Using Structured Analytic Techniques to Assess the Interrelationship between Warlordism and International Diffusion

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Abstract

Warlords and warlordism are significant influences in many present-day conflict areas, yet they remain poorly understood and largely neglected in international statebuilding, peacebuilding, and development initiatives, to the detriment of these efforts. Although warlordism is assumed by many to be a strictly negative force, some scholars contend that warlords are often integral to the functioning of both political and economic systems and societies writ large[1], and as such serve an undeniable role in peacebuilding and development efforts.

As the international community seeks to understand and build appropriate responses to the complex conflicts and political instability in North Africa, the horn of Africa, the Arabian Peninsula, southeast Asia, and elsewhere, an understanding of the threats posed – as well as the opportunities presented – by warlordism remains critical.

Much scholarship on international diffusion has focused on the spread of elements considered widely to be positive, such as democratization, but has not examined this phenomenon as it relates to complex issues with both positive and negative aspects, like warlordism.

The authors posit that international diffusion and warlordism directly and significantly influence one another: the expansion or contraction of one impacts the dynamics, tendencies, and trajectories of the other. This paper focuses on the use of structured analytic techniques to better understand warlordism and international diffusion and illuminate the interplay between these two phenomena.

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[1] See, for example, Jackson, Paul, "Warlords as Alternative Forms of Governance," *Small Wars and Insurgencies,* Vol. 14, No. 2 (Summer 2003), pp. 131-150, and Danielle Beswick's "The Challenge of Warlordism to Post-Conflict State-Building: The Case of Laurent Nkunda in Eastern Congo", *The Round Table*: Routledge, vol. 98, No. 402: pp. 333-346. June 2009.

The Use of Structured Analysis and SATs to Better Understand Complex Issues

Structured analysis is a method employed by analysts to ensure that their findings are as objective as possible, and thereby devoid of such cognitive traps as bias, erroneous assumptions, and established mindsets. Structured analysis allows for a systematic review of the analyst's discoveries and "cognitive trail" in an open forum that includes evaluation and input from a variety of stakeholders, such as others tasked with analyzing the same event or issue, managers, and experts on the subject matter who are external to the analytic task.[2]

Structured analytic techniques (SATs) are the tools used to establish a structured analytic environment. SATs are designed to improve analysts' and other stakeholders' understanding of and response to new, enduring, or emerging issues, and even unanticipated adverse events.

The Analytic Spectrum

Structured Analytic Techniques allow the user to move along what we refer to as the Analytic Spectrum, a diagram of which is below.[3]

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[2] Heuer Jr., Richards J. and Randolph H. Pherson, *Structured Analytic Techniques for Intelligence Analysis*, Washington, DC: CQ Press. 2011. 4-5.
[3] The Analytic Spectrum concept and its diagram were developed by Katherine Hibbs Pherson and Randolph H. Pherson, and are published in Pherson, Katherine Hibbs and Randolph H., *Critical Thinking for Strategic Intelligence*, Washington, DC: CQ Press. 2013. 48-52.

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The Analytic Spectrum
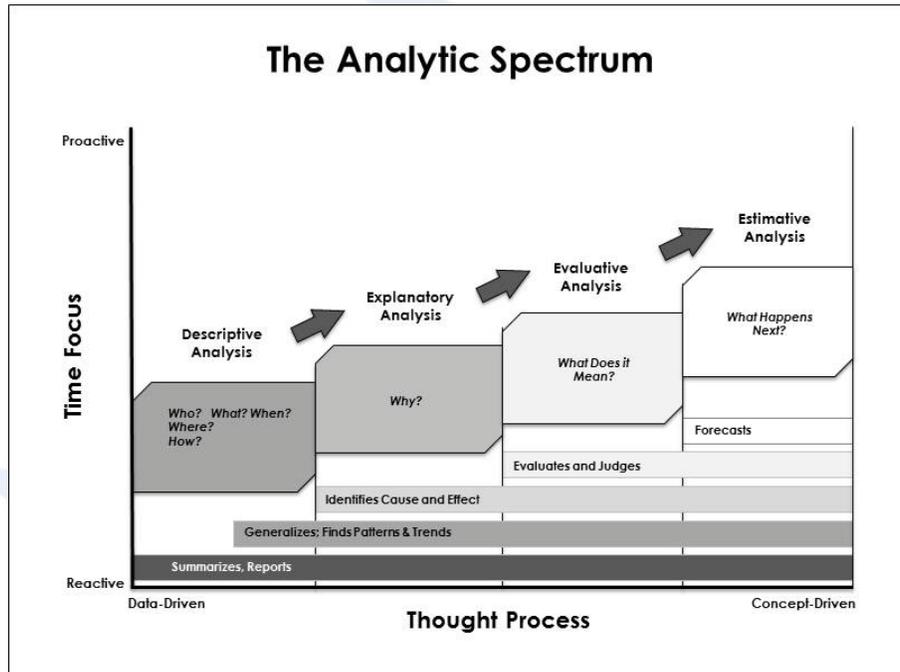
Source: Pherson, Katherine Hibbs and Randolph Pherson, *Critical Thinking for Strategic Intelligence*

This spectrum is comprised of four stages of analysis, beginning with basic descriptive analysis (a summary of the important components – the *Who*? *What*? *How*? *When*? and *Where*?– of an event, individual, group, issue, etc.). Explanatory analysis is performed to explore *Why* an event, situation or problem occurred or is developing. Descriptive analysis and explanatory analysis are fundamentally necessary to any analytic task, but they are far from sufficient when examining complex issues such as the interplay between warlordism and international diffusion.

Structured Analytic Techniques allow analysts to move further along the analytic spectrum, and expand their thought processes from **reactive** analysis of what has happened or is happening to more **proactive** analysis of *what does it mean?* (evaluative analysis) and *what may happen next?* (estimative analysis). A shorthand way of expressing this is that as one moves from left to right along the spectrum, the analyst moves from answering the *What*? to the *So What*? to the *So What of the So What*?

For the purposes of this paper, we will divide SATs into two subsets, reactive and proactive analytic techniques, and discuss their applicability in analysis of complex issues such as the interplay between warlordism and international diffusion.

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Reactive Structured Analytic Techniques

Reactive (or reflective) types of SATs allow analysts to analyze an event in the past or to illuminate elements of an event or problem as it is unfolding. They focus on what is known, how the data can be organized, who are the critical actors, where and when did it happen, what trends or patterns can be discerned, and what are the key drivers generating the dynamic. Such knowledge then can be used to tease out factors and elements that may assist in informing current actions and forecasting the progression of future events. They provide the user with a means to systematically and impartially categorize and evaluate information that may be ambiguous, voluminous, incomplete, or in conflict either with other information within the dataset, or with common perceptions and conclusions.[4]

Analytic techniques that fall mostly in the domain of reactive analysis include *Social Network Analysis*, whereby the user depicts and codifies relationships and linkages among individuals, groups, and/or organizations; *Analysis of Competing Hypotheses (ACH)*, a technique used to first develop a set of plausible alternative explanations of an event or issue and then systematically evaluate data related to the event or issue to determine which hypothesis (or hypotheses) is (are) most consistent; and *Force Field Analysis*, that allows the user to identify and assess the relative importance of the forces acting upon an actor, event, or issue.[5]

Proactive Structured Analytic Techniques

Proactive SATs are those that enable analysts and others to prepare responses to envisioned (as well as previously unanticipated) scenarios, such as sudden and divisive political change, a dirty bomb detonation, a hostage crisis, a terrorist incident, and the like. Proactive SATs are designed to stimulate imagination, spark innovative ideas or responses, and generate fresh perspectives and creative solutions to current or future complex problems. These techniques include *Quadrant Crunching*, a type of structured brainstorming used to systematically challenge assumptions, develop and explore the implications of contrary assumptions, and discover "unknown unknowns"; *Alternative Futures Analysis*, a systematic method for identifying alternative trajectories to a highly uncertain political, economic, or social situation or phenomenon in order to develop appropriate responses to an array of outcomes; and the

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[4] Ibid.

[5] These and other reactive analytic techniques are detailed in Pherson Associates, LLC's *Handbook of Analytic Tools & Techniques*, Reston, VA: Pherson Associates, LLC. 2008. ISBN 978-0-9798880-1-4.

development of *Indicators*, a set of observable phenomena that are periodically reviewed to track events, spot emerging trends, and warn of unanticipated change.[6]

Both types of SATs, reactive and proactive, are helpful – and arguably necessary – to more fully illuminate and address complex issues like warlordism, international diffusion, and the interrelationship of these phenomena.

The Use of SATs to Better Understand Warlordism and International Diffusion

While the authors' main concern in this paper is to discuss how structured analysis can improve understanding of warlordism and international diffusion, we feel that a general – albeit short – discussion of these phenomena is warranted.

<u>International Diffusion</u>

For the purposes of this paper, the authors draw largely on Gilardi's work (2012) in defining "international diffusion" as the process by which policies, protocols, standards, ideas, ideals, movements, principles, frameworks, legislative norms, and the like are disseminated transnationally.[7]

Recent scholarly discussion of international diffusion has often centered on its relationship to democratization.[8] Gleditsch and Ward argue that a change to or toward democracy is more likely in a state bordered by democracies, including newly-democratized states, and therefore is a result of the diffusion of principles, ideas, ideals, and the like across borders. Additionally, they posit that outcomes in the democratization of a state depend on the international or transnational forces (including personal or professional linkages) that act upon influential

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[6] Ibid.

[7] Gilardi, Fabrizio, "Transnational Diffusion: Norms, Ideas, and Policies," in Walter Carlsnaes, Thomas Risse and Beth Simmons (eds.) (2012), *Handbook of International Relations*, Thousand Oaks, SAGE Publications, pp. 453-477.

[8] Johan Elkink provides a comprehensive review of literature on international diffusion and democratization in "The International Diffusion of Democracy," *Comparative Political Studies* 44 (12), December 2011. 1651-1674. http://researchrepository.ucd.ie/bitstream/handle/10197/2978/Elkink%20-%20paper_cps_rev.pdf?sequence=1. Accessed March 2, 2013.

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actors, groups, or institutions within its borders.[9] In other words, these forces (connections, linkages) are the means by which ideas, ideals, and the like diffuse transnationally.

These two points by Gleditsch and Ward concerning international diffusion and democratization – 1) that international diffusion democratization is "contagious" across borders, and 2) that transnational linkages among influential actors and groups in democratic and heretofore-undemocratic states are critical to the process of democratization – are critical to the examination of international diffusion and warlordism. We posit that if democratization, a phenomenon generally perceived as positive, is diffused internationally to neighboring states via interpersonal and professional connections, then other phenomena (like warlordism) are diffused in a similar geographical fashion and in a similar manner.

Warlordism

Recent academic discourse on warlordism has often focused on defining this phenomenon; examining its impact on societal, political, and economic trajectories in the post-Cold War era; and determining how an improved understanding of warlordism can impact peacebuilding, security, and development efforts in weak or failed states.

Most studies of warlords converge on several key points: warlords use coercive force to assert and maintain power and authority, they wholly or partially control their local – or even regional – economy and governance structures, and they are well-networked with both the ruling forces that they run counter to and a panoply of influential and/or violent non-state actors (at the local, regional, national, and/or transnational levels) interwoven with their own activities and territories.[10] Scholars vary in their degree of emphasis on one or another of these generally-regarded central aspects of warlordism, as well as in their role in governance.

Marten's definition of warlords as "…individuals who control small slices of territory, in defiance of genuine state sovereignty, through a combination of patronage and force" puts primacy on economic and military aspects of warlordism, and depicts warlords as direct counterpoints to

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[9] Gleditsch, Kristian Skrede and Michael D. Ward, "Diffusion and the International Context of Democratization", *International Organization* 60 (4), Fall 2006, 911–933. http://www2.kobe-u.ac.jp/~tago/pdf/Gleditsch%26WardIO2006.pdf. Accessed March 3, 2013.

[10] A worthwhile discussion of relevant scholarship is contained in Harpviken, Kristian Berg, "Understanding Warlordism: Three Biographies from Afghanistan's Southeastern Areas," PRIO Paper: PRIO, 2010. http://www.prio.no/Publications/Publication/?x=4658. Accessed November 7, 2012.

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state governance.[11] Giustozzi's work isolates warlords' ability to employ force and violence as the primary determinant in their legitimacy and resilience.[12]

Paul Jackson sets forth the notion that warlords are entrepreneurial in spirit, and behave like armed, well-heeled service providers. He suggests that warlords often step in to replace state function and provide governance and government services where a vacuum now exists, rather than act in direct defiance of a functioning state.[13] In this analysis, it is possible to see positive aspects of warlordism – that, absent these benefactors, the inhabitants of the localities in which they operate would be even more marginalized and needy.

Reno's analysis of warlordism in the post-Cold War era places preeminence on economic factors – essentially, present-day warlords act solely in their own self-interest and out of greed, taking advantage of access to natural resource wealth, state assets and the like, as opposed to their predecessors, who were also motivated by ideological and/or political concerns.[14]

For the purposes of this paper, the authors will probe those features of warlordism articulated in current scholarship that we feel are most important to examining the phenomenon of warlordism and its relationship with international diffusion, as follow:

1) warlordism arises in states or areas that have experienced a devolution or collapse of centralized control,
2) warlords use (or demonstrate the ability to use) violence or force to assert and maintain authority over their territories,
3) warlords rely on their established relationships, be they tribal, ethnic, political, economic, or the like, to rise to power and maintain their position of authority, and
4) warlords' relationships provide them access to licit and illicit goods necessary to retain their power, equip and sustain their militias, and provide for inhabitants of their territories.

The authors advance these four points to make the assertion that warlordism is a transnational systemic phenomenon: warlords interact one another, with other non-state actors and with

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[11] Marten, Kimberly, "Warlords," paper presented at "The Changing Character of War" conference, Oxford University, March 2009. (Revision 4/28/09). http://ccw.modhist.ox.ac.uk/events/Chapter_Marten.pdf. Accessed February 16, 2012.

[12] Giustozzi, Antonio, "The Debate on Warlordism: The Importance of Military Legitimacy", Discussion Paper no.13, Crisis States Programme, Development Research Centre, DESTIN, LSE, London: 2005.

[13] Jackson, Paul, "Warlords as Alternative Forms of Governance," *Small Wars and Insurgencies,* Vol. 14, No. 2 (Summer 2003), pp. 131-150.

[14] Reno, William, "The Politics of Insurgency in Collapsing States," *Development and Change,* 33:5 (2002), pp. 837-858.

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corrupt government officials along licit and illicit supply chains to obtain or sell goods, services, and people; and with subversive movements, terrorist factions, and even above-board government agents to advance their political and ideological agendas. In this way, warlordism is inextricably linked with the principle of international diffusion. The authors posit that SATs provide a simple but elegant way to explore complex phenomenon such as the nexus between warlordism and international diffusion because they are systematic, rigorous, and transparent.

Reactive SATs: Identifying Who?, What?, How?, When?, Where?, and Exploring Why?

While analysts could employ numerous reactive SATs to better understand the interrelationship between warlordism and international diffusion, for the sake of brevity and illustration we will limit our discussion to the three reactive SATs described earlier, *Social Network Analysis*, *Force Field Analysis,* and *Analysis of Competing Hypotheses*.

Social Network Analysis has been particularly helpful to analysts seeking to monitor and expand their understanding of illicit activity, terrorist networks, organized crime groups, and the like, and as such is a comfortable fit for the subject task, as a warlord's linkages with illicit networks, other non-state actors, and even sometimes government agents are critical to his ability to sustain or increase his activities.[15]

First it is important to understand that warlords usually depend on access to supply chains for both licit goods (e.g. food, clothing, medicines) and illicit goods (e.g. weapons, smuggled mercenaries, or trafficked humans), in order to both equip and sustain their armies, and often to provide resources for the communities in which they operate.[16] Further, not only do warlords procure goods from these illicit networks, but they are actors in them as well: they may either serve as direct sellers of illicit goods (e.g. drugs, conflict diamonds, coltan, or other natural resources) or act as transshipment points of illicit goods. In this way, warlords fund their

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[15] While some notable warlords are or have been women, such as Afghanistan's Bibi Ayesha, the majority are or have been men. Therefore, for the sake of ease of reading, we will use masculine pronouns when referring to warlords in the singular.

[16] Warlords' involvement in licit and illicit trade routes and supply chains in southeast Asia and Africa has been widely documented. Indeed, warlords' access to – and control over – supply chains in Afghanistan was of such concern in Congress that U.S. Representative John Tierney (D-MA), Chair of the Subcommittee on National Security and Foreign Affairs of the U.S. House of Representatives' Committee on Government Oversight and Reform requested a study of this issue. The subject study was published in June 2010 as *Warlord, Inc.: Extortion and Corruption Along the U.S. Supply Chain in Afghanistan.*
http://democrats.oversight.house.gov/images/stories/subcommittees/NS_Subcommittee/Cover_-_TOC.pdf.
Accessed November 18, 2010.

activities and amass personal wealth; retain power at the local level and potentially gain stature at regional, national, or transnational levels; and assert their authority and prestige.

Interstate and transnational supply chains play an important role in the interrelationship between warlordism and transnational diffusion. Not only do goods, services, and people flow along illicit and licit trade routes, but information does as well. In this way, warlords directly influence the spread of their ideas, ideals, movements, standards, principles, and protocols – all of which are elements in our definition of transnational diffusion. International diffusion also acts upon warlordism via international supply chains: the information shared along these routes and through these networks may be internalized into the structure and operations of a warlord's organization.

When the relationships among supply chains, illicit networks, warlords, and international diffusion is thus understood, the value of using Social Network Analysis in evaluating them becomes evident. For example, we may imagine a less originally- well-intentioned movement than the Arab Spring fueling and being fueled by international diffusion in areas along known illicit trade routes replete with warlords, such as the Horn of Africa, North Africa, West Africa, post-Soviet Central Asia, and the Arabian Peninsula. Because warlords serve as links in various illicit supply chains, understanding with whom they are closely networked may provide important insights into, for example, 1) *by whom* and *how* radical ideas, ideals, and movements are diffused transnationally, and 2) *what*, *when*, and *where* future such diffusions will take place. In this instance, Social Network Analysis would help analysts perform descriptive analysis, the starting point of analysis along the analytic spectrum.

Force Field Analysis is a technique that assists analysts in assessing and describing the broader environment impacting – and impacted by – an actor, event, or situation. In better understanding the interplay between warlordism and international diffusion, Force Field Analysis would illuminate the forces driving the international diffusion of ideas, ideals, and movements associated with warlords and warlordism, as well as those forces acting to restrain them.

In performing Force Field Analysis, analysts would brainstorm to identify the full range of forces acting to promote or hinder the spread of warlords' ideas, ideals, operations, and movements, such as needs, resources, costs, benefits, interests, social and cultural trends, rules and regulations, policies, values, and leadership qualities. Analysts would then compile two lists: one comprised of the forces promoting the international diffusion of ideas, ideals, and movements associated with warlords and warlordism, and the other comprised of forces restraining them. Each force would be assigned a value (or "intensity score") to indicate its

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strength, with "1" indicating a weak force and "5" indicating a strong force, and the intensity scores would be compared to determine which types of forces are most dominant, focusing alternatively on promotional forces and restraining forces. Finally, analysts would devise or recommend a course of action to both strengthen the forces that lead to the preferred outcome and weaken the forces that hinder it.

For example, if the analytic task is to determine how to curb the diffusion of radical ideas espoused and tactics employed by dominant Yemeni warlords eastward into Africa, north to Syria, and westward into southeast Asia, analysts would determine the forces acting to promote or hinder the diffusion, assign value to these forces, assess whether the problem requires management at an supra-national or international level, and if so, develop methods to either strengthen forces that hinder the diffusion of ideas and tactics (for example, enhanced border security) or weaken forces that promote it (such as deteriorating economic conditions, high youth unemployment, or growing income disparity), or both.

Like Social Network Analysis, Force Field Analysis is a technique analysts could use to better describe the interplay between international diffusion and warlordism, by understanding *how* relevant forces impact this phenomenon. However, Force Field Analysis helps us move a little further to the right along the analytic spectrum toward explanatory analysis with its emphasis on cause and effect: if we bolster one *cause* of the spread of warlords' ideas and tactics (enhanced border security), we would expect the *effect* of a decrease in international diffusion.

Analysis of Competing Hypotheses (ACH) would assist analysts in moving still further along the analytic spectrum, as it is used primarily in explanatory analysis. It is a method whereby analysts can reflect on the worth, completeness, and veracity of data that they have used in formulating a lead hypothesis, and expand their range of hypotheses to ensure that their analysis will account for all data, and not suffer from confirmation bias.

In the context of probing the interrelationship between warlordism and international diffusion, ACH would advance explanatory analysis: existing data drawn from Social Network Analysis, Force Field Analysis, and other SATs that describe existing conditions would be reviewed systematically to assess a hypothesis that, for example, Yemeni warlords diffuse their ideas, ideals, and tactics along licit and illicit trade routes eastward through Africa, northward to Syria, and westward through southeast Asia in order to fuel unrest and civil war, and undermine states' authority. In other words, a lead hypothesis would be that Yemeni warlords' motivations are to disrupt the current political order.

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In performing ACH, analysts would identify all possible alternative hypotheses to their lead hypothesis, taking care to ensure that all hypotheses are mutually exclusive (meaning that if one is true, all others must be false). ACH is most effective when used by a group of analysts with varying perspectives and expertise to ensure a complete array of hypotheses. In our Yemeni example, competing hypotheses might include political (self-aggrandizement in the political arena from local/regional overlord status to transnational overlord status), economic (accumulation of wealth from illicit trade in drugs, weapons, supplies, and the like), social (advancement of one's ethnic, tribal, or social group), or ideological (international expansion of one's ideals and philosophies).

Next, analysts would identify and review the most salient existing data and assumptions that relate to these hypotheses. Each item of relevant information would be scrutinized to determine whether it is consistent with, inconsistent with, or neutral about each competing hypothesis. If a substantial amount of data is inconsistent with a given hypothesis (in essence, if one would not expect to see this information if the given hypothesis were true), then that hypothesis can be discounted. On the other hand, if all the available relevant information is consistent with a given hypothesis, then that given hypothesis is most likely to be correct. Hypotheses that most closely correlate to the salient data points are then reviewed more thoroughly, and the field of hypotheses is narrowed until analysts are left with the hypothesis that is most highly confirmed by the salient data.

By identifying alternative explanations for the data derived using descriptive analysis, ACH helps analysts get to the most appropriate assessment of *why* a behavior or situation occurs – in our example, why Yemeni warlords are spreading their ideas, ideals, and tactics.
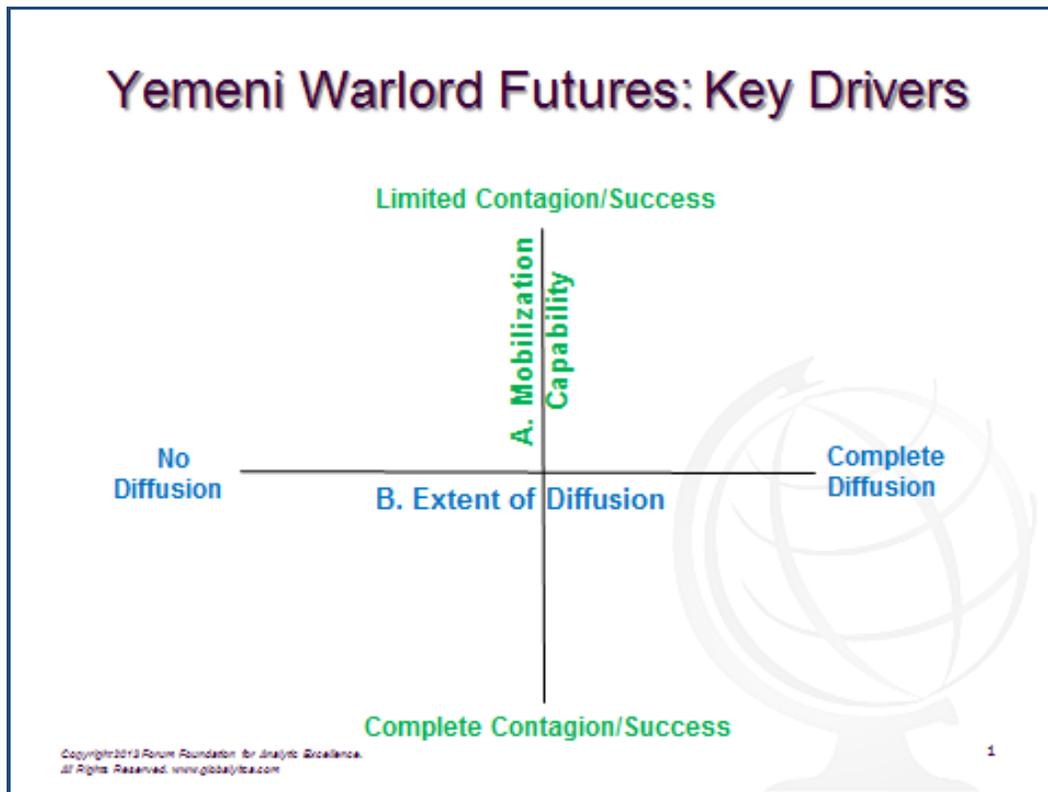
Proactive SATs: Probing the *So What?* and the *So What of the So What*?

Ending analysis at the explanatory stage (once the *why* is understood) would stymy the pursuit of better understanding complex issues. At the policy and intelligence levels, arguably more important is an understanding of what this means, where things are headed in the future, and what can be done about it. In the context of warlordism and international diffusion – or any complex, systemic issue – it is vital not just to know who the actors are, what they are involved in, or when, where, how, and why they acted, but *what this means* (*so what?*) and *what might happen next* and *what can be done about it* (the *so what of the so what?)*. Primary actors (*who?*) may change with time, as may the nature, location, and focus of their activity. Proactive SATs that help analysts perform evaluative analysis (to examine the significance of a problem or

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topic) and estimative analysis (to anticipate or forecast future events) are best suited to help analysts develop a deep understanding of a complex issue like warlordism and international diffusion that will transcend political, economic, and social changes.[17]

Alternative Futures Analysis, and its more robust cousin technique, Multiple Scenarios Generation, help analysts move further toward the most proactive, concept-driven end of the analytic spectrum – estimative analysis. Using these techniques, analysts seek to understand *what might happen next?* and *what can be done about it?* They are usually conducted as a facilitated group exercise involving a diverse set of experts from academia, the government, and the private sector. In our example of analyzing warlordism and international diffusion, participants would use the list of forces, factors, or events that are most likely to influence how an issue will unfold over a specified period of time which they had developed earlier using Force Field Analysis (factors of societal welfare, youth employment, government or supranational capacity to curtail illicit supply chains, and economic factors such as income equality or equitable access to economic opportunity). Participants would then organize these factors and forces as spectrums on an *x*- and *y*-axis in a matrix, and identify the end points of each spectrum. In our example of Yemeni warlords diffusing their ideas, ideals, and tactics internationally, end points of the *x*-axis could be "no diffusion" to "complete diffusion", and end points of the *y*-axis could be "limited contagion/success" and "complete contagion/success". The matrix thus far might look as follows:

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[17] Pherson and Pherson, 50-52.

Yemeni Warlord Futures: Key Drivers

Limited Contagion/Success

A. Mobilization Capability

No Diffusion — B. Extent of Diffusion — Complete Diffusion

Complete Contagion/Success

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Finally, participants would use their subject-matter expertise in a structured brainstorming environment to create scenarios for each quadrant in the matrix that are consistent with the two ends of the spectrum in that quadrant. Our matrix might be populated in the following way:

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Yemeni Warlord Futures: Alternative Scenarios
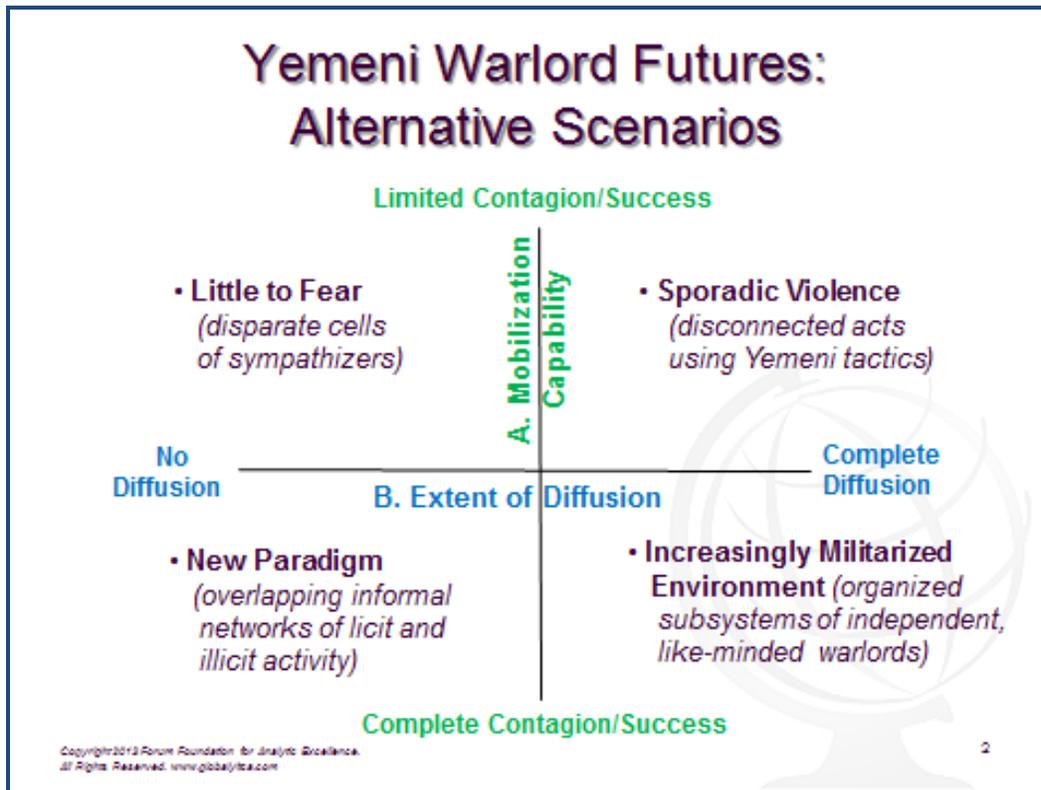
Similar in nature to Alternative Futures Analysis, *Quadrant Crunching* is a technique that analysts can use to generate new ideas and ways of understanding a phenomenon and avoid surprise. The technique is particularly helpful in generating large sets of mutually exclusive hypotheses or scenarios of how a terrorist attack might be launched or a complex situation might evolve in the coming years. By using structured brainstorming techniques to generate dozens of potential scenarios, the analyst can be more confident that she has anticipated all possible scenarios or outcomes and will not be surprised by an "unknown unknown."

In Quadrant Crunching, the first step is to establish a lead hypothesis or the most commonly accepted explanation for why something is happening – "Yemeni warlords' ideas, ideals, and tactics are being diffused to other areas along licit and illicit trade routes". The lead hypothesis is then broken up into its key component parts (Who, What, How, When, Where, Why) and alternatives are generated for each component. For example, the *How* would be along licit and illicit trade routes, and the alternatives might include diffusion via telecommunications or new media strategies, or via congregations of warlords or soldiers in Sudan, or other variants. Two alternative "*How*" dimensions would then displayed on the *x*- and two alternative dimensions

of "Why" would be displayed on the *y*-axis and, as in Alternative Futures Analysis, analysts then would construct unique scenarios for each quadrant keyed to the various combinations of "*How*" and "*Why*" that have been generated.

The challenge in conducting both Alternative Futures Analysis and Quadrant Crunching is to review all the possible scenarios that have been created and select those (usually between three and five) that are most deserving of attention and further analysis. Both scenarios methodologies will quickly capture the most obvious alternatives, but participants usually are surprised when a few brand new-and sometimes counterintuitive—scenarios emerge that are deserving of serious consideration. Ideally, the process can also stimulate new thinking on how to, or what can, best influence future outcomes in a way that makes desirable outcomes more likely to emerge and bad outcomes less likely to happen.

When conducting an Alternative Futures or Quadrant Crunching exercise, a natural next step is to develop lists of *Indicators* that will help analysts discern which of the various scenarios generated is starting to emerge or is most likely to occur. Such indicators provide an objective baseline for tracking events and for instilling rigor into the estimative process.

For example, if we review the Alternative Futures matrix above, indicators that would serve to forewarn analysts if international diffusion of Yemeni ideas, tactics, and ideals were increasing and the situation were deteriorating into – or deeper into – a more dangerous quadrant. Similarly, analysts could use indicators to determine whether a new strategy aimed at curtailing the international diffusion of Yemeni warlords' tactics, ideas, and ideals were having the intended effect. In this way, the proactive structured analytic technique of indicators helps analysts answer the questions three central questions to estimative and evaluative types of analysis: *what does it mean?*, *what might happen next?* and *what can be done about it?*

Conclusion

Gathering and processing core descriptive information about a complex issue such as the interplay between warlordism and international diffusion is an essential building block to research and analysis, but it is hardly enough. Most scholars and analysts take their descriptive research and analysis one step further to examine the issue of *why* an event, problem, or issue is intensifying or emerging. Some analysis and scholarship ends here, and therefore remains insufficient in helping the academic, policymaking, law enforcement, intelligence, and other

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stakeholder communities to develop methods and policies to curtail negative phenomena and/or promote positive phenomena. Comprehensive analysis that responds to all elements of the analytic spectrum is essential to better understand and more fully address complex issues.

Structured analysis has significant value for scholars and analysts examining complex issues and phenomena. Reactive structured analytic techniques, such as Social Network Analysis, Analysis of Competing Hypotheses, and Force Field Analysis, help to ensure that all relevant information concerning a complex issue is captured and rigorously reviewed for its veracity, completeness, and consistency with other known information. Proactive structured analytic techniques help analysts and scholars overcome mindsets and other analytic traps, leverage their imaginations, and fully grasp all the complexities of a new, emerging, or enduring problem or issue.

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