local tribal identities. Many Arab residents disapprove of local, primarily Kurdish governance institutions. Since at least 2017, they have voiced their complaints about poor representation.³⁰ There is also a general resentment towards the Syrian regime given the region's history of alienation, resource exploitation, and marginalization in Deir ez-Zour. Hajin, specifically, is one of the most recently liberated areas from the Islamic State in northeastern Syria (February 1, 2019). The Hajin Council is affiliated with the Deir ez-Zour Civil Council (DCC) and has been actively providing basic services and responding to citizen needs. Civil society groups were established in Hajin following its liberation. These groups immediately began to organize in order to return life to normalcy in the area.

Raqqa City, Raqqa: Raqqa was the de facto capital of the Islamic State prior to its defeat by the SDF and U.S.-led coalition in October 2017. The Raqqa Civil Council (RCC), based in Raqqa City, is one of the strongest governance bodies in this region and has played a critical role in the restoration of services and stabilization efforts. This predominantly Arab city contains a strong civil society presence, mostly led by respected local community leaders and members who have played an influential role in stabilizing the area.

Qamishli, Al-Hasakah: The Kurdish-majority city of Qamishli, located adjacent to the Turkish border, is the de facto capital of the AANES. The Syrian regime has a longstanding security area within Qamishli city, and the regime has cooperated with the AANES in Qamishli on several service provision issues. Following Operation Peace Spring, Russia took over and expanded Qamishli's airport. In mid-2020, the regime maintained troops just south of the city limits. Convoys from the U.S.-led coalition routinely passed by Qamishli on patrols and supply operations. Qamishli also presents an interesting opportunity for civil society research. A number of Kurdish civil society organizations operate across al-Hasakah province, including some that function as front groups for the Kurdish Democratic Union Party (PYD).

Tailored Questions and Likert Scale Questions

We approached interview design as a two-part process. We conducted preliminary interviews with well-informed locals in each area to determine the degree to which our core questions would resonate in their municipality and to add locally-tailored questions to better understand relative influence.

During the testing of the general influence questionnaire, we asked our enumerators in Qamishli, Raqqa, and Hajin to pose a series of questions to a subset of interviewees to help us better understand the nature of influence in each area; to refine our general questions; and to develop additional, area-specific questions.³¹ This two-step

30 For example: "The SDF's Attempts at Local Governance in Deir Ezzor Have Failed," Chatham House, September 2018; Suleiman Al-Khalidi, "Anti-Kurdish Protests Grow in Syria's Deir Al-Zor: Residents, Locals," *Reuters*, May 7, 2019.

31 We asked: (1) Which areas in [municipality] do you know the most about?; (2) How do you understand the word, "influence?" (3) What are the different ways and methods influence is exercised by different groups in your area?; (4) What are the most important ways and methods influence is exercised?; (5) Who are the groups and actors who influence decisionmaking in your area?; (6) Do people call these groups by different names? What are they?; (7) Are there any other groups you didn't mention in your previous answer, like social or civil groups, tribal groups, ethnic groups, military groups or religious groups?; (8) What do you think are the most important indicators that point to the influence of groups in your area? How could they be measured or evaluated?; (9) Any other indicators?; (10) Please rank the indicators you mentioned from most to least influential; (11) How do you think your area is

process was intended to improve the relevance of the interview process for localized findings. **Table 4.1** provides the additional, local-area questions we posed to interviewees in each of the three locales.

Table 4.1 Localized Indicators for Hajin, Raqqa, and Qamishli—June 2020

Localized Relative Influence Questions—June 2020	
Hajin:	<ul style="list-style-type: none"> Do the Iranian militias have any prison cells in the city of Hajin, since it is close and across the river from the city of Albu Kamal, which is under control of Iranian and Iraq militias? Do Iranian militias have any influence over the city of Hajin? [Follow: If so, what is the influence?]
Raqqa:	<ul style="list-style-type: none"> Did Raqqa City experience waves of migration during the Turkish incursion due to the rumors of the regime entering the area? [Follow: If so, did they return when it was confirmed that the regime was not taking control of the area?] Do the regime checkpoints in Ain Eissa pose any threats or uncertainties on locals in Raqqa City?
Qamishli:	<ul style="list-style-type: none"> To what extent does the government—along with Russian—control over the Qamishli airport impact the balance of power and influence in Qamishli?

Each interview included a four-point Likert scale rating at the conclusion of the interview. We placed this portion last to allow the interviewees to consider their own opinions on the full range of influence issues in Section 3 before assigning values to each group. This section asked the interviewees to assign a rating of 1 (no influence at all) to 4 (considerable influence) to each of the major influence groups in their municipalities: AANES, Government of Syria, the PKK, tribal leaders, and the Islamic State.³²

Rather than forcing the interviewees to rate these groups in a five-point ratio scale, we allowed them to assign any number of points from 1 to 4 to any or all of the groups. They could, in theory, assign all groups with scores of 1, or all with scores of 4. This allowed us to understand the nature of the competition for influence in each area. Was it a tight competition, or was one group clearly dominant? Results showed a close competition at the top, with no one group exceeding 35% of all assigned influence points.

Table 4.2 Likert Scale Influence Rating

QUESTION: Please rate the influence of the following actors over the given area, using a scale from 1 [no influence] to 4 [very strong influence]				
AANES & SDF	1	2	3	4
Government of Syria	1	2	3	4
PKK	1	2	3	4
Tribal Leaders	1	2	3	4
Islamic State	1	2	3	4

The next section presents a summary of the findings from the Likert scale results.

different from other areas in terms of influence?; (12) What are the most important security issues in your area? Economic? Political? Social?; (13) Any other issues you consider important in your area?; (14) How do people get information in your area?; (15) What questions should we ask to understand influence in your area?; (16) Are there certain questions we should avoid, and if so why?; (17) What other areas should we survey in northeast Syria to understand the region?; (18) Would researchers be in danger if they went to those areas? Why or why not?; (19) Do you know people who might be open to being interviewed? Can you put us in contact?; (20) Are you open to being interviewed again?

³² Some questions may be perceived to be sensitive by interviewees. This is particularly true in conflict areas dominated by active and often abusive intelligence services. A small number of prospective interviewees recruited for this study refused to participate. We do not know if they refused to participate out of fear of reprisal or for other reasons. We removed one question from our protocol during testing when it became clear that it made participants uncomfortable. This question related to security activities in their local area.

Results from the Likert Scale Scoring of Relative Influence

This section presents results only from the Likert scoring of relative influence. Alwan and Wilkofsky, 2022, includes a fuller assessment of the interview results, including qualitative analysis of the nearly 1600 individual semi-structured interview responses provided to our four enumerators.

Table 4.3 provides the four-point Likert scale responses from the 26 Qamishli interviews. This table, and Table 4.4, below, demonstrate the process of translating the Likert responses to percentage results.

Table 4.3 shows how many influence points each interviewee assigned to each group in Qamishli, then a total number of points assigned by each interviewee, and then the sum total of points assigned. This sum was used to determine the percentage of relative influence. Note that each rating of 1 is scored here as 0, indicating “no influence.”

This table shows the unrestricted approach to ratings used to determine relative influence. It allows interviewees to represent equal influence for two or more groups, highlighting the tight competition for influence in these three areas. For example, see interviewee 5, below (highlighted in yellow). That interviewee scored the AANES, GoS, and PKK as having equivalent, high levels of influence in Qamishli. This interviewee believes that these three groups have dominant but equivalent, competing influence in Qamishli. Regime results in Qamishli are highlighted in dark red in the third column from the left.

Table 4.3 Example of Likert Scale Scoring: Qamishli

Interviewee	AANES	GoS	PKK	Tribal	IS	Points
1	3	0	2	0	0	5
2	2	2	3	2	0	9
3	4	2	4	2	2	14
4	4	2	3	2	2	13
5	4	4	4	3	0	15
6	4	2	3	0	0	9
7	3	2	4	2	2	13
8	3	2	4	2	0	11
9	3	2	3	2	0	10
10	3	3	3	2	0	11
11	4	0	3	2	0	9
12	4	0	2	2	0	8
13	4	0	2	3	0	9
14	4	2	3	2	0	11
15	3	2	3	0	0	8
16	4	2	3	2	0	11
17	4	0	3	2	0	9
18	4	0	2	2	0	8
19	4	0	3	2	0	9
20	4	0	3	3	0	10
21	4	0	2	2	0	8
22	4	3	4	0	0	13

Interviewee	AANES	GoS	PKK	Tribal	IS	Points
23	4	2	3	2	0	11
24	4	2	3	2	2	13
25	4	2	2	2	0	10
26	4	0	3	3	0	10
	96	36	77	48	10	267

Building from the tabulation in Table 4.3, we calculated the percentages of each score out of the total number of points assigned. **Table 4.4** shows the results of these calculations with results rounded to the first decimal place.

Table 4.4 Scoring Relative Influence in Qamishli

Group	Score	Calculation	%
AANES	96	$96/267=$	35.9%
PKK	77	$77/267=$	28.8%
Tribal	48	$48/267=$	18%
GoS	36	$36/267=$	13.5%
ISIS	10	$10/267=$	3.7%
Total	267	$267/267$	100%

Figure 4.2 presents two figures describing influence in Qamishli. The map chip on the left shows the boundary of influence generally described by our first-step interviews. The chart on the right shows the relative influence of the five selected groups in Qamishli. The AANES received 36% of the total influence points, while the PKK received 29%.³³

Given the fact that this was not a scientifically randomized sample, there is no margin of error for the results. It is sufficient to acknowledge that while the AANES appeared to have dominant influence in early July 2020, the PKK and the tribes wielded considerable influence as well. The Government of Syria had little influence in Qamishli outside of the tightly- bounded strip shown in the map chip in red.

Figure 4.3 depicts the findings from Raqqa. The map chip on the left shows the influence boundaries. The chart shows the results of the ratings from the 15 successful Raqqa interviews. As in Qamishli, the AANES is dominant while the PKK and tribes show considerable influence. Tribes appeared to be more influential in Raqqa than in Qamishli, which aligns with the more tribal nature of the broader Raqqa area.

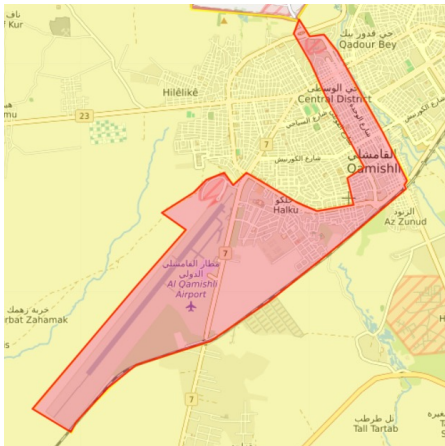
Figure 4.4 presents the Hajin map chip and ratings. Given that these results were derived from 10 nonrandom interviews, and given the number of interview refusals in Hajin, these results should be considered tentative pending further interviews. With these caveats in mind, the AANES and PKK received equal influence scores from our Hajin interviewees.

Figure 4.5 depicts these findings side-by-side in funnel charts. This comparison shows both the AANES top ratings and the close nature of the competition for influence between the AANES and the PKK. For the sponsor, it also shows the trailing influence of the Government of Syria in all three locations.

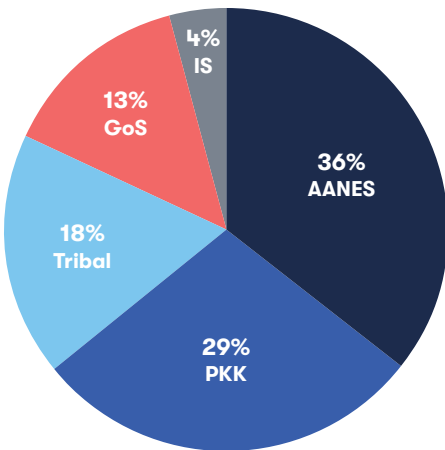
Overall, these test case findings support the hypothesis that influence in localized hybrid governance conflict areas is most accurately understood in relative terms. Section 5 recommends additional research that would help to further explore this hypothesis and to improve understanding of relative influence in northeastern Syria.

33 See Alwan and Wilkofsky, 2022, for additional information on this process.

Figure 4.2 Boundary and Results



Qamashli

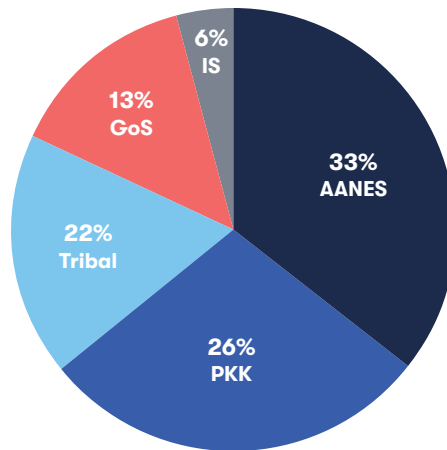


26 interviews
267 points assigned

Figure 4.3 Boundary and Results



Raqqa

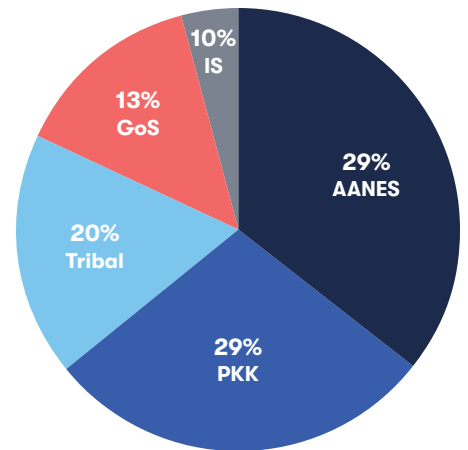


15 interviews
181 points assigned

Figure 4.4 Boundary and Results

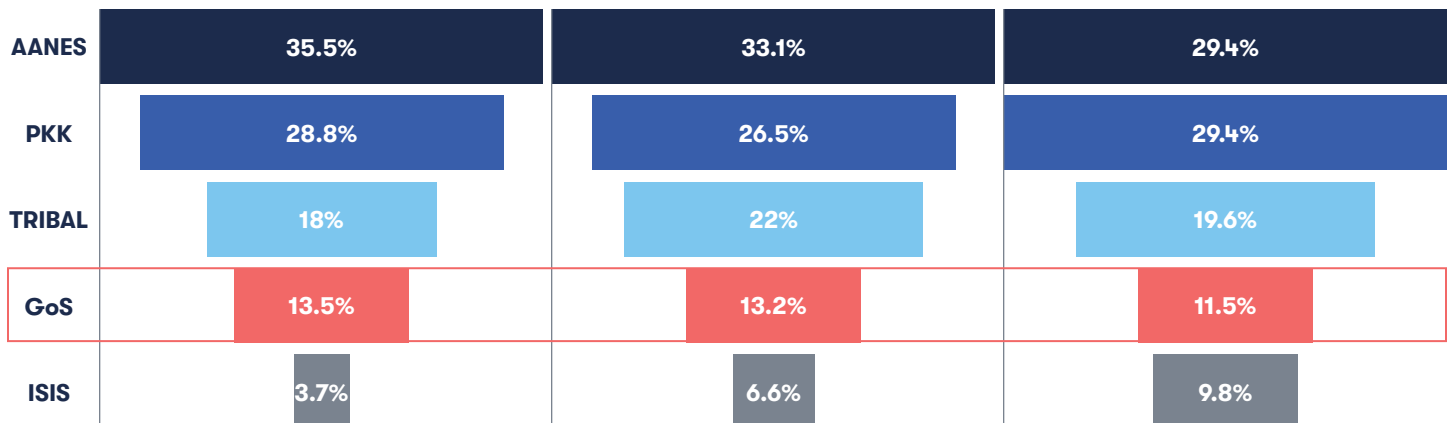


Hajin



10 interviews
122 points assigned

Figure 4.5 Regime Influence Across Qamishli, Raqqa, and Hajin: Waterfall View



5

RELEVANCE AND NEXT STEPS

This final section describes the relevance of this work for the peace and development community and describes the necessary steps to advance this exploratory work.

Relevance for Aid, Peace, and Development Assessment

We undertook this exploratory research effort to help improve aid, peace, and development programming delivery. Donors—including DT Institute—have limited access and resources to assess risk in areas of hybrid governance in conflict zones. Narrowing the gap in local knowledge is essential to reducing risk that humanitarian aid or development grant funds might be siphoned off or misdirected by a non-supportive government agency, militia, insurgent organization, or sociopolitical faction. Knowing which groups have most influence in specific local areas, how they wield that influence, the limits of their influence, and the competition they face from other groups is an important step in improving the efficacy of assessment.³⁴

Next Steps: Improving Methods and Building Test Cases

This study provided findings on relative influence in three municipalities in northeastern Syria, and it tested our hypothesis on influence assessment with—given the literature review—what appears to be a novel method. Improving understanding of relative influence in northeastern Syria is a clear task: The scale of the research can be expanded to include other areas in northeastern Syria; additional data sources can be added to improve accuracy and holism; and longitudinal data collection can be conducted in specific areas to improve fidelity and understanding of the dynamic nature of relative influence in conflict zones.

Improving the general approach would begin with these improved and expanded field activities. Further research is needed to improve the grounding of the categories and factors in well-regarded literature; our hypothesis remains insufficiently explored and it is not proven.³⁵ Grounding will be essential to supporting findings from field research in future efforts. Eventually this process should be repeated outside of Syria, in other conflict areas and areas with hybrid governance, to put our hypothesis about the nature of relative influence assessment to additional tests and to build case studies for deeper analysis.

Table 5.1 identifies gaps or opportunities that arose during this prototype test, and then proposed actions and desired outcomes to help improve influence assessment in Syria and for general applications elsewhere. General improvements can also be applied to the Syria case.

Table 5.1 Opportunities to Improve Syria Research and General Influence Assessment

Syria Analysis: Gap or Opportunity	Proposed Action	Desired Outcome
Three municipalities, limited insight	Add municipalities	Generate findings for additional locations
Collection needs repetition	Repeat interviews	Generate longitudinal data
Questions need greater specificity	Improve questions	Improve accuracy and precision

³⁴ Influence assessment requires complementary analysis of each group or faction. It is important to know which group has a majority or plurality of influence in a given area, but that information is only useful if the delivery organization has at least a working understanding of each group's or faction's interests, internal dynamics, and probable future actions.

³⁵ In social science analysis, this kind of hypothesis is rarely, if ever, proven in the way that physical science hypotheses can be proven. It is better to consider the full scope and scale of research, successful or failed protocol replication, the reliability of core questions in our survey instrument to generate commonality among results across unlike areas, and competing or confounding research that might suggest a flaw in the hypothesis.

U.S.-led coalition not represented	Add coalition	Improve understanding of relative influence
Local boundaries may not be identical from interviewee to interviewee	Have interviewees draw boundaries on a map	Refine understanding of local influence, identify areas for further collection, and improve accuracy
Improve General Method	Proposed Action	Desired Outcome
Findings based on interviews	Add data sources	Increase holism to increase depth, accuracy
Categories, factors not empirical	Further research	Improve reliability and empiricism
Testing in one location insufficient	Add country tests	Determine if approach works outside of Syria
Literature review was limited	Further research	Improve reliability and empiricism

POINT OF CONTACT

Cameron M. Chisholm
 Executive Vice President, DT Institute
 D+ 1-646-315-2304
cameron.chisholm@dt-institute.org

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