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**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**AN ADAPTIVE SECURITY CONSTRUCT:
INSURGENCY IN SUDAN**

by

Patrick T. Colloton
Benjamin R. Maitre
Tommy E. Stoner

December 2007

Thesis Advisor:
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ABSTRACT

Internal wars are by default the business of others, until someone says they are not. Artificially contained within the confines of the current international system, insurgent conflicts are considered domestic affairs only until they threaten external interests. In judging intrastate conflict by and large from a crisis-response perspective, conventional assessment methodologies, oriented largely toward interstate wars, tend to fall short in objectively analyzing the historical and dynamic aspects of internal wars. This thesis develops an Adaptive Security Construct (ASC) that aims to correct such shortcomings through the multi-disciplinary integration of three conceptual lenses: a qualitative situation estimate, a game-theoretic dynamic conflict model, and geospatially oriented nexus topography. Using Sudan's internal wars as a case study, where the existence of signed peace-agreements in both the south and Darfur exist in apparent contradiction of these conflicts' causes, the ASC iteratively correlates the analysis of each of the three lenses to provide an observer a more objective external view of conflicts that are inherently "internal." This thesis presents the ASC as an iterative process and perspective that enables the formulation of general imperatives and specific approaches in response to contemporary arenas of conflict, both in Sudan and within the international community at large.

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LIST OF TERMS AND ACRONYMS

ARFWS	Alliance of Revolutionary Forces of Western Sudan
AU	African Union
AMIS	African Union Mission In Sudan
BC	Beja Congress
CPA	Comprehensive Peace Agreement (2005)
DCM	Dynamic Conflict Model
DIME	Diplomatic Information Military Economic
DPA	Darfur Peace Agreement (2006)
FL	Free Lions
G19	Group of Nineteen
GNU	Government of National Unity
GoS	Government of Sudan
GoSS	Government of Southern Sudan
GSLM	Greater Sudan Liberation Movement
IGAD	Intergovernmental Authority on Development
JEM	Justice and Equality Movement
JEM/EC	Justice and Equality Movement Eastern Command
JEM/PW	Justice and Equality Movement Peace Wing
LRA	Lord's Resistance Army (Uganda)
NCP	National Congress Party
NDA	National Defense Alliance
NIF	National Islamic Front
NMRD	National Movement for Reform and Development
NRF	National Redemption Front
NSF	National Salvation Front
NT	Nexus Topography
PFF	Progressive Front Forces
PMESII	Political Military Economic Social Infrastructure Information
QSE	Qualitative Situation Estimate
SAF	Sudanese Armed Forces

SFDA	Sudan Federal Democratic Alliance
SLM/A	Sudan Liberation Movement/Army
SLA/AS	Sudan Liberation Army Abdul Shafi
SLA/AWN	Sudan Liberation Army Abdul Wahid al Nur
SLA/FW	Sudan Liberation Army Free Will
SLA/JN	Sudan Liberation Army Jar al Nebey
SLA/KAC	Sudan Liberation Army Khamis Abdullah Command
SLA/MM	Sudan Liberation Army Minni Minawi
SLA/UC	Sudan Liberation Army Unity Command
SPLM/A	Sudan People's Liberation Movement/Army
SSLM	South Sudan Liberation Movement
UFLD	United Front for Liberation and Development
UNMIS	United Nations Mission in Sudan
UNAMID	United Nations African Mission in Darfur
URFF	United Revolutionary Force Front

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The impetus for this thesis came from a strategic multilayer assessment workshop sponsored by U.S. Central Command in January, 2007. The varied membership of the workshop was challenged to create an objective assessment methodology for regions of emergent security concern, a means by which the U.S. Unified Combatant Commands with regional responsibilities can fuse qualitative and quantitative data sources into a comprehensive yet adaptable analytic output. As selected members of this workshop, faculty members and students from the Department of Defense Analysis at the Naval Postgraduate School were asked to conduct a parallel effort to this inter-agency project, to include a particular and detailed focus on insurgent conflict in Sudan. This thesis reflects the end-state of that effort. We hope that it will also represent the initial embrace of a new perspective in defense analysis.

As the primary authors of this thesis, we relied heavily upon the expertise and background in insurgency theory provided by our thesis advisor, Professor Gordon McCormick. Professor McCormick's model of intrastate conflict provides both the starting point and culmination of the iterative method inherent in the Adaptive Security Construct. Incorporating a conceptual perspective and detailed process, the latter facet of the construct could never have come to fruition without the input of our second reader, Professor Peter Gustaitis. His relentless efforts to have our thesis presented within the greater context of the Department of Defense community, along with a similar dedication by the department chair from U.S. Special Operations Command, Colonel Brian Greenshields, have successfully set the stage for both the theoretical validation and future implementation of this methodology. We would also like to thank Professors Anna Simons, Frank Giordano, and Nancy Roberts for their assistance and guidance in understanding the societal context, game-theoretic imperatives, and network analysis that allowed for the successful application of this multi-disciplinary framework.

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I. INTRODUCTION

What remains peculiar to war is simply the peculiar nature of its means.

*- Carl von Clausewitz*¹

A. PURPOSE AND SCOPE

While war between nations may be on the wane, conflict within countries is not. Africa is rife with internal wars; eight of the top ten entries in “The Failed States Index 2007” are sub-Saharan states.² According to twelve political and economic indicators, these countries are in imminent danger of dissolution, continued violence, and escalating bloodshed. For the second year in a row, Sudan has topped the list, due primarily to the escalating violence in the province of Darfur. Internal wars are not new, yet the prevalence of intrastate conflict illustrates the extent to which rebels and regimes manipulate the conditions of internal wars to further their own interests. Deprived of the bipolar opposition of Cold War superpowers, contemporary international relations are mired in the ambiguities of sovereignty at the margin; countries that were once at least tenuously aligned with superpower patrons now find themselves immersed in internal crises of identity and self-determination. Internal wars, insurgencies, and the violence committed by non-state actors have come to the forefront of contemporary world affairs.

1. Purpose

This thesis develops a construct that allows for the iterative assessment and engagement of the factors influencing insurgent conflict in Sudan. Two premises are fundamental to this objective. The first acknowledges internal wars as a distinct expression of conflict. An internal war is fought between elements of states that might otherwise be considered singular entities in international affairs. Internal wars are not

¹ Carl von Clausewitz, *On War*, ed. and trans. by Michael E. Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 87.

² The Fund for Peace and Foreign Policy Magazine, “The Failed States Index 2007,” *Foreign Policy* (July/August 2007): http://www.foreignpolicy.com/story/cms.php?story_id=3865 (accessed August 10, 2007). The other sub-Saharan states in the top ten were the Central African Republic, Chad, Somalia, Zimbabwe, Ivory Coast, Guinea, and Democratic Republic of Congo. The only non-African states in the top ten were Iraq and Afghanistan.

fought *between* states, they are fought *within* states; societies fight not just each other but within themselves as well. In these conflicts, insurgencies comprise those entities that violently oppose the formalized status quo, be that an incumbent regime or some other manner of recognized sovereignty. The second premise, reliant upon the first, asserts that internal conflicts are perceived differently by external actors who become involved in the domestic struggles of others. Here, the requirement for objectivity becomes increasingly important. Put bluntly, modern states experience difficulties when they become involved in the internal squabbles of others. In attempting to project their own universal perspectives onto internal wars, intervening nations are invariably perplexed by the apparent suboptimal behavior of warring factions. Such perspectives reflect biases of the observer; understanding why other countries fight within themselves is problematic.

This issue identifies the need for a systemic process and perspective for assessing internal wars. As a process, such a construct must allow for an adaptive and iterative analysis of internal conflict; it defines a method of assessment. That method becomes a means of translating theory into practical policy applications, a bridge that in US political history has a long record of tumultuous crossings.³ As a perspective, the construct requires a familiarity with the history and contemporary relevance of the internal war being examined; it defines the context of assessment. A policy action will fail if it does not accurately account for the local conditions it is meant to address. Using the Sudan as a case study, this thesis incorporates both process and perspective within an Adaptive Security Construct (ASC) by which the insurgencies of internal wars are assessed in order to develop engagement options for exogenous actors.

The contemporary relevance of such a study is readily apparent. One source listed 19 major ongoing armed conflicts in 2003; there is “a growing preoccupation with these phenomena of violence in the world, and particularly in the ‘South’ or the ‘developing world’.”⁴ Several theories exist that attempt to quantify the politico-military

³ Alexander L. George, *Bridging the Gap: Theory and Practice in Foreign Policy* (Washington, DC: United States Institute of Peace Press, 1993).

⁴ Christopher Cramer, *Violence in Developing Countries: War, Memory, Progress* (Bloomington, IN: Indiana University Press, 2006), 2. The source references the Uppsala Conflict Database, available online at <http://www.pcr.uu.se/database/> (accessed August 10, 2007).

aspects of weakened or failed states. A large portion of this literature is based upon analyses of historical examples of insurgent warfare, and then attempts to draw far-reaching parallels to current conflicts.⁵ Using current modeling techniques, this thesis in part overcomes such limitations by applying several perceptual lenses to separate yet interrelated conflicts within Sudan, a nation of significant importance in African regional stability. Sudan provides a unique case study as government forces and rebel factions are engaged in conflict in several distinct areas, to include the escalating humanitarian crisis in Darfur, as well as secessionist engagements within the country's historical North-South divide. In contrasting insurgent conflict in several regions of Sudan, it is possible to substantiate the validity of the ASC, derive practical implications for external intervention in the region, and enhance a general conceptual perspective of internal wars.

2. Scope

The scope of this thesis involves the development of an assessment construct, the ASC. It does not purport to offer a means by which the specific conflicts in Sudan will be resolved, let alone provide a solution to internal wars in general. Rather it proceeds from the underlying supposition, already offered, that dealing with internal wars, particularly from the position of an outside actor, requires an objective process and perspective grounded within an analytic framework. Both mainstream academia and media portrayals of these conflicts tend to overly rely upon single-factor explanations for the violence in these areas.⁶ “At times the attention of governments and of public opinion has seemed to lurch from one ‘crisis’ to another: from Bosnia to Somalia to Rwanda to Afghanistan to Iraq to Darfur.”⁷ Sporadic assessments of these “crises” belie their historic origins; internal wars are not spontaneous. Time may also alter the reasons for which internal wars are fought: what started a war may not be what sustains it. This forms the underpinnings of an objective perspective in assessing insurgencies and internal wars; such a process requires a familiarity with specific chronology and context,

⁵ Cramer, *Violence in Developing Countries*, 2-9.

⁶ Morten Bøås and Kevin C. Dunn, eds., *African Guerrillas: Raging against the Machine* (Boulder, CO: Lynne Rienner, 2007), 1.

⁷ Cramer, *Violence in Developing Countries*, 2.

not a premature attempt to attribute causality. Internal wars and the insurgencies they spawn are a complex not simple phenomenon. The ASC provides a comprehensive means to analyze those complexities.

A second concept inherent in the scope of this project is that comprehensive analysis requires the integration of qualitative and quantitative analysis of insurgent conflict. Assessments of internal violence cannot rely solely upon empirical (primarily financial or economic) indicators to assess the status of “weak” or “failed” states. Such measures often disregard the complex and convoluted sociopolitical facets that would otherwise lead to a different assessment. Insurgencies themselves defy conventional theories of military engagement in that the numerical strengths of opposing factions provide a misleading indicator of their resilience. The further the insurgent force is reduced in number, the more difficult it is to defeat. The opposite holds true for government forces, as the greater the numerical defeat of the regime’s military, the weaker it becomes. It is therefore difficult to quantify the true strength of opposing factions, let alone to accurately predict the outcome of an internal war.

In concert with the limitations of purely statistical measures, an over-reliance on subjective assessments by subject matter experts can also result in erroneous conclusions, a phenomenon colloquially termed the “Chalabi effect” in reference to recent US involvement in Iraq. When coupled with the political, economic, and cultural factors that characterize internal wars, deriving purely empirical implications for external engagement options is increasingly arduous. Rather than directly attribute a singular causality, there are instead several groups of issues that appear to foment internal wars. Recent research has demonstrated a correlation between rainfall patterns and a propensity for conflict in Darfur, with distinct implications for the continuance of violence there.⁸ Additional studies indicate that ethnic marginalization is positively correlated with the probability of civil conflict, regardless of whether the incumbent regime in fact represents

⁸ Mohamed Suliman, “Civil War in the Sudan: From Ethnic to Ecological Conflict,” *The Ecologist* 23, no. 3 (May/June 1993), 104. A conceptualization of “how environmental scarcity is linked to domestic political unrest” can also be found in Jason J. Morrisette and Douglas A. Borer, “Where Oil and Water Do Mix: Environmental Scarcity and Future Conflict in the Middle East and North Africa,” *Parameters* 4, no. 4 (Winter 2004-05): 87.

a minority or majority of the populace.⁹ Though posits of causality are overstated, these issues do reflect the long history of sociopolitical and economic characteristics in Sudan.

B. BACKGROUND

For all but ten years of the half-century since gaining independence in 1956, Sudan has been embroiled in internal warfare. Sudan is Africa's largest country and is also the current home to the Council of the Arab League. Sudan recently abstained from assuming the chairmanship of the African Union.¹⁰ These factors begin to suggest root tensions of Sudanese internal strife: ethnicity and religion, territory and resources. Several areas of insurgent conflict exist within the geopolitical bounds of Sudan. Of these, the humanitarian crisis in Darfur and the persistence of a North-South divide are the most significant, both in terms of international effects and domestic upheaval. In Darfur, mostly ethnic African and Muslim pastoralists battle government-supported militias primarily composed of Arabic nomads, also known as "Janjaweed." In the contested divide of northern and southern Sudan, local insurgent factions and the central government in Khartoum continue to oppose each other in spite of a Comprehensive Peace Agreement (CPA).¹¹ Paradoxically, peace has been declared in the south while the Darfur Peace Agreement (DPA) has been disdained by both sides in the west. Violence is manipulated to benefit militant leaders on both sides of these conflicts.

The dynamic and geopolitically fluid global arena has demonstrated a requirement for irregular military engagement in areas of limited or absent governance. Countries like

⁹ Lars-Erik Cederman and L. Girardin, in "Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies," *American Political Science Review* 101 no. 1 (February, 2007): 173, present findings that "cast doubt on the tendency to ignore ethnic politics as an explanation of civil wars." See also, James D. Fearon, K. Kasara, and D. D. Laitin, "Ethnic Minority Rule and Civil War Onset," *American Political Science Review* 101 no. 1 (February, 2007): 187, stating: "We find that although there has been a tendency for states with ethnic minority leaders to have had a higher risk of civil war, the tendency is weak. It is neither statistically significant nor substantively strong."

¹⁰ The abstention is considered a political maneuver by which the regime in Khartoum acknowledged problems internal to its borders and thereby ironically improved external perceptions of its legitimacy. United Nations Mission in Sudan (UNMIS), "United Nations Sudan Bulletin," UNMIS (February 1, 2007): <http://www.unmis.org/english/2007Docs/UMAC-Bulletin-feb01.pdf> (accessed August 10, 2007).

¹¹ Theodore S. Dagne, Library of Congress, and Congressional Research Service, "Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement," *CRS Report for Congress RL33574* (Washington DC: Author, updated March 27, 2007).



Figure 1. Map of Sudan¹²

¹² United Nations, "Map of Sudan," Department of Peacekeeping Operations, Cartographic Section, May 2004.

the Sudan provide non-governmental actors and extremist fundamentalist organizations a power-vacuum within which conventional military means of employment are either cost-prohibitive (politically and/or legally) or logistically infeasible. Neither economic sanctions nor diplomatic initiatives have found a significant degree of success in curtailing violence in the Sudan. The struggle in Southern Sudan has resulted in over two million deaths over a 21-year period, while displacing four million people within Sudan.¹³ While the CPA seeks to mitigate the antagonism of both sides, the pending independence referendum in 2011 itself questions the possibility of a lasting peace. In Darfur, at present it is estimated that approximately 450,000 persons have been killed since 2003, with an additional 2.3 million displaced either internally or into neighboring Chad.¹⁴ The sole insurgent faction to sign the DPA has since broken ranks with the government of Sudan; an escalation of fractious insurgent conflict prevails and has spilled over into neighboring countries. Despite international sanctions, the efforts of humanitarian relief organizations, and the presence of both African Union (AMIS) and United Nations (UNMIS) peace-keeping forces, the Sudanese regime and opposing factions continue to resist an effective negotiation process or an arbitrated solution. Each of Sudan's internal wars presents a distinct set of challenges to both domestic opponents and the international community alike.

1. Conflict in Sudan's North-South Divide

Civil war between northern and southern Sudan preceded independence, beginning in 1955. Southerners expected to be politically discounted in a unified Sudan, a view substantiated by the installation of a military regime in 1958 and the subsequent banning of southern political parties.¹⁵ Following seventeen years of war, both sides signed the Addis Ababa accords on March 27, 1972. These accords guaranteed

¹³ United States Agency for International Development (USAID), "Sudan – Complex Emergency: Situation Report #14" (May 9, 2007): ¶1, http://www.usaid.gov/our_work/humanitarian_assistance/ (accessed August 10, 2007).

¹⁴ Dagne and Congressional Research Service, "Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement," 8. Sources present a broad range of casualty estimates of civilians in Darfur, of which the quoted figure is on the high side. Measures of displaced persons are commonly considered more easily quantified and thus may serve as a better indicator of the scope of domestic conflict.

¹⁵ Edgar O'Ballance, *The Secret War in the Sudan: 1955-1972* (Hamden, CT: Archon, 1977): 48-53.

autonomy for a southern region, encompassing the provinces of Equatoria, Bahr al Ghazal, and the Upper Nile, with a regional president appointed by the national president on the recommendation of an elected Southern Regional Assembly.¹⁶ After ten years of tenuous peace, the Addis Ababa accords were abrogated by the Sudanese government under Gaafar Mohamad Nimiery following the discovery of petro-resources. The National People's Assembly and the Southern Regional Assembly were dissolved, and the national introduction of Islamic *Shari'a* law took effect on September 8, 1983. Conflict reignited between north and south, further intensified by repeated regime changes in Khartoum and a protracted suspension of peace negotiations following the August 16, 1986 shoot-down of a Sudan Air civil airliner by southern insurgents.¹⁷ Deep-rooted ethnic divisions were further polarized along religious lines by the Islamist agenda of the National Islamic Front (NIF) government that came to power in 1989.

Several peace negotiations were initiated throughout the 1990's, all of them ineffective. The southern insurgency was divided into several factions that failed to attain a unified bargaining position. Southern opposition eventually coalesced at the turn of the century under the leadership of John Garang and the Sudan People's Liberation Movement (SPLM), which had until then steadfastly asserted sovereign autonomy for the south of Sudan. On January 9, 2005, the government of Sudan and the Sudan People Liberation Movement signed the Sudan Comprehensive Peace Agreement (CPA) in Naivasha Kenya, which "effectively ended the 21-year old civil war and triggered a six-year interim period."¹⁸

According to provisions of the CPA, at the end of the interim period southerners will hold a referendum that will decide their political future as either an independent or

¹⁶ Douglas H. Johnson, *African Issues: The Root Causes of Sudan's Civil Wars* (Bloomington, IN: Indiana University Press, 2003), 222.

¹⁷ Edgar O'Ballance, *Sudan: Civil War and Terrorism: 1956-99* (New York: St. Martin's Press, 2000): 156. The Nimiery regime was ousted by a coup in 1985.

¹⁸ Dagne and Congressional Research Service, "Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement," 15. The authors misidentify Nairobi as the signing location. Other sources indicate a preference for independence within southern Sudanese public opinion, ironically coincidental with a pervasive distrust of the interim Government of South Sudan (GoSS). See "The Leading Website for South Sudan Secession and National Independence," (n.d.) <http://www.southsudannation.com> (accessed August 10, 2007).

federated Southern Sudan. Meanwhile, from the perspective of the newly termed Government of National Unity (GNU) in Khartoum, the regime's "central strategic and tactical objective [regarding the south] is to remain in power by whatever means necessary."¹⁹ Though the CPA may foster a present aura of cooperation, the future expectations of both sides continue to reflect fundamentally opposed visions of what the final resolution should be. Illustrative of a paradox in peace agreements, the CPA appears to exist in spite of the mutually-exclusive objectives of its signatories.

2. Conflict in Sudan's Darfur

Conflict in Darfur is commonly identified as an opposition between ethnic African and Arab populations based upon patriarchal lineage and tribal affiliation. In actuality, this ethnic identification is not at all clear-cut; distinctions are further complicated by tensions over resource allocation. The area's tribal-based population is centered on two traditional economies: millet farming, which is generally practiced by African Muslim peasants, and nomadic camel and cattle pastoralism, long considered the domain of Arab nomadic tribes. Both forms of sustenance rely on increasingly scarce arable land. Neither farmers nor nomads can be assigned an exclusive ethnic affiliation, as years of intermarriage have occurred since Arabs arrived in the region in the 14th century. This has blurred the delineations between ethnic groups.²⁰ During a period of widespread famine and drought in the 1980s, conflict over resources and land-reform policies caused a Manichean split in Darfur's population; tribes began an autochthonous trend in identifying themselves as either distinctly African or Arab.²¹ Following the resurgence of civil war in Southern Sudan, in which both the southern insurgency and the central regime sought to use Darfur as a mobilization and staging ground, opposing sides began to form local militias as a coping mechanism for the increasing violence. Both the

¹⁹ John Prendergast, "Resolving the Three Headed war from Hell in Southern Sudan, Northern Uganda, and Darfur," *Africa Program Occasional Paper Series*, Woodrow Wilson International Center for Scholars, no. 3 (2005), 1.

²⁰ Alexander De Waal, "Who are the Darfurians: Arab and African Identities, Violence and External Engagement," *African Affairs*, no. 105/415 (2005: 181-205).

²¹ Autochthony refers to a process of nativism in constructed opposition to outsiders. For additional examples of autochthony in civil strife, particularly as institutionalized in the government policies of Cote D'Ivoire, see Bøås and Dunn, eds., *African Guerrillas*.

Sudan Liberation Army (SLA) and the Justice and Equality Movement (JEM), the primary insurgent factions in Darfur, claim the government of Sudan has systematically targeted African ethnic groups since the early 1990s.²²

In February 2003, these newly organized rebel groups began to openly target Government of Sudan (GoS) security forces and Arab militias, the latter known as the “Janjaweed.” On April 25, 2003, SLA forces attacked a military base at Al Fasher airport, in the provincial capital of Northern Darfur, destroying a half-dozen aircraft and capturing a Sudanese Air Force general.²³ In response, the regime’s counterinsurgency operations intensified as combined Janjaweed raids and Sudanese Armed Forces air strikes were directed at African villages throughout Darfur. Through the use of proxy militias, regime forces now targeted the civilian population in an escalating series of reprisal and repression to attain local control.

The first attempt at a negotiated solution, brokered by Chad, was the April 8, 2004 Humanitarian Ceasefire Agreement. Indicative of the factionalism that pervades insurgent forces in Darfur, an element of the JEM declined to sign the ceasefire, fighting continued, and, in fact, escalated. The next attempt at a ceasefire was brokered by the United States on behalf of the African Union: the May 2006 Darfur Peace Agreement (DPA). This agreement was signed by the GoS and only one faction from the SLA, led by tribal leader Minni Minawi, who has since recanted on the agreement in claiming non-compliance by the central regime. Both the SLA and JEM factions have periodically aligned to form a unitary opposition, but pervasive factionalism continues to derail any proposed negotiating process. International efforts to curtail the violence in Darfur have achieved little success. The United Nations peacekeeping forces (UNMIS) in Southern

²² Justice and Equality Movement (JEM), “Proposal for Peace in Sudan in General and Darfur in Particular,” (n.d.), available online at <http://www.sudanjem.com> (accessed August 10, 2007); and Sudan Liberation Movement/Army (SLM/A), “Political Declaration,” March 14, 2005: available at: <http://www.sudan.net/news/press/postedr/214.shtml> (accessed August 10, 2007).

²³ Paul D. Williams and Alex Bellamy, “The Responsibility to Protect and the Crisis in Darfur,” *Security Dialogue* 36, no. 1 (March, 2005): 30. Additional sources present conflicting estimates as to the number of government soldiers killed, ranging from several dozen to over one hundred.

Sudan are hampered by government-imposed travel constraints. The African Union Mission in Sudan (AMIS) has been largely ineffective due to limitations on their mandate, size, and support base.²⁴

The underlying conditions of internal war in Sudan are ethnopolitical marginalization and resource allocation. In the south, these conditions are expressed through the continued and violent tensions of Southern Sudanese relations with the north, resulting from the perceived imposition of an Islamic agenda, religious, ethnic, and economic repression, and the long-standing frustrations of unfulfilled expectations of autonomy and self-determination. In Darfur, conflict revolves around the ethnic polarization of Arab and African Muslim segments of the population, in conjunction with economic competition between sedentary peasants and nomadic tribes. These issues are exemplary of the sociopolitical and economic characteristics historically present in Sudan. When the underlying conditions of political marginalization and resource allocation are coupled with the factionalism of opposing sides, a dynamic analytical setting emerges. This setting presents a case study background allowing for the development of an assessment methodology. That methodology is the “Adaptive Security Construct” underlying the structure of this thesis. The ensuing section outlines the manner in which the ASC’s development takes place.

C. METHODOLOGY

Fully encompassing an assessment model as both a perspective and process necessitates a multi-disciplinary approach.²⁵ “Perspective” refers to the removal of observer bias from the assessment, while the “process” provides an actionable set of steps by which the assessment takes place. The limitations of mono-causal explanations and solely quantitative or qualitative models suggest that relying on a single analytic lens produces a myopic resultant that may well obscure critical facets of the topic under

²⁴ Paul D. Williams, “Military Responses to Mass Killing: The African Union Mission in Sudan,” *International Peacekeeping*, no. 13/12 (June, 2006): 175-177.

²⁵ The use of a mixed-methods approach is utilized in order to combine qualitative initial assessments with empirical follow-on analysis as subject to data availability. See also, John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2003), 136-9.

discussion. While not all-inclusive, this thesis' adaptive construct utilizes three analytic lenses to examine the specific case-study of Sudan's internal wars. Within that case-study, insurgent groups are selected as the predominant analytic focus, though the same overall methodology can potentially be used to examine any of several alternate sets of actors, to include formal state institutions and authority, or, instead, a more comprehensive analysis of population measures.²⁶

The security environment of a state or region of interest is the result of numerous dynamic relationships that are unlikely to be captured in a single assessment. An adaptability of analytic focus is considered inherent in the iterative nature of this product, and lends itself to the titling of the Adaptive Security Construct (ASC). An outline of the rationale, concepts, and stages of the ASC is presented below; the outline and implementation of its development occurs in the chapters to follow.

1. The Adaptive Security Construct (ASC)

In creating a comprehensive perspective of Sudan's internal wars, the core of the ASC consists of three distinct analytic stages. The first stage involves a qualitative estimate of "what" comprises the Sudan: the identification and outline of the topic environment. This involves an intentionally porous delineation of the study's geopolitical boundaries, as the realities of contemporary affairs rarely allow for a clear separation of what may be a domestic as opposed to an international concern. The same blurred distinction exists within the decision-making processes of actors within that environment; rarely are actions taken or courses selected in isolation of either inter- or intra-national factors. As an integrated model of internal wars derived from the literature and past experiences, the Qualitative Situation Estimate (QSE) provides an organizing framework for those considerations that further guides the ensuing analytic stages.

The second stage of the ASC involves the use of a game-theory approach to outline the dynamic interactions of opposing sides in Sudan's internal wars. This Dynamic Conflict Model (DCM) relies heavily upon tenets of rational-choice theory, though assumptions of unitary behavior on the part of opposing actors are tempered by

²⁶ Suggestions for future research to this effect are briefly outlined in the conclusion of this thesis.

the contextual characteristics identified in the ASC's first stage.²⁷ Established methods of game-theoretic analysis are introduced and then employed in a multi-level process by which Sudan's internal wars are "gamed" to a set of possible outcomes. This stage of the ASC provides an analysis of the "why" and "how" of insurgent conflict in Sudan. As part of the ASC's comprehensive intent, the Dynamic Conflict Model also allows for a perceptual bridge between the Qualitative Situation Estimate and the detailed data requirements of the third stage, which entails the use of Nexus Topography (NT).

The NT stage of the ASC addresses the "who" and "where" of Sudan's internal wars. Whereas the second stage employed an analysis of opposing actors, the third stage extracts the insurgent factions themselves and examines their specific capabilities, structure, and development. Network analysis provides a useful set of tools to identify the internal "strengths and weaknesses" of Sudan's insurgent actors. The focus in this stage is on analyzing organizational facets of insurgent groups rather than the individuals that comprise them; specific areas of interest include comparisons of objective, coalition, and tribal affiliations. The analysis of these capabilities provides a valuable adjunct to the second stage's analysis of strategies and outcomes, while the sequencing of a game-theory approach and network analysis is based largely on the expected realities of operationalizing the ASC as an employable and feasible analytic tool. The complexities of foreign entanglements place distinct limitations on the timely availability of the data requisite of each form of approach. Previous analytic endeavors illustrate this juxtaposition of requirements: "Understanding the value-maximizing choices of nations demands chiefly an analytic ability in vicarious problem-solving. Analyses that concentrate on capacities and outputs of organizations, or on bargaining among individuals, demand more information."²⁸ The projected availability of data and a reliance on increasing levels of data granularity lead to the selected chronology of what remain in essence a set of complimentary yet distinct analytic approaches.

²⁷ Additional corrections are addressed in this stage, to include issues of player *loss-aversion* and *bounded rationality*, according to which the information available to each player regarding the adversary maybe incomplete and distorted. These concepts are more fully articulated in Chapter IV, which discusses the underlying tenets of both rational-choice and game-theoretic models prior to "gaming" Sudan's wars.

²⁸ Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd. ed. pbk. (New York: Longman, 1999), 387.

Following the third stage of the ASC, the construct correlates the results from each of the three stages to identify commonalities, and, perhaps more importantly, gaps in derived information. Lessons drawn from each endeavor are thus substantiated, to be further validated by what is intended to be an iterative application of the ASC as a whole. This thesis in essence provides a theoretical “first-run” of an operationally applied ASC, a stepping stone from which future analyses can be further refined. From this analytic correlation, both general imperatives and specific avenues of approach can be extracted that may, in reference to the specific case-study of Sudan’s internal wars, yield an assessment that ultimately contributes to the successful resolution of that country’s protracted violence. Intended to provide an overall heuristic perspective and process, a summary view of the ASC is presented in Figure 2 below. The ASC is now broken down into a practical chronology that also serves as the chapter outline of this thesis.

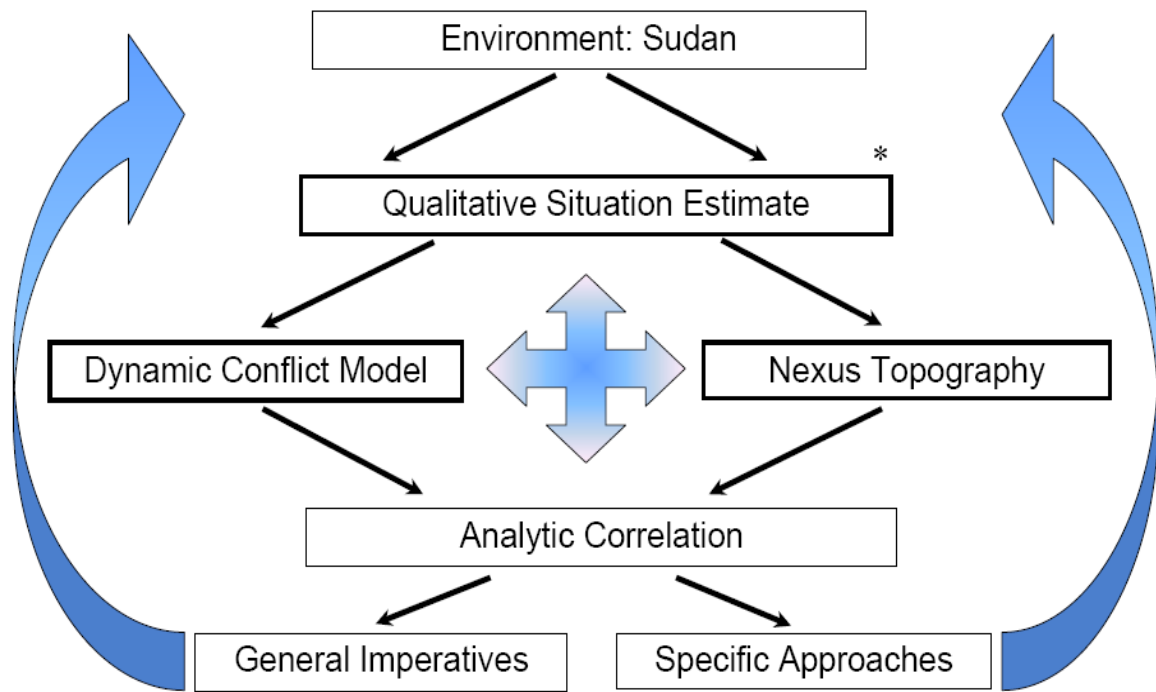


Figure 2. The Adaptive Security Construct (ASC) ²⁹

²⁹ (*) Depending on the availability of data in other applications of this construct, social network analysis can potentially be used for the situation estimate, thus allowing for additional model applications.

2. Structure and Outline

Chapter I has identified the relevant purpose and scope of this study of Sudan's internal wars. The introduction to this thesis has also laid the foundations for the ASC, an alternative and integrated methodological approach to the strategic assessment of evolving intrastate conflicts. The rationale for the selection of the subordinate steps of that approach forms the core of each subsequent chapter, portrayed within the specific context of Sudan. Each chapter presents a largely self-standing module, the individual values of which are then correlated to produce a comprehensive picture.

Chapter II identifies the primary "environment" of this study, in which insurgency is used as a keystone around which the remainder of the analysis is oriented. The same analytic framework may be applied to any other number of relevant aspects of conflict in Sudan, yet insurgencies present an oftentimes disregarded or marginalized aspect of Third World concerns, overshadowed by emotional appeals within the international community in regard to humanitarian or economic conditions. Insurgencies, rather than being a result of these conditions, exist as a correlated if not causal mechanism by which these conditions are facilitated and manipulated by the combatants involved. For example, insurgency in Sudan has direct implications for the humanitarian crisis in Darfur, for Sudan's possible appeal as a safe-haven to terrorist organizations, and for regional stability within the Horn of Africa as a whole.³⁰ Chapter II defines the relevant concepts and dynamics of insurgencies as organized movements.

Chapter III presents the QSE, a situation estimate of Sudan's history and contemporary context. The specific aspects of four intrastate actors are examined, to include the state, counterstate, population, and external forces, each of which are then identified and disaggregated. Relying heavily upon written academic record and the testimony of subject matter experts, Chapter III is qualitative in focus and reflects the practical requirement to draw upon those who have "been there" in first approaching an emerging and unfamiliar environment. This structure allows for the characterization of opponents, further assessed and refined in the game-theory applications of Chapter IV.

³⁰ These conditions were identified by U.S. Central Command, J-8 Assessments Branch, Tampa, FL, in 2006, as issues of interest related to Sudan's internal instability. They formed the impetus for this thesis.

Chapter IV applies a game-theory based Dynamic Conflict Model to the behavior of the primary belligerents identified in Chapter III. A brief review of rational-choice and game theory is provided to familiarize the reader with the specific assumptions of these approaches. A generic model is then presented to capture both the internal and external constraints faced by opposing actors in Sudan's internal wars. Separated into the North-South divide and Darfur, the actors are defined and aggregated in relation to each side's minimally obtainable objectives and the limitations of the contested space. Then, the specific strategies and outcomes employed by each side are "gamed" so as to further illuminate the underlying nature of conflict in each of the two selected situations. In short, Chapter IV examines the "why" and "how" of Sudan's internal wars.

Chapter V then extracts Sudan's insurgent groups from the model in Chapter IV and individually assesses their structure and orientation using Nexus Topography. In effect, this allows for the answering of the "who" and "where" of Sudan's internal wars. Emphasizing socio-organizational rather than individual relationship categories, to include tribal, ethnic, and operational affiliations, Chapter V completes the ASC's final stage of granularity in measuring the distinct connections, bonds, and strengths of Sudan's insurgent groups.

Chapter VI presents the Analytic Correlation of the preceding three chapters. This chapter is the key to the iterative nature of this study's multi-disciplinary approach. It utilizes the correlated data from the previous chapters to outline avenues of approach toward the formulation of US engagement options toward Sudan. Two specific areas are delineated here: one of general imperatives, in which the interactions of Sudan's internal wars yield insights that may be more broadly applied in analyzing intrastate conflict as a whole, and a second of specific avenues of approach, offering means by which external involvement in Sudan's internal wars may bring these conflicts to a stable conclusion.

In Chapter VII, the thesis conclusion summarizes the experience and result gained by the development of the ASC, and provides guidance for future research and application. Thus the thesis ends and returns to its original purpose, the development of an adaptive security construct that allows for the iterative assessment and engagement of the factors influencing insurgent conflict in Sudan.

II. INSURGENCY AND THEORY

The mere existence of privations is not enough to cause insurrection; if it were, the masses would always be in revolt.

- Leon Trotsky ³¹

A. DEFINING INSURGENCY

The introductory chapter provided a brief summation of the scope and relevance of this thesis. Since the insurgencies of internal wars were selected as the primary focus of effort, it is necessary to first define what is meant by “modern insurgencies.” The term insurgency fosters a number of distinct impressions, from ones of rag-tag rebels to ones of immense occupying armies. This chapter expands on these impressions and definitions, and then presents a derived framework within which insurgent conflict in internal wars is objectively assessed. The ensuing chapters, as part of concurrent development of the ASC, apply the tenets of this framework to Sudan’s internal wars.

The portion of a society seeking to rebel against the state authorities in power can be broadly called the “counterstate.” Within that term, conventional literature has produced a plethora of related words that both further refine as well as obscure the concept at hand. Though far from all-inclusive, this set of terms includes rebellion, insurrection, revolution, civil war, guerrilla war, and insurgency. It is that last of these that will be used for this study. This chapter then has two purposes: to define “insurgency” as a concept by examining its development as an inherently social and organizational process, and to establish a model by which insurgencies can be measured and addressed in an operational manner.

As rebellious entities, insurgencies foster negative impressions. They exist outside of the law and are then automatically “illegal”; thus most military thought is focused on counter-insurgency, or COIN, instead of insurgencies themselves.³² Defining

³¹ Leon Trotsky, *The History of the Russian Revolution* (New York: Monad Press, 1980 [1932]).

³² A notable exception to this is the U.S. Army’s identification of Unconventional Warfare (UW) as a means of fomenting and supporting rebellious entities within other nations. See also United States Department of Defense, *Doctrine for Joint Special Operations (JP 3-05)* (Washington, D.C: Author, 17 December 2003).

insurgency is problematic; as insurgents exist outside of conventional norms, the term is used to refer to any groups or individuals opposed to the government. The *Department of Defense Dictionary of Military and Associated Terms* uses the following definitions:

Insurgency – An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.

Insurgent – Member of a political party who rebels against established leadership.³³

These two definitions in and of themselves illustrate the problem of objectively evaluating insurgent conflict. While the DoD definition of *insurgency* postulates a requisite intent to overthrow the government, an *insurgent* must only seek to rebel against that government. The purest application of these terms would exclude a majority of commonly accepted insurgencies, to include many of the opposing factions in Sudan. For instance, the opposition groups in Darfur are not necessarily focused on overthrowing the Khartoum regime; rather, most efforts intend to establish a greater degree of regional representation within the Sudanese regime.³⁴ Do insurgencies always seek to overthrow governments? Do they also exist as a mechanism by which politically marginalized groups express dissent in forums that otherwise do not allow for popular expression?

Further complicating an objective set of definitions is the concept of state legitimacy, that the “constituted government” or “established leadership” of a state is inherently sovereign. More often than not, the term insurgency is used to negatively characterize the opposition of an incumbent regime, fostering an emotional response as opposed to an objective one. To preclude a bias in perspective it is perhaps useful to remember Charles Tilly’s definition of “state legitimacy” as simply an expression of “the probability that other authorities will act to confirm the decisions of a given authority.”³⁵

³³ US Department of Defense (DoD), *Department of Defense Dictionary of Military and Associated Terms (JP 1-02)* (Washington, D.C: Author, 12 April 2001 as amended through 22 March 2007), 265.

³⁴ The one rebel faction that signed the Darfur Peace Agreement (DPA) thereby theoretically secured political positions in the Government of National Unity (GNU). See Dagne and Congressional Research Service, “Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement,” 11.

³⁵ Charles Tilly, “War Making and State Making as Organized Crime,” in *Bringing the State Back In*, eds. P. Evans et al. (Cambridge; New York: Cambridge University Press, 1985), 171. Tilly’s definition is perhaps oversimplified, yet it does eliminate the “good” versus “bad” connotations of insurgent conflict.

If the incumbent authority is internationally recognized as the state, those factions that act out against that authority can be considered the counterstate. Insurgency then exists as an organized political activity that seeks to politically undermine or alter the authority of those in power. Insurgencies challenge the established status quo by violent and subversive means, the latter occurring in part as a result of marginalization in the established political process. As insurgencies directly challenge the stability of sociopolitical relationships, it is now appropriate to further examine the established literature on why and how insurgent movements develop as a method of revolt.

1. Dissent in Society

A large body of literature examines the relationship of human society and the concept of revolution. The predominance of such writing uses historical analysis to extract generalities from specific instances of social revolt. Such works juggle a delicate balance of universalism and specificity; one need only compare the commonly lauded analyses of American involvement in Vietnam in order to view the dangers of extrapolating the specific to the general.³⁶ A distinct portion of theoretical literature attempts to distill the revolutionary process within empirical analysis. In dissecting notions of *Revolutionary Change*, Chalmers Johnson refrains from attempting to define a specific revolution, nor is the work about “the ‘philosophy’ of revolution in general.”³⁷ The author asserts that revolution is best examined by creating a synthesis of prevailing theories on the subject in order to develop a model that provides insight into a given situation within its social context. Although a revolutionary outcome cannot be guaranteed (if such an outcome could be accurately predicted, revolutions would likely not occur at all, as the change would simply happen), the factors involved can be actively influenced in any number of directions. The outcomes of revolutions and insurgencies may not be pre-determined, but they are malleable.

³⁶ In the 1980s, Harry Summers’ *On Strategy: A Critical Analysis of the Vietnam War* (Novato, CA: Presidio Press, 1982) was considered the authoritative discourse on military action in Vietnam. Later, Andrew Krepinevich’s *The Army and Vietnam* (Baltimore: Johns Hopkins University Press, 1986) took an opposing view that has been commonly accepted as the “correct” interpretation of U.S. military action in the Vietnam conflict. The issue remains debatable despite the plethora of analysis oriented to the topic.

³⁷ Chalmers A. Johnson, *Revolutionary Change*, 2nd ed. (Stanford, CA: Stanford University Press, 1982), xi.

Johnson's synopsis of various theories addresses identification of the societal system (coercion and value theory) and the associated definitions of societal characteristics (i.e., norms, roles, and "disequilibrium"), while providing a reconciliation of several descriptive discrepancies (i.e., "rebellion" vs. "revolution"). A society's values provide its context, and thus form the basis of the ruling party's legitimate authority. Revolution becomes possible when a society's values no longer coincide with the distribution of power and in the absence of other mechanisms for resolving such a disagreement peacefully, a situation Johnson calls "disequilibrium." The process required to equalize "disequilibrium" defines the strategic problem of revolutions: the need to legitimize the resort to violence. The important distinction is that the incumbent government is not being deprived of force itself, but rather of their complete control of its legitimate application. Once this occurs, revolution is possible as each faction maneuvers to minimize coercion (the required use or threat of physical force) and achieve consensus (societal agreement as to the location of legitimate authority). Revolution should not be regarded as a process requiring the rebels "to seize the 'levers' of government to achieve their objectives."³⁸ Instead, revolutionary change occurs not upon transfer of the instruments of power, but rather when a society's impression of the seat of legitimate authority favors the challenging faction(s). Popular preferences matter.

This leads to an assertion that revolution in its essence consists of a struggle between the need for physical coercion and the consensual seat of legitimate authority. This defines the first conceptual point that underlies this study of insurgent conflict: Insurgencies present a coercive struggle for political legitimacy that rests upon the consensual perceptions of the populace. That struggle exists not as a chronological process, but rather as a result of the societal context within which it occurs. Academics have debated the extent to which modern insurgent conflict takes place with or without any sort of popular legitimacy, and use terms such as "warlord insurgencies" to classify revolts that seem to lack a clear ideological motive.³⁹ This thesis considers that argument

³⁸ Johnson, *Revolutionary Change*, 151. Here again, the term "disequilibrium" suggests that societal change occurs at a deeper level than is accomplished by simply swapping out those in the seat of power.

³⁹ Christopher S. Clapham, ed., *African Guerrillas* (Bloomington: Indiana University Press, 1998), and Bøås and Dunn, eds., *African Guerrillas: Raging against the Machine*, 3.

from a more practical perspective, in that regardless of popular allegiance with an insurgent cause, ideological or otherwise, insurgent organizations must develop a following that at the very least allows them to recruit the personnel required to carry on the fight. The mere existence of “disequilibrium” does not identify when, or even if, a revolution will take place. Something must occur to catalyze the struggle for control. Insurgency exists as an organized manner of insurrection, a means by which an opposing faction mobilizes the masses towards the insurgent cause, be that ideological or economic. Insurgent factions inherently rely upon characteristics of the local populace in order to advance their own agendas. The process by which an insurgency comes into existence and mobilizes the population is the focus of the next section.

2. Organization and Mobilization

Classical perspectives on the organization and process of insurgencies are broadly encompassed within two camps. The first, popularly characterized by the writings of Ernesto “Che” Guevara, idealizes insurrection as a phenomenon in which the charisma of a popular leader serves to instigate the revolt of the masses. The *foco* (focus), or rebel leadership, itself is the catalyst for revolutionary change and motivates the masses that follow.⁴⁰ A second perspective, fundamentally contained in Maoist thought, presents a process of development in which insurgent organizations nurture and foster the mobilization of a populace towards an ultimate end of supplanting the incumbent authority. Though premised on differing assumptions, both camps acknowledge that in order to succeed, an insurgency must foment the engagement of the populace at large.

In an examination conducted in the context of the Vietnam conflict (ongoing at the time of publication), Nathan Leites and Charles Wolf Jr. assert that “insurgencies are unique yet have shared features.”⁴¹ In analyzing insurgency as a systemic process, the authors discuss prevailing and alternative views of insurgency theory. The fundamental

⁴⁰ Originally derived in respect to rural uprisings based on the Cuban revolution, the same concept was later adapted for urban guerrilla conflict. See also Carlos Marighella, “Minimanual do guerrilheiro urbano,” translated by Robert Moss, *Urban Guerrilla Warfare; with an Appendix: Minimanual of the Urban Guerrilla*, Adelphi Papers, no. 79 (London: International Institute for Strategic Studies, 1971).

⁴¹ Nathan C. Leites and Charles Wolf Jr., *Rebellion and Authority: An Analytic Essay on Insurgent Conflicts*, Rand Corporation R-462 (Santa Monica: The Rand Corporation, 1970), 2.

point of their position against prevailing theory argues that a successful insurgency does not require the allegiance of a majority of the population. Instead, the insurgency only requires enough support to enable the skilled manipulation of popular choices.⁴² In essence, through deliberate control of available opportunities, the insurgency can “volunteer” people to enable the insurgent cause. This then is the crux of how an insurgent minority can get out of its disadvantaged starting block; it does not require the active support of the majority, only a tacit acceptance of the movement’s existence.

Due to a perceived bias regarding the terms insurgency and counterinsurgency, Leites and Wolf instead use the words *rebellion*—an organized and armed resistance, and *authority*—a legitimized right and capacity to command. The essay “is an attempt to identify and assess the characteristics and operational modes of rebellion and authority under conditions of stress.”⁴³ The pervasive view of insurgency—the hearts and minds approach—defines rebellion as a primarily political endeavor. The authors argue a limitation of this theory in that it overstates the requirements of popular majority allegiance to the rebellion, and that historically this has not always been the case. They equate this theory with a *demand-pull* economic inference, summarized as follows:⁴⁴

An *emphasis* on popular support based on hard work and likes or dislikes, also termed *pure preferences*.

A *primacy of internal grievances and influence* while discounting external support/influence.

An *emergent strength* of the rebellion *directly correlated* to level of economic deprivation & inequality.

The *progress* of insurgents and regime reflect the affiliation of a significant portion of the population.

Leites and Wolf go on to present an alternative view of insurgency—a systems approach. In this view, the authors essentially redefine popular support as the

⁴² Recent quantitative literature has also questions the notion of a correlation between ethnic minority regimes and a propensity for civil strife. See Fearon, Kasara, and Laitin, “Ethnic Minority Rule and Civil War Onset.”

⁴³ Leites and Wolf, *Rebellion and Authority*, 4.

⁴⁴ Leites and Wolf, *Rebellion and Authority*, 24.

“nondenunciation” of the insurgency. All that is required for insurgents to exist is that the population doesn’t fight them or turn them in to the regime. The emphasis is on the population as rational actors.⁴⁵ Individuals are not motivated as much by preferences (likes and dislikes) as they are by opportunity (cost-benefit analysis). This alternative theory can be equated to *cost-push* economics, with the following characteristics:⁴⁶

Success (progress) of the rebellion depends not only on popular “demand”, but also on “supply” of choices provided by the insurgents which in turn affect the population’s *assisted preferences*.

Though a minimum level of internal demand may exist, to a large extent it can be balanced and even supplanted by external resources in creating and sustaining an insurgency.

Economic improvements cannot be assumed to benefit either side; rather it is the balance of factors contributing to the improvement that will determine the benefactor.

The progress of both sides influences popular allegiances as much as it is influenced by them.

Fundamental to both views of insurgent development is the premise that an insurgency is essentially a war of production, in which both sides struggle for control of inputs (people, food, materiel, information) and how those inputs are applied to the existing social and political structure. The concept of insurgency as a production effort, regardless of the relevance of a purely economic analogy, inherently suggests an organizational aspect to the development of an insurgency, as well as the counter-insurgent efforts of the regime. Reliant upon the population base, both sides strive to expand, or alternatively, maintain, their control from a localized to a national level, through the use of both internal (endogenous) and external (exogenous) resources. The actions of both rebels and the regime correspond to each level of the insurgent system, which can be visually expressed as follows in Figure 3 below, and corresponds to the following sequential actions on the part of the insurgency:

⁴⁵ This notion imposes several limitations on the derived theoretical framework, to include an implied assumption of unitary behavior. That limitation is further addressed in the model development to follow.

⁴⁶ Leites and Wolf, *Rebellion and Authority*, 150-151.

Sources of inputs and their costs: Insurgency struggles to acquire them while the regime impedes their availability.

Conversion of inputs into activities (outputs): The insurgency indoctrinates, trains, and equips operations while the government applies counterforce to destroy the forces produced by the insurgents.

Application of outputs: Insurgents target activities against the existing structure while the government attempts to build the structure in such a manner as to envelop and persevere over their opponents.

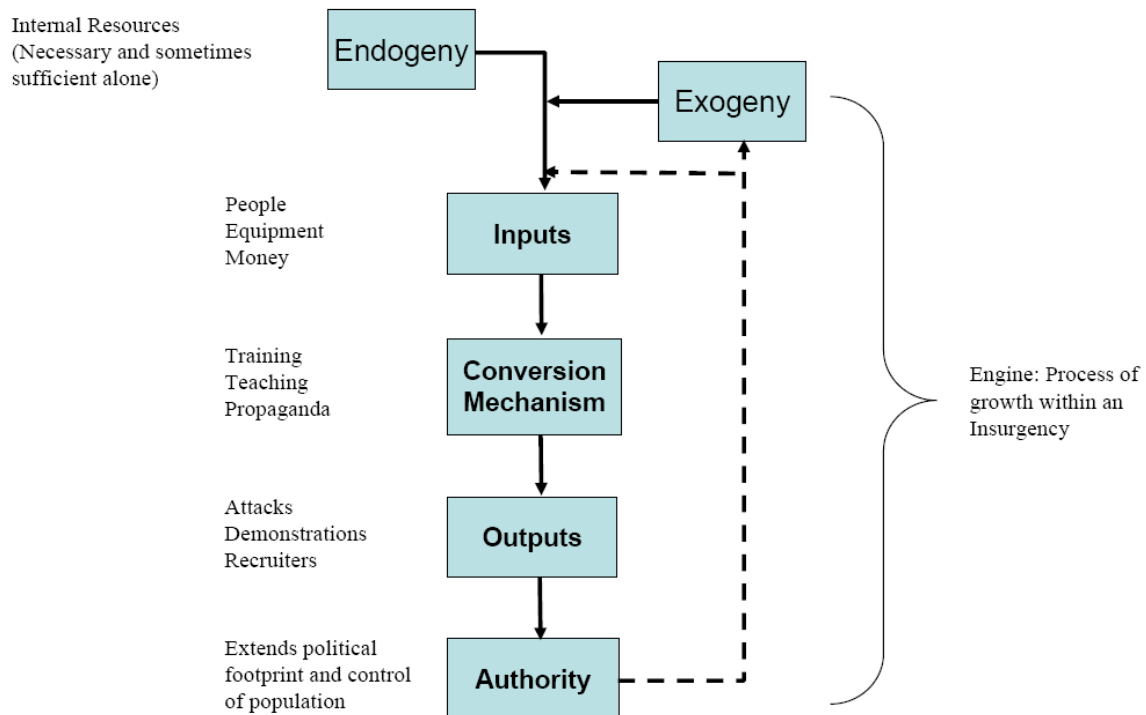


Figure 3. Insurgency as a Systemic Approach ⁴⁷

This alternative framework is fundamentally easier to quantify (and thus evaluate) than the “hearts-and-minds” approach. It is simpler to measure a cost-versus-benefits analysis of a population than it is to attempt to assess their individual preferences and motivations. However, the underlying presumption that the population is essentially

⁴⁷ Leites and Wolf, *Rebellion and Authority*, 35. Dotted lines are additions to the original figure and illustrate the iterative effect of production output (activities) on external inputs to the insurgent system.

composed of rational actors is perhaps overextended. It fails to account for the influences of societal structure itself (family, religious, and moral implications) and minimizes ideological compulsions of the minorities (extremes). The focus remains on aggregate individuals and separate identities, and fails to account for a communal identity and an accompanying sense of self-worth.⁴⁸ Though contemporary literature suggests that there is little if any correlation between ethnic minority regimes and civil war, there is evidence to support the assertion that “specific ethnonationalist configurations are more prone to generate violence in civil wars.”⁴⁹ The ethnic composition of a given population plays a significant role in the development of insurgent warfare, a premise that underlies the root conditions of the conflicts examined in this study (see also Chapter III to follow).

A second limitation of the systems approach of insurgency is that it fails to account for the importance of time as an indicator of success for either side of the struggle. Insurgents are most vulnerable during the initial struggle to acquire resources, while the government has already largely lost when trying to directly engage insurgent forces. The insurgency seeks to utilize an advantage in information to create sufficient forces to challenge the regime. At the same time the government attempts to develop the intelligence necessary to allow effective employment of its force advantage. In short, the winner is the side that negates the other’s advantage first. Time plays an important role in the dynamics of the insurgency process, a role that has asymmetric implications for both sides in the intrastate game. The key role of the populace as a foundation for the development of the insurgent system has been identified. A second conceptual point of insurgent conflict is evident: Insurgent organizations mobilize and grow through the manipulation of the population base and its corresponding adjusted preferences. Having conceptually defined insurgent conflict as an organized process, it is now appropriate to further discuss the dynamics by which insurgencies relate within the overall arena of

⁴⁸ The integration of individual *selective incentives* and *communal goods* has been expanded upon in Samuel L. Popkin, “Political Entrepreneurs and Peasant Movements in Vietnam,” *Rationality and Revolution*, ed. Michael Taylor (Cambridge: Cambridge University Press, 1988). It has also found renewed interest in contemporary studies of the psychology of suicide terrorism, as a mechanism by which an instilled allegiance to a collective sense of self allows individuals to forgo their own continued existence.

⁴⁹ Cederman and Girardin, “Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies,” 173. The authors suggest it is not the actual percentage of populace that matters, but rather a marginalized population.

internal wars. The next section will identify a framework within which the actors of internal wars operate in relation to one another.

B. DYNAMICS OF INSURGENCY

The previous section defined “modern insurgencies” as counterstate entities that seek to politically undermine or alter the authority of those in power. It is now necessary to characterize the organizations that are in power, the “state,” as well as the internal and external actors that are integral to the inherent oppositional framework of insurgent conflict. In this section, internal wars are framed within the interaction of state, counterstate, population, and external actors. The relationships between these “players” form the essence of intrastate conflict. Prior to addressing this essence, it is first necessary to discuss prevalent notions of causality in internal wars. This removes a tendency towards mono-causal explanations of conflict, and eliminates the bias of an oversimplified two-sided approach to an assessment of internal wars.

1. Causes and Contexts

Governments and academics attempt to assign wars mono-causal explanations that in turn present diametrically opposed sides. An infamous example of this trend is Samuel Huntington’s 1993 argument, considered prescient in the minds of many, of “The Clash of Civilizations” between societies today and tomorrow.⁵⁰ Yet one author has suggested that such an argument disregards local specifics in trying to postulate universal truths; it attempts “to analyse international politics without discussing real politics. . . . It is international relations with politics taken out.”⁵¹ Yes, rebels and regimes also foster an image of fundamental opposition amongst their followers; defining an “us versus them” enables mobilization and collective action. Yet these actions, which serve to further internally entrench a conflict, may also mislead an external perspective. When outside observers characterize wars in general, and internal wars in particular, as being composed of two distinct sides fighting over a specific set of disagreements, they often miss the

⁵⁰ Samuel P. Huntington, “The clash of civilizations?” *Foreign Affairs* 72, no. 3 (1993): 22-49.

⁵¹ Ervand Abrahamian, “The US Media, Huntington and September 11,” *Third World Quarterly* 24, no. 3 (2003): 535.

point entirely. Wars may start over one thing or another, but what “causes” them to continue may be someone and something different altogether.

Causal explanations of war are based on an assumption that wars can be solved, thereby implying that all wars are problems to begin with. Two fundamental perspectives envelop these causal explanations of conflict. The first is a general liberal presumption that all wars are negative. When they occur in developing countries, they do so as a result of barbarity and irrationality. From this perspective, war is perceived as an aberration, that peace is a norm from which wars deviate. Instead it seems hardly refutable, especially in light of even the briefest snapshot of history, that wars are perhaps more of a norm than is peace. Still, analytic explanations for the causes of war tend to fall into several common categorical asymmetries, of which one is the “culture clash” idea already mentioned. Other causalities include, though this list is far from complete, ethnicity, political inequality, and resource scarcity (or alternatively, resource abundance). Each causal theory attempts to pin down a single “problem” of war.⁵²

If general liberalism identifies war as a problem, neo-classical economics appears determined to offer a “solution.” Comprising the second fundamental perspective on war, neo-classical economics hypothesizes violence as a set of independent variables, or causes, that lead to a dependent result, namely war. Such a perspective can be overly simplifying and misleading:

For now, the main point is that this kind of explanation of violent conflict can only deal in certain types of evidence: quantifiable evidence that can be assumed to ‘mean’ similar things across different contexts, in different countries and over a given span of time captured in the dataset that is matched to the model. Theoretical debates about violent conflict are as much about what evidence may be admitted as about substantive claims.⁵³

When the causalities presented by the two prevailing perspectives on violence are taken in total, two broad themes emerge: politics and economics. It is not the

⁵² Cramer, *Violence in Developing Countries*, 7, 114-124. The author examines war as integral to a process of societal transition, as opposed to occurring as a result of that transition.

⁵³ Cramer, *Violence in Developing Countries*, 8-9.

appropriateness of these themes that is problematic as much as is an over-reliance on their singular explanatory power. In fact, such explanations stand in marked contrast to more subjective and anthropological definitions of traditional warfare, “fought for a host of social-psychological purposes and desires, which included conquest, prestige, ego-expansion, honor, glory, revenge, vengeance, and vendetta—motivations that could be remote in time and place and to the Western observer could appear obscure, idiosyncratic.”⁵⁴ Mono-causal explanations of internal wars are just as if not more likely to miss the mark as they are to attain it.

The level of analysis employed for any attempt at an explanatory endeavor of internal wars is also subject to misapplication. “Micro-level theories of war, or what could be called individualist, rational choice explanations of war, regard the poor as prone to violence simply as a function of cost-benefit decisions.”⁵⁵ On the other side of the spectrum, a state-centric level of analysis irresponsibly defaults to defining countries as monolithic actors, engaged in a scripted game of global billiards, where each country’s interactions composes a predictable set of angles and outcomes. In between these extremes, conflict origins are blurred within competing analyses of social constructs, of which ethnicity currently appears to be the most popular. More appropriate is a holistic picture that both accommodates and mitigates systemic preferences across various levels of analysis. For example, “it is not sufficient to simply claim that long-standing ethnic animosities explain the post-Cold War upsurge in ethnic conflict, but we must also consider how that hostility affects political and economic realities.”⁵⁶ The glue that binds such a comprehensive analysis together is not a postulation of presupposed causality, but rather a detailed exploration of the particular and locally specific characteristics of the conflict itself.

⁵⁴ Richard H. Shultz, Jr. and Andrea J. Dew, *Insurgents, Terrorists, and Militias* (New York: Columbia University Press, 2006), 6. The anthropological work on “traditional warfare” referenced in this source is Harry Turney-High, *Primitive Warfare* (Columbia: University of South Carolina Press, 1949).

⁵⁵ Cramer, *Violence in Developing Countries*, 75.

⁵⁶ Shultz and Dew, *Insurgents, Terrorists, and Militias*, 33. Despite this engaging insight, the authors also assert: “Internal wars are the result of *political conflicts over the distribution of resources by competing elites*” (emphasis in original). Through this assertion, the authors end up applying the very explanatory oversimplification they so astutely critiqued in their earlier point.

This thesis argues that while quantifiable evidence does have a distinct role in examining internal wars, and will be utilized in this project, it must be used in concert with a holistic perspective that seeks to primarily understand rather than simply solve an internal war. As Tolstoy wrote: “The deeper we delve in search of these causes the more of them do we discover; and each separate cause or whole series of causes appears to us equally valid in itself and equally unsound by its insignificance in comparison with the size of the event.”⁵⁷ It is unproductive to simply search for causes; instead, internal wars should be analyzed as having been fostered by an underlying set of conditions that interact within a framework of actors and relationships. In doing so, the outside observer gains an illuminating perspective on how the rebels and regimes themselves frame the context of conflict toward their own benefit. While the conditions of internal wars are of a specific local context, the framework of actors and relationships can be universalized and is the focus of the section to follow.

2. The “Diamond Model”

Internal wars and the form of insurgent conflicts that characterize them are not easily evaluated by conventional military methods. Quantified variables of military strength, such as statistics of materiel production and an enemy order of battle, rarely provide an adequate picture of the relative strength of opposition. The same limitations apply to assessing insurgent objectives and strategy: “There are many strategic theories related to insurgency and counterinsurgency that, while academically stimulating, cannot be applied effectively. Likewise, there are countless tactical remedies for dealing with insurgent warfare that are not strategically grounded.”⁵⁸ As stated before, bridging the gap between theory and local context requires a perspective that is flexible enough to accommodate local specifics while retaining the rigidity required of a universal construct. The first step of that construct’s ability to assess an internal war is a means by which the specifics of an “emergent” situation can be objectively identified.

⁵⁷ Leo Nikolaevich Tolstoy, *War and Peace* (London: Penguin, 1982), Book Nine: 1812–Ch. 1.

⁵⁸ Eric. P. Wendt, “Strategic Counterinsurgency Modeling,” *Special Warfare* 18, no. 2 (September, 2005): 2.

The “Diamond Model,” developed by Dr. Gordon McCormick at the Naval Postgraduate School, provides a valuable framework for such an assessment. The model, outlined in Figure 4 below, presents an objective lens for the analysis of internal wars by incorporating both insurgent and counter-insurgent (COIN) approaches.

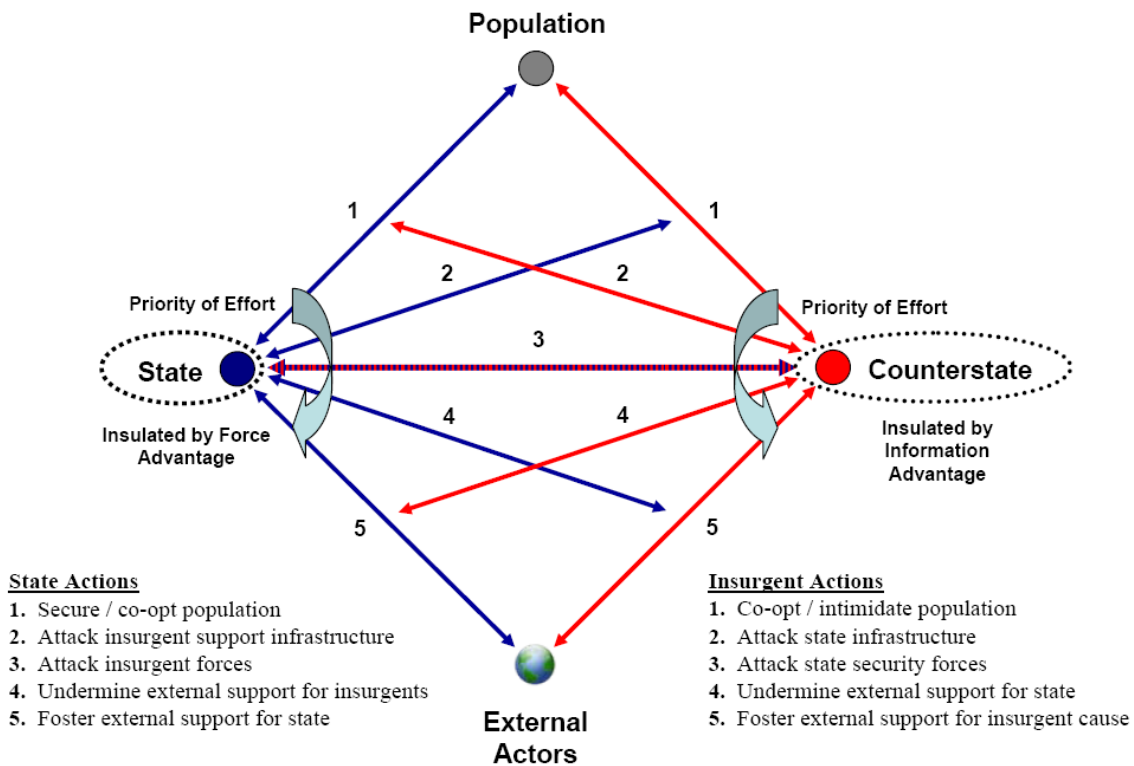


Figure 4. The "Diamond Model" ⁵⁹

A key to the relationships depicted in Figure 4 above is the premise already identified in previous sections of this chapter, that both the government and insurgent forces (or “authority” and “rebel,” to use Leites and Wolf’s terminology) rely upon the population at large to execute their own comparative advantages. On one level, this is expressed by Chalmers Johnson’s definition of legitimacy, that the government remains in power either by the consensus of its constituents or by its ability to coerce them into

⁵⁹ Figure adapted from authors’ course notes, *SO3802: Seminar in Guerrilla Warfare* (Monterey, CA: Naval Postgraduate School, summer, 2006). See also, Wendt, “Strategic Counterinsurgency Modeling,” 6.

compliance.⁶⁰ The insurgency faces the same challenge in its attempt to gain power. This effectively summarizes the strategic objectives of both the state and counterstate. On another level, the relationship to the population also characterizes each side's tactical approaches in engaging the other. Stated briefly, the government inherently relies upon the population to identify where the insurgents are, while the insurgency depends upon the population to shield it from the government. This trifocal relationship, in addition to each side's relationships with external sponsors or opponents, defines the "Diamond."

The "Diamond" is composed of four cornerpoints, broadly encompassing the "State" and the "Counterstate" as the primary antagonists, with the "Population" and "External Actors" existing as both foundational and supporting relatives. The "Legs" between cornerpoints, in addition to defining the tactical approaches employed by each side, also define a set of relationships between the actors of internal wars. A key underlying premise here is that the government possesses an advantage in force at the outset of conflict, while the insurgency possesses an advantage in information. This defines the "asymmetry" of insurgent conflicts, a relationship that changes as each side maneuvers to minimize its disadvantage while applying its superior capabilities.⁶¹ For example, in order for the government to apply its force advantage, it must first be able to identify the opposition, which is likely hidden amongst the populace, or at the very least shielded by its covert nature. Next, the government must engage the insurgency's connection to the population at large, undercutting its legitimacy and support structure. Only then can it resort to direct action against insurgent forces, in what should then be a final assurance of regime victory. On the other side, the insurgency follows much the same progression, in first engaging the population to establish its own credibility, then undermining the government's legitimacy with the people, and finally engaging the government directly. In a simplified mirror-image, the same progression of legs underlies each side's connection with international or non-governmental external actors. Opposing belligerents require internal and external support in order to engage each other.

⁶⁰ Johnson, *Revolutionary Change*, 151.

⁶¹ Gordon H. McCormick and Frank Giordano, "The Dynamics of Insurgency," paper presented to the Insurgency Board of Experts (Naval Postgraduate School: Department of Defense Analysis, June 2002):17.

The process of assessing insurgencies along the approaches outlined in this insurgency model then returns to the previous discussion of the organization and mobilization efforts of the insurgent forces. In having a force disadvantage, the insurgency's ability to coerce popular "support" is limited. The insurgents must foster popular consensus by fostering "popular expectations" of a successful conflict outcome:

Popular expectations concerning which side is likely to win, in this respect, will have a key influence over each side's level of popular support. Expectations, in turn, are shaped by the size of the opposition, which is used as a means of measuring its future prospects given the historical power of the state.⁶²

It becomes clear that internal wars are not simply a matter of force-on-force contests of material advantage, but instead are inherently political endeavors in which each side seeks to optimize its own particular advantages while negating that of the opposition.⁶³ These advantages are operationally realized through the proactive shaping of expected utilities to both the combatants and population at large. These utilities will play a fundamental role in Chapter IV, where the relational dynamics of internal wars are further explored. Chapter III, the Qualitative Situation Estimate, sets the stage for that exploration by examining Sudan's internal wars through the actor-based relationships of the Diamond Model. This framework objectively identifies the primary players involved in Sudan's internal wars, while refraining from an attempt to exclusively "shoe-horn" them into one definition or another. "Alternative conceptual frameworks are important not only for further insights into neglected dimensions of the underlying phenomenon. They are essential as a reminder of the distortions and limitations of whatever conceptual framework one employs."⁶⁴ Chapter III provides a conceptual foundation from which Sudan's insurgencies are "extracted" and further analyzed in the chapters that follow.

⁶² Gordon H. McCormick and Frank Giordano, "Things Come Together, symbolic violence and guerrilla mobilization," *Third World Quarterly* 28, no. 2 (2007): 299.

⁶³ The idea of maximizing relative advantages in warfare is, of course, not a recent development. Nonetheless, the identification of the primarily political relationships within internal wars is an oftentimes understated perspective. For a particularly insightful illumination of the frailty of a "conventional" military perspective, see Edward N. Luttwak, "Notes on Low-Intensity Warfare," *Parameters* (December, 1983).

⁶⁴ Allison and Zelikow, *Essence of Decision*, 8.

III. SITUATION ESTIMATE

Allah laughed when he created the Sudan.

- Arab proverb

Allah wept when he created the Sudan.

- Another Arab proverb⁶⁵

A. POPULATION

Chapter II delved into the definition and dynamics of insurgency. To understand the context within which Sudan's civil wars occur today, it is necessary to examine both their contemporary expression and the history from which they emerged. Chapter III utilizes the insurgency theory outlined in the previous chapter to dissect the specific characteristics of "the" Sudan that define its internal wars. The intent here is to present more than a chronology of history. Rather, it is to identify conditions prevalent throughout Sudanese history that today form the underpinnings of intrastate conflict. Writ large, those conditions are encompassed by issues of resource allocation and political marginalization, realms of contestation that are further entrenched by religious agendas, ethnic polarization, and the continued deterioration of ecological conditions in Sudan (and much of the Horn of Africa). The explanatory power of these conditions provides grounds for further analysis: "Whatever the level of detail, explanation seeks to identify causes that account for the difference between what actually happened, on the one hand, and some specified or assumed alternative states of the world, on the other."⁶⁶

Sudan occupies a unique position in African and Middle Eastern regional affairs. As a member of both the Arab League and the African Union, Sudan is the largest nation on the African continent and borders seven sub-Saharan countries, while also having an 853-km coastline on the Red Sea, and bordering Libya and Egypt. Sudan is comparable in size to the United States east of the Mississippi. Physical distances have profound implications for Sudan; the centralized regime in Khartoum is inherently challenged in

⁶⁵ O'Ballance, *The Secret War in the Sudan: 1955-1972*, 16; 32.

⁶⁶ Allison and Zelikow, *Essence of Decision*, 388. In this case the search for "causes" allows for the exploration of alternate explanations, rather than a limitation to single or limited perspectives.

extending its rule within a marginal and often neglected infrastructure, in which the country is administratively divided into 26 states and 133 districts (see Figure 1 on page 6). The geographic borders of contemporary Sudan were defined at the forefront of African post-colonialism. The country has been historically divided into northern and southern regions, with a physical separation delineated by people not terrain, and a political declaration of semi-autonomy that both preceded independence and was institutionalized by a Line of Demarcation on January 1, 1956.⁶⁷ The population in the south is mainly African Christian and Animist. The majority Arab population of northern and central Sudan is Muslim, while a predominantly African Muslim population lives in the western Darfur region. Religious affiliations are further divided into ethnic divisions, thereby exacerbating “the difficulty of achieving a consensus within the Sudan concerning its national identity.”⁶⁸ This difficulty as encountered today is an expression of a long and dynamic Sudanese history.

1. History

As with much of Africa, Sudan’s current geographic borders were drawn with the departure of colonialism and the onset of independence in the aftermath of World War II. The territorial borders of Sudan have remained largely unchanged in over a half-decade of continued internal conflict, with the exception of two politically contested administrative boundaries, one with Egypt and the other with Ethiopia (see also Figure 1, page 6). Yet Sudan as a unified political entity has never been a foregone conclusion. Located at a nexus of trade-routes linking the Middle East with the caravans of the Trans-Sahel, the provinces of Sudan have been subject to a rich and diverse history that is anything but self-contained. Beginning in the 16th century, governments were largely involved in the administrative regulation of trade, as exemplified by the Sennar and Keira

⁶⁷ The “Closed District Act” of 1935 barred movement between northern and southern Sudan and predated independence by over two decades. The separation of peoples and tribes was encouraged by the divide-and-conquer policies of Anglo-Egyptian colonial rule. For an expanded discussion of the development of Sudanese nationalism during the interwar period (1918-1942), see Tim Niblock, *Class and Power in Sudan: The Dynamics of Sudanese Politics, 1898-1985* (Albany, NY: State University of New York Press, 1987).

⁶⁸ Ann M. Lesch, *The Sudan: Contested National Identities* (Indianapolis, IN: Indiana University Press, 1998), 3.

sultanates. The emergence of a merchant class fostered by the involvement of foreign trade ultimately weakened these administrative authorities; Turko-Egyptian forces under Muhammed Ali conquered the disintegrating Sennar sultanate in 1821, yet were in turn overthrown by Mahdist forces in 1885. The Mahdist regime was defeated at the Battle of Omdurman in 1898, and the Anglo-Egyptian Condominium in Sudan was established.⁶⁹

Colonialism to Independence (1898-1956)

British rule in the Sudan was not characteristic of the Empire's colonies as a whole. International tensions were significant; Egypt then and today has considered the origins of the Nile waters of critical interest, and the English had little desire to subsidize yet another colony. The solution was the "Condominium," a system of co-dominion by which "the British had effective control over the Sudan without cost to the British taxpayer; Egyptian grounds for complaint had been minimized; and no other powers had acquired any rights at all."⁷⁰ The political changes in the Middle East following World War I, during which the Sudanese government re-conquered the Sultanate of Darfur, fostered nationalist movements in both Egypt and Sudan. While Britain unilaterally accorded independence to Egypt, Sudan's nationalist movement was judged to be fragmented and largely urban-based in the north. This resulted in a distinct schism in British colonial policies. The British considered the south a fractured appendage to the largely unitary north, with no recognizable system of local governance. Instead of fostering a nativist government as they did in the north, the British became intricately involved in ruling the south. Political separation between north and south was thus formalized by default. When a transition to independence for a unified Sudan was outlined in 1953, distrust of the new authority was immediate. E. H. Nightingale, a Governor of Equatoria, offered a prescient warning: "The shock of discovering that the British propose to withdraw and abandon them within the next three years to other administrators who are distrusted and even hated by the majority of the population will, I

⁶⁹ Niblock, *Class and Power in Sudan*, 1-11.

⁷⁰ Peter Woodward, *Condominium and Sudanese Nationalism* (New York: Harper and Row, 1979), 2. Authority of the condominium was vested in the appointment of a governor-general, appointed by the Egyptian Khedive on the recommendation of the British government.

believe, leave them bewildered and resentful.”⁷¹ Those words were to be a perhaps typically British understatement of the discord to come.

The First Sudanese Civil War (1955-1972)

The first fourteen years of independence were tumultuous, exemplified by alternating periods of parliamentary (1956-58, 1964-68) and military rule (1959-1964). Throughout this period, “political influence and authority rested with those social groupings which had benefited from the distribution of resources under the Condominium.”⁷² This separation of interests had distinct repercussions regarding the concept of social identity in the Sudanese population: “[T]he creation of Sudanese consciousness developed only once outsiders had defined the country’s territorial boundaries for it. Similarly the growth of regional consciousness amongst the heterogeneous peoples of the south resulted in part from the British policy of seeking to develop it in a way which would retain, and indeed accentuate, its differences from the north.”⁷³ Southern Sudanese were excluded from the formal political process; southern political parties were outlawed in 1958 and civil strife escalated for the next ten years, a period during which the southern opposition was ill-organized and largely ineffective, (with the exception of the Anya-Nya rebels, who were later supplanted by the SPLM).

Exacerbating the informal separation of north and south were the policies of nationalization embarked upon by the Nimiery regime after 1969. Also apparent were implications for Sudan’s international relations: “The attempt to pursue a development policy geared towards greater self-sufficiency and a more egalitarian distribution of rewards required, so it was believed, a re-orientation of foreign trade.”⁷⁴ Ironically, and perhaps suggestive of possible arbitratative solutions in the present conflict, Nimiery’s

⁷¹ Woodward, *Condominium and Sudanese Nationalism*, 148. Citation dated 12 Feb. 1953, documents submitted by Deputy Governor Equatoria, MI Cotran Commission, Vol. II. One petition of protest to the Governor-General stated bluntly: “If the Northerners and the Egyptians want to join with the South let them bring our grandfathers and grandmothers, and all our brethren whom they carried as slaves long ago, then we can link with them.” Woodward cites ‘Chief Lako Logono of the Bilinyag to Governor Equatoria, 18 Feb. 1954, MI SCR 1/C/15. ‘

⁷² Niblock, *Class and Power in Sudan*, 204.

⁷³ Woodward, *Condominium and Sudanese Nationalism*, 181-2.

⁷⁴ Niblock, *Class and Power in Sudan*, 246.

desire to foster external support required concessions towards the south. Initial negotiations toward a cooperative outcome and federal autonomy for Southern Sudan began in 1969. Still, the revolutionary agenda that Nimiery initially professed based upon “an ideological attachment to the nebulous concept of ‘Arab socialism’ and a flirtation with the Soviet Union” was supplanted by a decade-long period “of ‘neo-conservatism’ or so-called ‘pragmatic’ orientation,” both domestically and abroad.⁷⁵

A Decade of Peace? (1972-1983)

“Nimiery was hoisted to power by a Free Officers Movement patterned on the organization within the Egyptian Army that had brought [Nasser] to power.”⁷⁶ Though claiming to be a revolutionary movement, the new regime found that a cohesive reform agenda was easier claimed than achieved. In attempting to provide a social platform for everyone, the Sudan Socialist Union became “a tatterdemalion collection of miscellaneous supporters [that seemed] to exist only in the rhetoric of its leaders.”⁷⁷ The appearance of a “strong” military government was belied by its hollow character; a state unable to effectively project its policies in either political breadth or depth. This underlying lesson remains consistent in Sudanese history, and led to the beginning of Sudan’s second civil war in 1983: “a society fragmented in social control affects the character of the state, which, in turn, reinforces the fragmentation of society.”⁷⁸

The intensive development attempted during the mid-1970s following the discovery of oil reserves could not have occurred without peace, thus allowing for the allocation of domestic resources and international confidence in monetary loans. Yet as one author suggests, “the most critical factors which made settlement possible were to be found not in the regime’s high regard for ‘national unity’ but in changes within the southern opposition; the regional autonomy arrangement implemented by the regime . . .

⁷⁵ Dunstan M. Wai, “The Sudan: Domestic Politics and Foreign Relations under Nimiery,” *African Affairs* 78, no. 312 (July, 1979): 297.

⁷⁶ Dunstan M. Wai, “Revolution, Rhetoric, and Reality in the Sudan,” *The Journal of Modern African Studies* 17, no. 1 (March, 1979): 76.

⁷⁷ Wai, “Revolution, Rhetoric, and Reality in the Sudan,” 89.

⁷⁸ Joel Migdal, *State in society: Studying How States and Societies Transform and Constitute One Another* (Cambridge; New York: Cambridge University Press, 2001), 93.

proved workable in the short-term and constituted an effective instrument through which civil order was re-established, but it was ultimately undermined by the regime's wider policies."⁷⁹ These policies ultimately emerged as a centralizing Islamist agenda in 1983, yet traditional means of local governance decayed long before then.

2. Sudan's People

The historical events as they have been described so far present a chronology of Sudanese history increasingly characterized by the influence of Arab migration into the Sudan over the last millennium, and a legacy of pre- and post-colonial foreign intervention. The format has thus yielded a decidedly state-centric perspective, one that ended with the resurgence of civil war in 1983. Today's context arose from that period, which resulted in the current regime and its opposition groups, and will be the focus of the "State" and "Counterstate" sections of this chapter. So far there has been little discussion of the Sudanese people themselves, and this mirrors contemporary reality:

Due to the difficulties of doing field work in Sudan, many recent political studies lack a deeper understanding of the regional societies. . . . This type of analyses can prove useful to understand the general national and international context but they often cannot assess the complex reality of the local ground. . . . [F]ocused anthropological studies appear to be of the utmost importance in areas where ethnic conflicts are often fueled by ideological distortion of a complex historical reality.⁸⁰

This subsection will identify additional characteristics of the Sudanese population that must be considered part of the interaction between intrastate power centers. These include a discussion of ethnic and linguistic composition, thus attempting to provide a level of objective measure to what is in essence a sort of social construct. Differences between people are important in Sudan, and relative perceptions are all the more so.

⁷⁹ Niblock, *Class and Power in Sudan*, 279.

⁸⁰ Catherine Miller, Manuscript subsequently published in "Power, Land and Ethnicity in the Kassala-Gedaref States: an Introduction," in *Land, Ethnicity and Political Legitimacy in Eastern Sudan*, ed. C. Miller (Le Caire: Cedej, 2005): 1. Miller goes on to identify the emphasis in literature on the role of Arab groups to the neglect of other Sudanese peoples. "By reaction, the 'neglected groups' are now involved in trying to present 'their view' on the Arab versus African contribution in the Sudanese history" (original author's footnote).

The Nimiery regime, in an ultimately unsuccessful attempt to mobilize Sudanese society at large, took unprecedented steps to formalize measures of land reform and class status in direct relation to tribes, ethnicity, and regional demographics. The results of these efforts, in conjunction with a period of widespread drought and ecological strain throughout much of the African Sahel, identify three additional factors relevant to Sudan's population today: language, religion, and ethnicity.

Language and Religion

The line of demarcation between north and south Sudan as drawn on January 1, 1956, obscures further cultural splits in Sudanese society: language and religion. Table 1 below presents a representative delineation of Sudan's population by linguistic groups.

<p>Southern Peoples (34%):</p> <ol style="list-style-type: none"> 1. Nilotic groups: Dinka (10%), Nuer (5%), Shilluk (1%), Anouak, Acholi, Bor Belanda, Jur, Shilluk Lwo, Pari 2. Nilo-Hamitic groups: Bari-speaking (Bari, Kuku, Pojulu, Kakwa, Nyangwara, Mundari; 2%), Nyepo, Lokoyo, Luluba, Latuko, Logit, Lango, Toposa, Domjiro, Jiye, Mourle Group 3. Sudanic groups: Azande (2%), Muru (1%), Ndogo, Sere Mundo, Biri (Balanda/Fertit), Madi, Bongo (Fertit), Baka, Feroqe
<p>Arabized Peoples of Northern Sudan (40%):</p> <ol style="list-style-type: none"> 1. Ja'aliyin Arab: Danagla Arabs, Hassaniya, Kawahla, Gima, Husainat 2. Juhayna Arab: Jamala (Kababish, Shukriya), Baqqara (Silaim, Hawazma, Misiriya, Humr, Rizaiqat, Ta'aisha, Bani Rashid, Rashaid, Habaniya) 3. Gezira Arab: Mesellimiya, Halawin, Rufa'a 4. Zibaidiya Arab 5. Hawawir Arab (Berber stock): Hawawit, Jellaba, Hawara, Korobat 6. Mixed Arab-Nubian: Shaiqiya, Manasir, Rubatab, Mirifab 7. Christian Arab: Copt, Syrian Orthodox
<p>Non-Arabized Peoples of Northern Sudan (26%):</p> <ol style="list-style-type: none"> 1. Beja (6%): Beni Amer, Amara, Bisharin, Hadendowa 2. Dar Fur: Fur (2%), Daju, Beigo, Zaghawa, Berti, Masalit, Gimr, Tama 3. Nuba (5%): over 50 groups, including Nyimang, Temein, Katla, Tima, Tegali, Koalib-Moro (Heiban, Shwai, Otoro, Tira, Moro), Daju, Tulishi, Keiga, Miri, Kadugli, Korongo. 4. Nubian (3%) 5. West African (fallata) (6%): Fulani, Hausa, Kanuri, Songhai (Zabarma)

Table 1. Diversity in Sudanese Peoples ⁸¹

⁸¹ Adapted from Lesch, *The Sudan*, 17. The author quotes multiple sources, including Wai (1981), Miller (1977), and Duku (1996). Sources span nearly two decades, and can further be assumed to have changed significantly in the interim ten year period since Lesch's work was published. The point of diversity and heterogeneity thus remains all the more pertinent.

Just over fifty percent of the Sudanese population speaks Arabic as a native tongue, and in the north Arabic is the principal language of education, commerce, government, and in the home. This contrasts starkly with Southern Sudan, where over a hundred languages are spoken and English is the preferred language of the educated elite. Additionally, “approximately 70 percent of the Sudanese people are Muslim, 25% follow indigenous beliefs, and 5 percent are Christian.”⁸² The combination of majority Arab and Muslim identities has a profound impact on Sudan’s political culture, yet that impact can not be simply distilled to an all-inclusive North-South divide or a divided pie chart.

Ethnicity and Ideology

The representation of linguistic diversity in Table 1 above, presents only a partial picture of the complexity of language, religion, and ethnicity in Sudan. Common conceptions regarding a crisis in Darfur and the question of autonomy for northern and southern Sudan tend to overshadow the actual intermixing and co-habitation of ethnic groups. A comparison of Sudan’s political map (Figure 1) and Figure 5 below, yields a more comprehensive picture.

Kinship helps to form a political arena, but does not capture the essence of competition: the language of kinship, rather, provides a ready made ideology through which combatants stigmatize the enemy (especially in oral poetry), ascribe unthinkable violence to the other side, and in turn justify their own atrocities, while claiming to uphold the social values of clan solidarity.⁸³

Contemporary literature tends to view ethnic centrality in conflict as a result rather than a cause of conflict in Sudan. The preceding quote forms the basis for conceptualizing the term “ethnic polarization.” Within the overwhelmingly Muslim north, “groups are potentially subject to competing claims of their own ethnic identities, (non-Arabs but Muslim) on the one hand, and the high value accorded to Arabism and the

⁸² Lesch, *The Sudan*, 20.

⁸³ Daniel Compagnon, “Somali Armed Movements,” in C. Clapham, ed., *African Guerrillas* (Oxford: James Currey, 1998), 60. See also, Shultz and Dew, *Insurgents, Terrorists, and Militias*, 92.

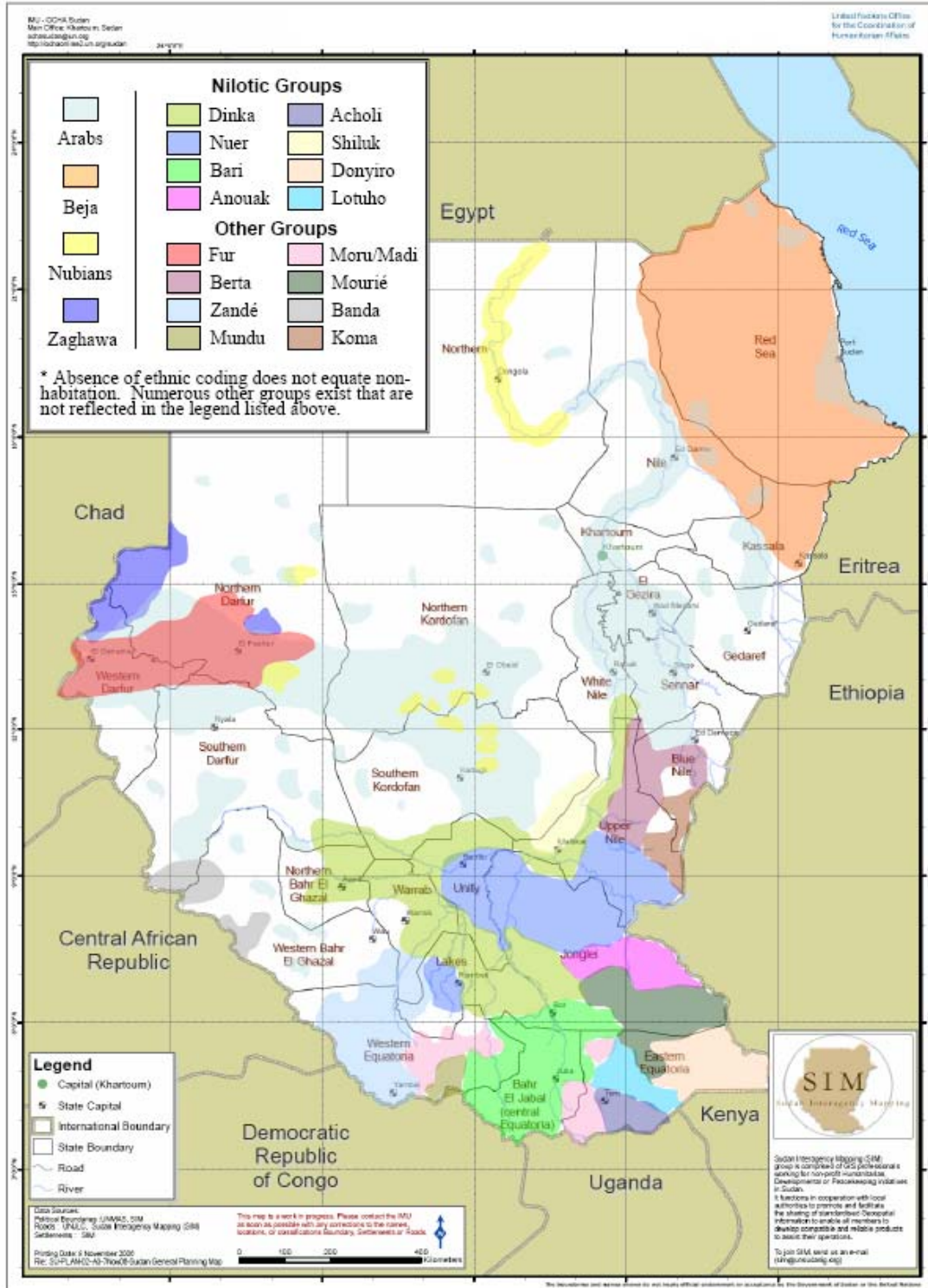


Figure 5. Sudan's Ethnic and Linguistic Groups ⁸⁴

⁸⁴ Overlays adapted from Lesch, *The Sudan*, 16. The author cites original source as: Marc Lavergne, ed. *Le Soudan Contemporain* (Paris: Lermoc/Karthala, 1989). Map from UN Cartographic section.

Arabic language in Sudanese society and in Islam on the other.”⁸⁵ In Darfur and the openly contested south, questions of ethnic identity define the essence of internal war.

The extent to which ethnicity plays a role in conflict in Sudan is only briefly introduced here. This concept will be further explored in Chapter V, which explores the relationship of ethnicity and resource constraints to network dynamics. In this chapter, the artificially constructed relationship between ethnicity, that which defines the “we are” of society, and ideology, that which defines the “we believe” of society, presents a convenient transition to the role of the state in Sudanese society.

B. STATE

In assessing Sudanese governance prior to 1985, Peter Woodward remarked: “Ideology, to be successful, requires consensus and/or institutional enforcement, and it was not only the former that was lacking in the Sudan; all institutions were weak as well.”⁸⁶ The labeling of “strong” and “weak” states often obscures the practical capacities of their regimes. Prudent caution also suggests that an increase in state capacity is by no means a guarantee of regime stability. The fostering of state capacity through social mobilization, “conveying to people that the routines, symbols, and ways of behaving represented by the state leadership are essential to their well-being,” can itself serve to create competing power interests within the state.⁸⁷ A state’s ability to implement its agenda or to allow state agencies a significant degree of autonomy in response to competing power centers is constrained. If internal and “international dangers can be countered through building agencies of the state . . . , strengthening those state institutions may at the same time hold out its own perils for state leaders.”⁸⁸

This presents the dilemma of attempting to advance a social agenda while both empowering and limiting state agencies. As a regime maneuvers to realize the agenda

⁸⁵ John Morton, “Ethnicity and Politics in Red Sea Province, Sudan,” *African Affairs* 88, no. 350 (January, 1989): 64.

⁸⁶ Peter Woodward, “Is the Sudan Governable? Some Thoughts on the Experience of Liberal Democracy and Military Rule,” *Bulletin (British Society for Middle Eastern Studies)* 13, no. 2 (1986): 144.

⁸⁷ Migdal, *State in Society*, 71.

⁸⁸ Migdal, *State in Society*, 68.

that brought it to power, state institutions “transforming” society also become power centers that themselves challenge the regime’s security. As indicated in the introduction to this thesis, in such cases, state legitimacy can be considered simply an expression of “the probability that other authorities will act to confirm the decisions of a given authority.”⁸⁹ The regime must decide whether to steadfastly pursue its agenda in an attempt to thrive, or resort to the internal appeasement of competing factions in order to survive. Writing about Sudan in 1979, Dunstan M. Wai, a Southern Sudanese, observed such a “survivalist” agenda in the characteristics of the Nimiery regime from 1969-1985:

In the Sudan where influences of the traditional order still exist, there is the persistent survival of a political network that is largely determined by social and personal relations, with the inevitable consequence that competition for power tends to revolve around issues of prestige, status, influence, and personality, and not primarily around questions of alternative courses of policy.⁹⁰

The inability of the Nimiery regime in Sudan to coalesce social mobilization within the implementation of a state agenda, as demonstrated in neighboring state regimes as well, most notably Egypt to the immediate north, resulted in pragmatic courses of action that also played out on the international scene. “Domestic pressures and conflicting priorities . . . produced a zigzag in Sudan’s foreign policy,” while the Nimiery regime “willingly rejected earlier ideological positions when doing so procure[d] material benefits for the country.”⁹¹ Regime survival trumped any sort of social agenda.

Paradoxically, rulers of the institutionally weakest states, which face the most severe threats from strongmen and the most intense pressures from outsiders, are the most consistent and thorough in destroying remaining formal state institutions—the very tools advocates of reform regard as the key to regime capabilities.⁹²

⁸⁹ Tilly, “War Making and State Making as Organized Crime,” 171. The reader will recall that the same definition was used in Chapter II to identify “legitimacy” as a quantifiable rather than subjective measure of state power.

⁹⁰ Wai, “Revolution, Rhetoric, and Reality in the Sudan,” 89.

⁹¹ Wai, “The Sudan: Domestic Politics and Foreign Relations under Nimiery,” 308.

⁹² William Reno, *Warlord Politics and African States* (Boulder, CO: Lynne Rienner, 1999), 7.

To solve this paradox, Nimiery attempted to follow an Islamist model in order to coalesce the populace under Arab rule and curtail local tribal mechanisms of governance. Instead, both the southern population and disgruntled African tribes in the west began to formally reorganize rebel groups, and Sudan's second civil war began. The Nimiery regime was ousted internally in 1985, and a succession of interim coups finally brought the National Islamic Front (NIF) and the al-Bashir regime to power in 1989.

1. Governments

While there were two periods of parliamentary rule in the first decade of Sudanese independence, and an ambiguous period of governance between 1985 and 1989, by in large, military leadership in Sudan has had a continuous role in Sudanese government. The present regime headed by President Omar al-Bashir is effectively contained within a single ruling party, the Popular National Congress (PNC) that evolved from the National Islamic Front (NIF), formerly headed by the supposed founder of the JEM insurgent faction, Hassan al-Turabi. "All other parties are formally or effectively or periodically banned and marginalized"; to the extent that government exists outside of the Government of National Unity (GNU), it resides within the *Inqaz*, the "military government of 'salvation'."⁹³ The local interests of this group are ones of commerce and military coercive power, encapsulated within the proclamation of an Islamic state. The result of this power division is a true regime of the "center," in which political power and coercive authority rest exclusively with the elite in Khartoum. Prior to the signing of the CPA, the central government was usually referred to outside of Sudan as the Government of Sudan (GoS), since then, it has been formally renamed the GNU, to allow for its supposed joint nature with the Government of South Sudan (GoSS).

Administered by the GoSS under the provisions of the CPA, Southern Sudan consists of ten states, formerly composing the provinces of Equatoria (Central Equatoria, East Equatoria, and West Equatoria), Bahr el Ghazal (North Bahr al Ghazal, West Bahr al

⁹³ Dr. Richard Lobban, Conference Presentation, Sudan Socio-Cultural Modeling and Strategic Multilayer Assessment Workshop (Arlington, VA: Directed Technologies (DTI), March 21, 2007).

Ghazal, Lakes, and Warab), and Upper Nile (Junqali, Wahdah, and Upper Nile).⁹⁴ Allegations of corruption persist regarding the newly formed Government of South Sudan, and the new authority has faced challenges in establishing a functioning administration; neither military nor civil servants are paid in a regular fashion. The SPLM leadership there is perceived as having been co-opted by the regime in Khartoum, despite the formalized inclusion of southern representation in Sudan's Government of National Unity. CPA provisions regarding political representation allows the SPLM 70% of the seats in the GoSS, while the ruling National Congress Party (NCP) has 10%.⁹⁵ This contrasts the apportionment of the GNU, in which the NCP has 52% of the appointed positions, while the SPLM there has 28%. This places the SPLM in the compromising position of having a predominant share of the leadership in the nascent southern government, while remaining committed to a minority position in the overall and north-dominated central regime in Khartoum. In pursuing a cooperative process towards independence, the SPLM, now formally included in the national-level government, today faces accusations of treason within its own constituency.⁹⁶

2. Tribes and Proxies

The central regime in Khartoum has historically lacked an apparatus by which to effectively extend its influence and policies throughout all of Sudan. Sudan's armed forces have also experienced limitations in operating throughout the country, due to infrastructural constraints as well as the ethnic composition of its troops. A predominance of Fur-tribe members among the army's foot soldiers has created difficulties in employing them in repressive activities in their own homeland, Darfur,

⁹⁴ US Department of State, "South Sudan Project Online," *Relief Web Cooperative Information Exchange*, January, 2001: <http://www.state.gov/www/issues/relief/links.html> (accessed August 12, 2007).

⁹⁵ International Crisis Group (ICG), "Sudan's Comprehensive Peace Agreement: The Long Road Ahead," *ICG Africa Report*, no. 106 (March, 2006): <http://www.reliefweb.int/library/documents/2006/icg-sdn-31mar.pdf> (accessed August 7, 2007). The CPA marked the first time the SPLM and SPLA (Sudan People's Liberation Army) were formally separated into distinct branches. Both terms are used here to respectively refer to the political and military arms of the organization.

⁹⁶ Admittedly biased views on the corruption of southern Sudanese leadership can be found in corroborating views on both sides. See Jacob K. Lupai, "South Sudan Needs Strong Leadership," *Sudan Tribune*, April 22, 2007, and Urban T. Kir, "Zigzagging Paths to the Precipitating Demise of CPA and the Post 2011 Era of Armed Struggles in South Sudan," *SouthSudan Nation.com*, May 28, 2007: <http://www.southsudannation.com/zigzagging%20paths%20to%20demise%20cpa3.htm> (accessed August 13, 2007).

literally “Land of the Fur.” Khartoum’s inability to penetrate Sudanese society at the local level has led to alternate strategies. William Reno has referenced Jean-Francois Bayart’s concept of “elite accommodation” in his study of *Warlord Politics in African States*. The term specifically suggests that to sustain a meaningful semblance of sovereignty—the exclusive control over territory and people—rulers needed to cut informal deals with individuals who exercised power in their own right.”⁹⁷

To a certain extent, tribal relationships in Sudan sufficed for local governance in the first twenty years of Sudanese independence. They presented a capable means of conflict resolution between competing clans, contesting economic or social resources, particularly in times of drought. Common throughout the Horn of Africa, and indeed much of the continent as a whole, these “formal kinship systems are not straightjackets . . . they offer a flexible series of opportunities for people to choose how to deal with others. They also provide multiple social vectors along which relations of alliance, association, mutual support, opposition, and hatred may develop.”⁹⁸ The flexibility of this system was tested, and ultimately overburdened, by the combination of failed land reform policies and ecological disaster during the early to mid-1980s.

Particularly in Darfur, the adverse effects of environmental conditions were compounded by a period of Arabization that was fostered by the central government of Sudan. Arab supremacist attitudes in Darfur can be traced in part to the efforts of Libyan leader Muammar Qaddafi, who proposed Arab expansion into northern Africa in the 1970s and 1980s.⁹⁹ Political events in Sudan also began to formalize Arabization, when in 1983 the Nimiery government began a shift away from a secularist agenda towards implementing Islamic political governance. The polarization of violence in Darfur was not limited to African tribes, but also occurred among the nomadic and primarily Arab communities: “the new government’s radical Islamism suited (at least in theory) the

⁹⁷ Reno, *Warlord Politics and African States*, 2. The original source can be found in: Jean-François Bayart, *L’État en Afrique* (Paris: Fayard, 1989).

⁹⁸ Emily A. Shultz and Robert H. Lavenda, *Cultural Anthropology: A Perspective on the Human Condition*, 4th ed. (Mountain View: Mayfield publishing Company, 1998), 235, as also referenced in Shultz and Dew, *Insurgents, Terrorists, and Militias*, 52.

⁹⁹ Øystein H. Rolandsen, “Sudan: The Janjawiid and Government Militias,” in M. Bøås and K. Dunn, eds., *African Guerrillas: Raging against the Machine* (Boulder, CO: Lynne Rienner, 2007), 155.

nomadic people, and the NIF regime saw them as useful allies and proxy soldiers. . . . The Sudanese government increasingly sided with Arab groups against African agriculturalists in local disputes.”¹⁰⁰

The resulting Arab militias have been grouped under the term “Janjaweed,” a somewhat derogatory term that was historically used to categorize bandit and criminal groups in Darfur. Janjaweed leaders seem to be primarily tribal chiefs “with the ability to exploit loyalty to tribal structures in persuading young men to join”; furthermore, the “main difference between the Janjawiid attacks of the 1980s and those taking place since the late 1990s is that now the militias operated under direction from the regional and national government and with the assumption of impunity”¹⁰¹ The most notorious of the Janjaweed leaders is Musa Hillal, a tribal chieftan in Northern Darfur. He is currently being investigated by the International Criminal Court (ICC) on the basis of his alleged involvement in human rights abuses in Darfur.

The use of Janjaweed forces as part of the regime’s counterinsurgency strategy is of questionable and perhaps contrarian value: “the Janjawiid attacks and the central government’s involvement initially helped the rebels to gain the moral high ground: their own attacks on noncombatants were, until quite recently, negligible in comparison to the havoc caused by the Janjawiid and the Sudanese Armed Forces.”¹⁰² Furthermore, employing the Janjaweed may serve to limit the regime’s options in any prospective return to the negotiating table. Having armed the Janjaweed to offset a lacking military capacity in Darfur, it will be exceedingly difficult to disarm them as part of a peace process. The unilateral interests of the Janjaweed themselves will have to be taken into account in any sort of negotiated outcome, thus suggesting a net decrease in the government’s number of possible compromise positions.

¹⁰⁰ Rolandsen, “Sudan: The Janjawiid and Government Militias,” 157.

¹⁰¹ Rolandsen, “Sudan: The Janjawiid and Government Militias,” 158-9/161, and also Human Rights Watch, “Darfur Documents Confirm Government Policy of Militia Support,” July 20, 2004, available at <http://hrw.org/english/docs/2004/07/19/darfur9096.htm> (accessed February 28, 2007). The term Janjaweed has nearly as many spellings as possible definitions. The usage elected by quoted references is maintained here, while the authors of this thesis default to using “Janjaweed.”

¹⁰² Rolandsen, “Sudan: The Janjawiid and Government Militias,” 161, and also Human Rights Watch, “Darfur Documents Confirm Government Policy of Militia Support.”

C. COUNTERSTATE

Insurgencies have existed in Sudan in one form or another since independence more than a half century ago. As the primary level of analysis in this thesis, the dynamics of insurgent development were introduced in Chapter II and will be further applied to Sudanese insurgent groups in Chapters IV and V. In introducing Sudan's insurgencies here, the list is not all inclusive; numerous regions of insurgent activity exist within the political boundaries of Sudan. One, the Beja Congress, operating in eastern Sudan and nominally supported by the Eritrean government, only recently agreed to abide by the provisions of the CPA. Nevertheless, the conflicts along the North-South divide and in Darfur are the most significant internal wars in Sudan, and thus they form the main focus of this study. The fundamental difference between insurgent groups in the south and those in Darfur is that the former fight for a secessionist cause, while the latter profess to struggle for what they consider their rightful "share of the pie."

1. Southern Insurgents

A deep-rooted resentment of northern domination has long been a characteristic of southern opposition, especially in view of northern lip-service to the federal autonomy granted the south by the 1972 Addis Ababa agreement. Still, a unified opposition proved difficult to achieve in the south. One of the first organized southern resistance movements was the Anya-Nya of the 1960s, yet their activities were mostly sporadic, characterized by limited numbers and a lack of modern weaponry.¹⁰³ Southern rebels eventually found enough reason to organize when the Nimiery regime announced on September 8, 1983, that Sudan's civil laws had been revised to bring them into conformity with *Shari'a*, or Islamic Law. The Sudan People's Liberation Movement/Army (SPLM/A) arose as a dominating insurgent faction in Sudan, though the SPLM/A was nonetheless subject to repeated internal schisms and competition with other Southern Sudanese insurgent groups such as the Southern Sudan Independence Movement (SSIM).¹⁰⁴

¹⁰³ O'Ballance, *Sudan, Civil War and Terrorism, 1956-99*, 36-50.

¹⁰⁴ Arop Madut Arop, *Sudan's Painful Road to Peace: A Full Story of the Founding and Development of the SPLM/SPLA* (Charleston, SC: Book Surge Publishing, 2006), 512.

Under the leadership of John Garang, factionalism within the SPLA was nominally contained. The organization steadfastly advocated and fought for complete independence for a Southern Sudan throughout the 1990s.¹⁰⁵ The Sudanese regime fought extensive military campaigns against the SPLA, to include large-scale conventional operations and the employment of surrogate irregular forces from neighboring Uganda. Despite their active support of Ugandan Lord's Resistance Army (LRA) groups operating against the SPLA within Southern Sudan, government forces were unable to establish full control, particularly as a lack of infrastructure and transportation means worked in favor of the "bush-fighting" insurgents.¹⁰⁶ Conventional operations grew increasingly costly, and following the continued inability of either side to attain a real measure of stability in the south, Khartoum agreed to "return" limited autonomy to the southern region in the Naivasha Agreement, more commonly known as the Comprehensive Peace Agreement (CPA), signed in January, 2005.

The southern insurgent movement, politically represented by the SPLM in the GNU while still militarily active via both autonomous SPLA units and as integrated elements of the Sudanese military as directed by the CPA, has long envisioned three possible outcomes to conflict in the North-South divide, presented as models in Table 2 below. In Model 1, the SPLA views Sudan since independence in 1956, characterized by an agenda of Islamization and Arabization of the south by the north. While this arrangement was formally institutionalized as a federated Sudan by the Addis Ababa accords of 1972, it has today been characterized as a form of "colonial war" that reflects northern interference with a southern right of "self-determination."¹⁰⁷ Model 2 was been presented as the SPLM's proposal leading up to the CPA negotiations. It represents a

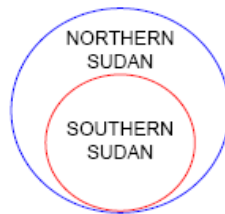
¹⁰⁵ Southern Sudan Civil Society, *The Constitution of Southern Sudan: Draft Constitution Framework Text*, proposal presented in Nairobi, Kenya, February, 2005. The text is available online at <http://www.darfurconsortium.org/Assets/PDFs/garangcoverletter.pdf> (accessed August 13, 2007). Emphasis on a single Sudan is also inherent in the title of the current Government of National Unity (GNU), to include the purported representation of southern political interests.

¹⁰⁶ F. Carlos Rodriguez, "Sudan Still Helping LRA Kill Acholi," *Monitor*, June 2, 2002, 13, as also referenced by Kevin C. Dunn "Uganda: The Lord's Resistance Army," in M. Bøås and K. Dunn, eds., *African Guerrillas: Raging against the Machine*, (Boulder, Lynne Rienner, 2007), 142.

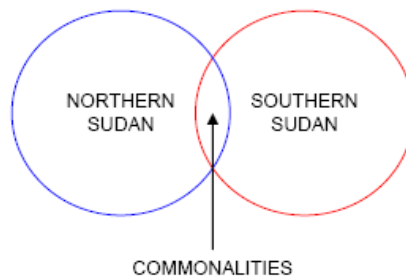
¹⁰⁷ Dr. David Chand, Conference Presentation, Sudan Socio-Cultural Modeling and Strategic Multilayer Assessment Workshop, Arlington, VA: Directed Technologies (DTI), March 21, 2007.

confederation of two sovereign states, with cooperation in common areas such as water rights to the Nile and oil exploitation. This contrasts with Model 3, two completely independent, and likely hostile, states. The SPLA has insisted that Model 3 will result from years of continued violence if the north rejects Model 2 and insists on Model 1.¹⁰⁸

Model 1. Unitary Sudan



Model 2. Confederated Sudan



Model 3. Independent Sudans

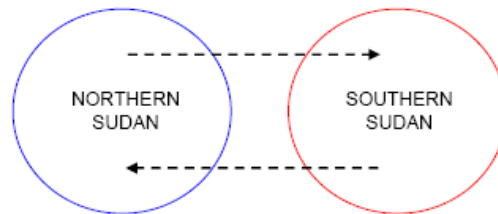


Table 2. Strategy Outcomes of the SPLM/A¹⁰⁹

¹⁰⁸ Lesch, *The Sudan*, 174-179. All three models were formally discussed by the SPLM delegation during the abrogated Abuja conferences, 26 April -18 May 1993. It remains to be seen how the provisions of the CPA reflect one model over the others, particularly as perceived by opposing sides.

¹⁰⁹ Adapted from Lesch, *The Sudan*, 176. The presentation of models is as per the original author, colors have been added here to coincide with “state” and “counterstate” as outlined in Figure 4.

2. Darfur's Rebels

Though the population in Darfur is primarily Muslim, practices vary widely between pastoralist and farming cultures. The farmers, who typically identify themselves as African, are more liberal in their practices and customs, and are often looked upon as being “less Muslim” than the Arabic tribes. The combination of marginalization and tribal fighting fostered ethnic polarization in Darfurian society as the tribes began to identify themselves as either distinctly African or Arab. Deteriorating ecological conditions have also contributed to the escalation of conflict in Darfur.

Beginning in the 1980s, Darfur's tribes began to form militias as a coping mechanism for the increasing violence in the region. The Sudan Liberation Army (SLA) emerged from these groups. The foundation for the SLA was laid by the leaders of the mainly Fur-tribe self-defense militias that formed in 1988 and went underground in 1989.¹¹⁰ These leaders, disgruntled with the GoS' lack of action in preventing attacks in the Darfur region, combined with Zaghawa tribal leaders in the late 1990s and formed the Darfur Liberation Front (DLF).¹¹¹ This group later changed its name to the Sudan Liberation Movement and Army (SLM/A) after it conducted initial attacks against the GoS in February, 2003. The general claim by the SLM/A is that it is not fighting for independence but only for a legitimate share of the political process.¹¹² The SLA has found several external sponsors, which adds a transnational dimension to the term “internal war.” Eritrea has long supplied the resistance elements in Darfur with weapons and political support while Chad has provided passive support in allowing the SLA to operate from Chadian territory.¹¹³ The SPLM/A provided training support to the SLA in 2003 and continued to profess political support throughout early peace process attempts.

¹¹⁰ Dagne and Congressional Research Service, “Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement.” African self-defense militias during this time period were also allegedly trained by SPLM/A forces.

¹¹¹ Julie Flint, A. De Waal, and the International African Institute. *Darfur: A Short History of a Long War* (London; New York: Palgrave Macmillan, 2005), 80.

¹¹² Sudan Liberation Movement/Army (SLM/A), Political Declaration, March 14, 2005: <http://www.sudan.net/news/press/postedr/214.shtml> (accessed August 13, 2007).

¹¹³ Marc Lacy, “World Briefing Africa: Sudan: U.N. Accuses Neighbors Of Arming Darfur Rebels,” *New York Times*, February 10, 2006, A10.

The Justice and Equality Movement (JEM) is the second largest of the original rebel groups fighting in Darfur. The JEM was formed by political followers of al-Turabi, the former Sudanese Speaker of the Parliament. After the 1989 coup, President al-Bashir began to purge the government of non-Arab members. This caused public protests, resulting in further government repression of non-Arabs. The JEM, formed after these crackdowns, has as its goal the fair representation of non-Arab Sudanese within the GoS, yet also supports the implementation of *Shari'a* law.¹¹⁴ With a leadership composed of former regime members and politicians, the JEM's political sophistication attracted secularists in Darfur that found little appeal in the seemingly unorganized and tribal-based SLA. Unlike the SLA, the JEM's political leadership initially operated outside of Sudan, with administrative offices in Paris and Asmara. The military forces of the JEM are drawn primarily from the Zaghawa Kobe tribe. Foreign support came from some of the same sources as the SLA, particularly Eritrea and Chad.¹¹⁵ The southern-based SPLM/A, a primarily non-Muslim organization, appears to have much less affiliation with the Islamic-oriented JEM than it does with the SLA.

In February 2003, these newly organized rebel groups openly began to target Government of Sudan security forces and Arab militias in Darfur. In April, 2003, a combined rebel force attacked the GoS base at the Al Fasher airport, humiliating the central regime and demonstrating the extent to which the insurgency was organized and possessed military capabilities. Instead of reinforcing Sudanese Armed Forces (SAF) units in the area, Khartoum pursued what has been called "counterinsurgency on the cheap."¹¹⁶ The government formalized and expanded Arab tribal militias in Darfur, the Janjaweed.¹¹⁷ The counterinsurgency strategy rapidly formalized into various combinations of Janjaweed and Sudanese Armed Forces raids and air strikes that were typically directed solely at African villages throughout Darfur.

¹¹⁴ Flint et al, *Darfur*, 93.

¹¹⁵ Sam Dealy, "Sudan: The Widening Gyre. Darfur's Janjaweed Militia Aren't the Only Ones Sowing Chaos and Death. Meet the Two Rebel Factions Threatening Yet Another Civil War," *Time International*, Nov. 8, 2006, 36.

¹¹⁶ Flint et al, *Darfur*, 24.

¹¹⁷ Oliver Read, "Sudan's Janjaweed Militia," *Online Newshour*, April 7, 2006, available online at http://www.pbs.org/newshour/indepth_coverage/africa/darfur/militia.html (accessed August 13, 2007).

D. EXTERNAL ACTORS

Peter Woodward's 1972 assessment of Sudan's role in regional politics remains eminently valid today:

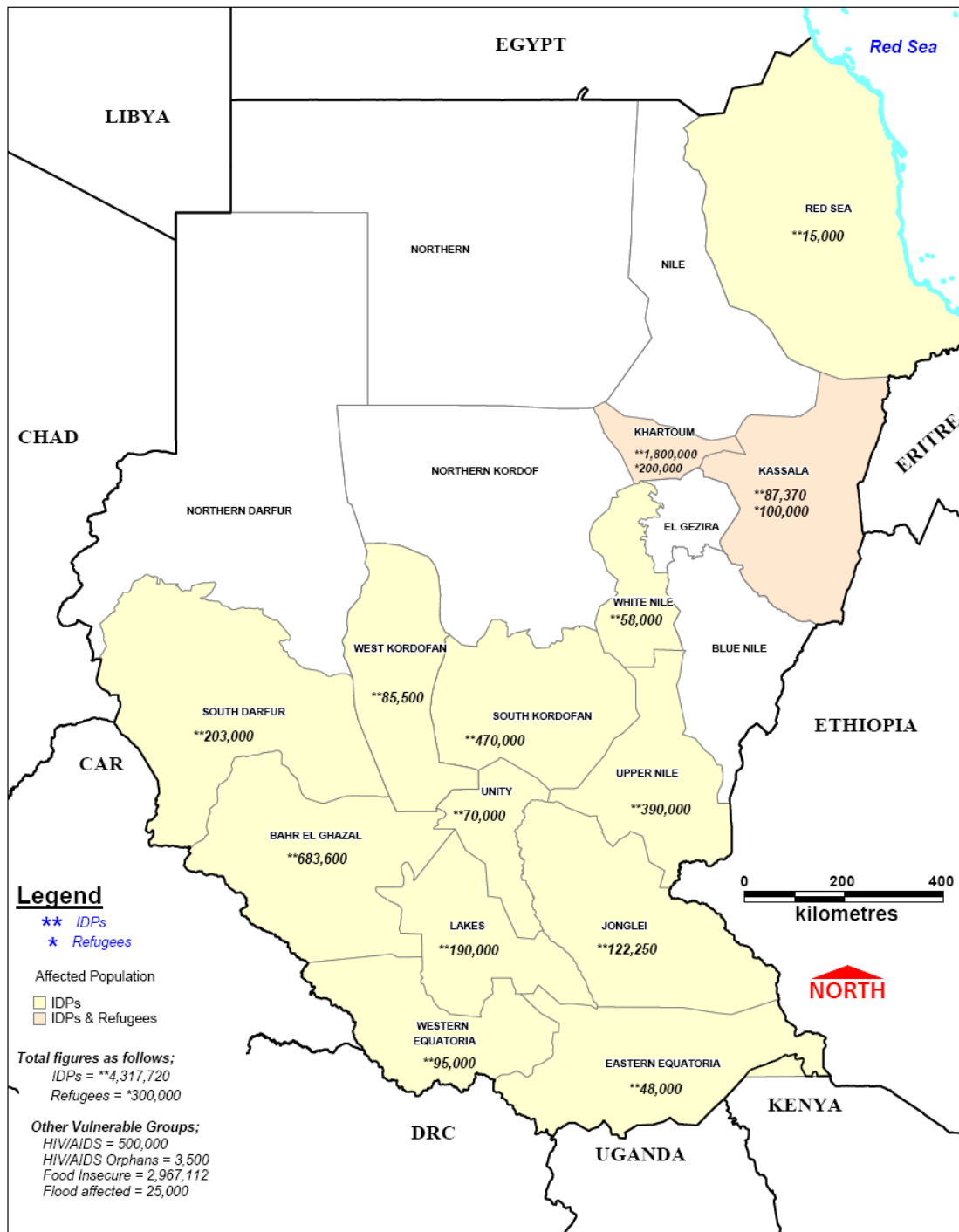
The Sudan's attitude towards the Middle East and Africa was not only a question of foreign relations, but involved the more difficult problem of her own self-identity. The possibility of union with Egypt [in 1953] had encouraged the country's awareness of its attachment to the Arab world. This in itself concerned southerners, but when in the post-independence period they faced a policy of Islamisation and, as they saw it, subordination to the Arab north, it produced open conflict.¹¹⁸

It is an illusion to assume that such conflicts remain constrained by geographic borders. Sudan's role as a boundary-state between the Arabic states of northern Africa and sub-Saharan Africa fosters a dynamic and volatile set of transnational relationships. The Sudanese government has consistently maintained active relationships with its neighbors, oftentimes as a means of leverage against frequent international allegations of domestic misconduct. In many ways, the "external" legs of the Diamond model present a much more engaging picture of Sudan's internal wars than does the domestic triangle that connects with the country's population at large. The following two sections further amplify this notion.

1. Regional Actors

Only two countries in Africa border nine other nations. The Democratic Republic of the Congo accesses the Atlantic to the west, while Sudan serves as a border between northern Africa, the near East, and the remainder of the African continent. The clear delineations of boundaries depicted on a political map belie the porous nature of these "walls": thousands of Sudanese are refugees in neighboring lands, while thousands of foreigners have also fled to Sudan (see Figure 6 below). In addition, the Nile River, critical to the existence of many east African states, runs the length of Sudan. The Blue and White Nile converge in Khartoum, underscoring the city's role as the "center" of both Sudanese politics and regional relations as a whole. The following paragraphs will briefly

¹¹⁸ Woodward, *Condominium and Sudanese Nationalism*, 181.



The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations

Prepared by OCHA Regional Support Office - CEA, Nairobi

Figure 6. Sudan's Affected Populations: Internally Displaced and Refugees ¹¹⁹

¹¹⁹ UN Office for the Coordination of Humanitarian Affairs (OCHA), "Sudan's Affected Populations" Regional Support Office, Nairobi: OCHA, August, 2002. Available online at: [http://www.reliefweb.int/rw/fullMaps_Af.nsf/luFullMap/C4D62037954E83CE85256C39007D4F99/\\$File/sudanafpop0802.pdf?OpenElement](http://www.reliefweb.int/rw/fullMaps_Af.nsf/luFullMap/C4D62037954E83CE85256C39007D4F99/$File/sudanafpop0802.pdf?OpenElement) (accessed July 3, 2007).

outline Sudan's relationships with its neighbors, starting with Libya to the northwest and progressing in a counterclockwise fashion to finish with Egypt to the immediate north.¹²⁰

Libya shares 383-kilometers of border with Sudan, and has been extensively involved with Sudanese domestic politics. Libyan leader Muammar al-Qadhafi encouraged Arabization amongst tribes in Darfur, many of whom today provide foot-soldiers for the Janjaweed.¹²¹ It is thus all the more ironic that Libya has at times had hostile relationships with Sudan's Islamic governments; Libya also provides support to the opposition SPLA, while Qadhafi had common contacts with John Garang. In 1984, a TU-22 bomber attacked the Omdurman radio station, missing its target but killing five Sudanese; the aircraft was supposedly Libyan.¹²² Tensions persist today, particularly in view of Libya's volatile relations with Chad, Sudan's immediate neighbor to the west.

Chad's 1,360-kilometer border with Sudan lies mainly along Darfur. Though Chad had fairly stable relations with Sudan in the 1990's, tensions have escalated exponentially with the crisis in Darfur. Janjaweed militias have conducted cross-border raids on refugee camps in Chad; Chadian military forces have also allegedly supported SLM/A units with safe-areas and military equipment. Several African tribes in Darfur, primarily the Zaghawa, have tribal claims to lands in both countries; Chad's President Idriss Deby is himself a Zaghawa. A number of non-governmental organizations (NGOs) enter Darfur through Chad, and have been subject to harassment and attack on both sides of the border. Though policy statements in N'djamena and Khartoum have expressed cordial relations, the two capitals could hardly be further separated, in both dialogue and geographic distance, from the realities of violence in Darfur.

The Central African Republic (CAR) shares a 1,165-kilometer border with Sudan that is extremely porous. Though the majority of the area on the Sudanese side is

¹²⁰ The structure and content of this section borrows heavily from "Sudan and Her Neighbors," a conference paper by Dr. David H. Shinn, February 19, 2003, presented at the Sudan Socio-Cultural Modeling and Strategic Multilayer Assessment Workshop (Arlington, VA: Directed Technologies (DTI), March 21, 2007). Dr. Shinn is a 34-year career foreign service officer with multiple postings to Africa, to include serving as ambassador to Ethiopia.

¹²¹ Rolandsen, "Sudan: The Janjawiid and Government Militias," 155. The Libyan-Sudanese border as indicated on maps has no physical delineation in reality.

¹²² O'Ballance, *Sudan, Civil War and Terrorism, 1956-99*, 134-5.

controlled by Sudan's southern insurgent groups, Sudan sent several military units into CAR in early 2002 in the context of a bilateral agreement under the auspices of the Community of Sahel-Saharan states.¹²³ Although no Sudanese troops remain in CAR today, the Sudanese regime has an interest in fostering a cooperative relationship with that country in order to use that territory as a base for future counter-SPLM operations.

Much of the 628-kilometer border with the Democratic Republic of Congo (DRC) is also under the control of the SPLA. Again, Sudan has sent military forces into the DRC, most recently in 1999 to support the government of President Laurent-Desire Kabila. Complicating relations between these countries are refugee camps near the DRC/Uganda/Sudan tri-point, which have housed up to 17,000 Southern Sudanese.¹²⁴ Uganda has a similar relationship to Sudan as does Chad, the regime in Kampala has lent support to the SPLA while Khartoum has provided a safe-haven for members of the Lord's Resistance Army (LRA), founded in 1988 by self-proclaimed prophet Joseph Kony.¹²⁵ After a period of alternately severing and reestablishing diplomatic ties, Sudan allowed Ugandan military units to pursue LRA rebels in to Sudanese territory; an effort termed "Operation Iron Fist." The mission was largely a failure and did not stop LRA attacks. Relations between Uganda and Sudan continue to be tension-laden; as conflicting sub-state level relationships exist between military leaders on both sides, interested in both denying and securing support for the opposing rebel groups.

Kenya's border with Sudan is fairly small, and relations have been largely stable since Kenyan independence in 1963. Kenya was given the lead in internationally monitored negotiations that led to the CPA in 2005; Kenya also has a vested interest in maintaining trade with Sudan. Though both countries share a common border livestock market, the Kenyan government halted the purchase of Sudanese petroleum on the basis of it aiding the war efforts of the Sudanese regime. Kenya remains intimately involved in

¹²³ Libya and Djibouti also sent forces, deployed in support of stability operations following a failed coup attempt against CAR President Ange-Felix Patasse.

¹²⁴ Shinn, "Sudan and Her Neighbors," 6.

¹²⁵ Dunn, Kevin C. "Uganda: The Lord's Resistance Army," 131-169. See also, Prendergast, John. "Resolving the Three Headed war from Hell in Southern Sudan, Northern Uganda, and Darfur."

the ongoing monitoring of the CPA process and implementation of its protocols, while also serving as a major staging location for NGOs and international aid programs operating in Sudan.¹²⁶

A second region of tri-border tensions exists between Sudan, Ethiopia, and Eritrea. Both Ethiopia and Eritrea have in the past supported the SPLA in an attempt to contain a perceived threat of Islamic expansion from Sudan. Sudan was also openly complicit in the 1995 attempted assassination of Egyptian President Hosni Mubarak by an Egyptian terrorist group in Addis Ababa. Ethiopian support for the SPLA peaked in 1997 with joint cross-border operations that allowed the SPLA to capture several border towns in the Blue Nile region. Yet when conflict broke out between Ethiopia and Eritrea in 1998, Ethiopia moved to normalize relations with Khartoum in regard to a perceived common enemy. A large portion of Nile waters originate in the Ethiopian mountains, so economic relations between these nations constitute a pivotal point in the final outcome of the CPA, as well as in Southern Sudan's role in the regional geopolitical context.

Egypt, perhaps Sudan's most important neighbor has twice had legal sovereignty over Sudan, first under Ottoman control from 1820-1885, and then again under the Anglo-Egyptian condominium. While "Egypt continues to think of Sudan as part of its backyard . . . [t]he matter is complicated because the Nile, Egypt's lifeline, flows through Sudan before reaching Egypt."¹²⁷ Egypt has repeatedly threatened to use full-scale military options in the event of a threat to that water supply. Historically, Egypt has supported a unified Sudan, not wanting another country with which to negotiate over Nile water rights. Since the signing of the CPA, Egypt has been quick to engage the GoSS, offering to pay much of the cost of resuming work on the Jonglei Canal in south Sudan. Egypt's relationship with the Sudan(s) continues to be an essential factor in any equation that might result in a stable peace in Southern Sudan.

¹²⁶ Shinn, "Sudan and Her Neighbors." The author cites Kenyan parliamentarian Wanyiri Kihoro's interview with the *East African Standard* in the summer of 2002, where the official refers to Sudanese "blood oil."

¹²⁷ Shinn, "Sudan and Her Neighbors," 11. See also, David Shinn, "Preventing a Water War in the Nile Basin," (n.d.), 4. SPLA units attacked and destroyed the construction headquarters of the Jonglei Canal project in 1984. Construction stopped after 70% of the work had been completed. The canal is supposed to recoup much of the Nile waters lost to the Sudd swamplands in Southern Sudan.

2. The International Community

The role of the international community in resolving Sudan's internal wars is of paramount importance. As demonstrated so far, internally instigated reform is unlikely, as even opposition groups seek to secure or supplant, rather than replace, current modes of governance. These agendas are further encouraged by the use of ethnic affiliation to entrench animosities, resulting in a pervasive aura of mistrust between opposing sides. External arbitration is a means by which this aura can be bridged. In the North-South divide, the involvement of the Intergovernmental Authority on Development (IGAD), as well as other international actors to include U.S. efforts in particular, contributed to the successful signing of the CPA in 2005. Spoilers that threatened to derail the peace talks in Naivasha have not gone away, and the need for continued international supervision of the CPA was recognized prior to its signing.¹²⁸ Since then, monitoring of compliance and accountability has been lacking, in large part overshadowed by the explosive expansion of violence in Darfur.¹²⁹

Hampered by the domestic constraints of its member nations, AMIS activities have been largely ineffective. AMIS personnel, to include senior leadership, have been repeatedly targeted in Darfur. Four incidents in early 2007 involved kidnapping, assault, and theft of AMIS vehicles, and several soldiers have been killed.¹³⁰ UNMIS efforts have been marginally more successful, though deployment of the full contingent of 10,000 security forces agreed upon in the CPA, and recently increased to 26,000 by United Nations Resolution 1769 (2007), remains problematic to say the least.¹³¹ A successful deployment of the newly-termed UNAMID in force could be used as a step in advancing the legitimacy of opposition parties in the GNU, thus mitigating the largely unilateral power position of President al-Bashir and the NCP. Yet the mission's charter to

¹²⁸ ICG, "Sudan's Comprehensive Peace Agreement: The Long Road Ahead," 25.

¹²⁹ USAID, "Sudan – Complex Emergency: Situation Report #14, Fiscal Year (FY) 2007."

¹³⁰ African Union Mission in the Sudan (AMIS), "AMIS deeply concerned about spate of attacks against its personnel," *Press Report*, March 5, 2007: <http://www.amis-sudan.org/press.html> (accessed August 5, 2007).

¹³¹ United Nations (UN), "Security Council Authorizes Deployment of United Nations-African Union 'Hybrid' Peace Operation in Bid to Resolve Darfur Conflict," *Security Council SC/9089*, July 31, 2007. Available at: <http://www.un.org/News/Press/docs//2007/sc9089.doc.htm> (accessed August 9, 2007).



Figure 7. Oil Concessions in Sudan, 2001 ¹³²

¹³² USAID, Sudan Oil and Gas Concessions holders, Map 8.1.2001. Accompanying text and map link: http://www.usaid.gov/locations/sub-saharan-africa/sudan/map_oil_text.html (accessed August 13, 2007).

“keep” the peace of the defunct DPA does not suggest this will be the case, and, ultimately, does not bode well for the mission’s success.

An issue of Sudan’s internal war that has previously been mentioned is one of resource allocation. The African drought of the 1980s exacerbated civil strife in all of Sudan, particularly in Darfur. In Southern Sudan, oil interests play a critical role in the relationships of both the GNU and the GoSS with the international community (see Figure 7 above). International interests have increased; since 2004, the Chinese National Petroleum Corporation has been purchasing oil concessions in Darfur.¹³³ The majority of the income and proceeds coming from these oil dealings are funneled directly to Khartoum, and are likely being used to purchase arms for the Janjaweed.

Contemporary Sudan serves to illustrate both the intractability and the dynamic nature of internal wars. While conflict in the south superficially appears to have been ended by the CPA, the underlying positions of both sides make the CPA’s potential as a permanent solution tenuous. The conflict in Darfur suggests that an arbitrated solution may be possible, yet the strong tendency for both sides to pursue unilateral agendas has made cooperation near impossible. The strategies of both sides may yield an advantage from an appearance of cooperation, yet issues of political marginalization and resource allocation remain unresolved. Furthermore, both issues encourage intransigent behavior. Ethnic polarization increases the relative political power of opposing factions, who in the case of Darfur have become artificially divided despite a long history (albeit an at times violent one) of coexistence. The distribution of resources, domestically contested in Darfur and of perceived increasing international relevance in the South, further encourages the use of informal mechanisms in local governance and politics, making formalized conflict resolution difficult.

In examining external avenues toward conflict resolution in Sudan, an accommodation of local context is critical. Though US leadership has described the systematic targeting of “Africans” in Darfur as “genocide,” there has been little proactive

¹³³ Enver Masud, “Sudan, Oil and Darfur Crisis, The Wisdom Fund,” *The Wisdom Fund* [online], August 7, 2004, <http://www.twf.org/News/Y2004/0807-Darfur.html> (accessed August 13, 2007).

response from the international community.¹³⁴ It is insufficient to simply insist on reform policies based on European models that have little historical relevance in Africa. It makes more sense to pursue what Joel Migdal has termed “an anthropology of the state,” in which each political actor “is not a fixed ideological entity. Rather, it reflects an ongoing political dynamic, a changing set of goals, as it engages other social groups.”¹³⁵ The model presented thus far allows a foundation for that reflection; both the expected and achievable outcomes of internal wars result from the interaction of disaggregate opposing actors. It remains for external actors to apply such a perspective in arbitrating an end to Sudan’s conflicts. The application of broad-brush punitive measures such as economic sanctions disregards the specific political context of Sudan.¹³⁶ Ironically, rather than support reform, such policies instead encourage the informal mechanisms that reinforce the status quo of political power in Sudan. While this chapter has provided a snapshot estimate of contemporary Sudan within the context of its history, the next chapter will further explore the opposition of regimes and rebels.

¹³⁴ Gérard Prunier, *Darfur: The Ambiguous Genocide* (Ithaca, NY: Cornell University Press, 2005), 140. See also, Rolandsen, “Sudan: The Janjawiid and Government Militias,” 159. The United Nations has found no genocidal intent in Darfur and therefore terms government policies in Darfur “ethnic cleansing.”

¹³⁵ Migdal, “The State in Society: An Approach to Struggles for Domination,” Joel Migdal, Atul Kohli, and Vivienne Shue, eds., *State Power and Social Forces* (New York: Cambridge University Press, 1994), 7-34, as also quoted in Reno, *Warlord Politics and African States*, 37.

¹³⁶ For a list of U.S. sanctions, see United States Department of the Treasury, “Sudan Sanctions,” (n.d.), <http://treas.gov/offices/enforcement/ofac/programs/sudan/sudan.shtml> (accessed August 7, 2007).

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IV. SUDAN'S INTERNAL GAMES

Then, the major conflict was a very simple conflict

*- Thomas Schelling*¹³⁷

A. FRAMING STRATEGIES AND OUTCOMES

The previous chapter presented a situation estimate of Sudan's internal wars framed within an outline of four intrastate actors. The situation estimate suggests several distinct lessons based on the actions and strategies of the actors involved. First, a perspective of monolithically opposing actors obscures the complex internal characteristics of the parties involved. This has profound implications for negotiated outcomes to conflict in Sudan. The signing of the CPA has so far resulted only in limited implementation of the agreement's protocols. The DPA, signed by the Sudanese government and only one of the insurgent leaders, has failed to produce lasting positive results. The exclusion of several rebel groups from a negotiated outcome has further divided insurgent factions in Darfur. Several additional points can then be derived from this first lesson. In the North-South divide, it is apparently in both sides' self-proclaimed interest to assert the validity of the CPA while using it to work toward fundamentally opposed outcomes. This has led to an artificial and possibly temporary overlap of conflicting interests; the long-term implications are not encouraging. In Darfur the nature of the conflict is self-reinforcing; fighting has escalated as expected outcomes yield less and less for each side. There is no "going back" to what was before. Even if local mechanisms of tribal negotiations are successfully revived in Darfur, the increase in desertification and a lack of arable land will only exacerbate the competition and conflict over local resources; while threatening to expand conflict into neighboring countries.¹³⁸

The second lesson learned from Sudan's internal wars deals with the issue of attempting to objectively define actor roles. Though it presents a useful analytic frame,

¹³⁷ Thomas Schelling, Nobel Prize winner in Economics and author of *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), compares the Cold War era to contemporary conflicts.

¹³⁸ Lawrence A. Kuznar and Robert Sedlmeyer. "Collective Violence in Darfur: An Agent-based Model of Pastoral Nomad/Sedentary Peasant Interaction." *Mathematical Anthropology and Cultural Theory: An International Journal* 1, no. 4 (October, 2005).

the four-actor intrastate situation estimate overly relies on aggregating factions on each “side” into a net whole, while the whole itself is oftentimes difficult to define. “Conventional distinctions such as those between state and society and public and private, which are so central to transformative expectations of African states, are difficult to discern in these cases.”¹³⁹ In the south, the GoSS faces a conflict in identity; its majority representatives from the SPLM now possess a legally defined and vested interest in the GNU, the former opposition. In Darfur, the SLM/A and JEM, aligned only in their opposition to the regime status quo, work toward conflicting goals that preclude a unified insurgency. At the same time, the Janjaweed, though ostensibly a proxy apparatus of Sudan’s central regime, themselves have preferences that make it impossible to disregard the role of nomadic tribes as part of any long-term resolution to conflict in Darfur.

This chapter attempts to analytically account for the heterogeneous nature of opposing players while still illustrating the net effects of their interactions within one framework. Using a game theoretic perspective, it builds upon the lessons of the situation estimate to outline the strategies and outcomes of Sudan’s internal wars in a manner that provides a dynamic representation of these complex conflicts. The results are demonstrative of Sudan’s internal wars. The first section of this chapter provides a basic review of game theory and illustrates the detailed application of processes involved. A second section then offers an expanded model of “nested games” which better illuminates the specific characteristics of internal wars. A final third section applies those methods specifically to the conflicts in the North-South divide and Darfur. In bridging a theoretic gap between qualitative and quantitative analysis, this chapter then introduces Chapter V, which in assessing the insurgent networks themselves, provides additional quantified measures for how the games of this chapter play out in reality.

1. Game Theory

Decisions made in conflict are a combination of individual preferences and the assessed actions of opponents. It represents an inherently competitive process in which “[s]trategic thinking is the art of outdoing an adversary, knowing that the adversary is

¹³⁹ Reno, *Warlord Politics and African States*, 29.

trying to do the same to you.”¹⁴⁰ Game theory is a scientific method applied to this art; the possible strategies of opposing players are “gamed” to provide a set of possible and likely outcomes. Assessing conflicts in this manner has several advantages. First, it allows for the derivation of each side’s preferences within an internal war. The extent to which these literally “conflict” with each other can illuminate the rationale behind internal warfare. Second, game theory assumes the actors on each side are also aware of the opposing side’s preferences; in short, what one side does, it does so in anticipation of the opponent’s actions. Outcomes are achieved by the convergence of actions undertaken by each side, while those actions are in turn taken in view of an expected outcome. This apparent tautology is offset by the existence of multiple games and iterative outcomes. The value of the outcomes and chosen strategies accorded to each player also affect the nature of the game itself. A purely static conflict setting, where strategies and outcomes are foregone conclusions, is unrealistic. A more likely setting is one in which player preferences and options are inherently dynamic and reflect the underlying context and conditions of the situation. Still, the underlying framework within which these interactions take place can be held constant; game theory thus provides a useful lens for the analysis of internal wars.

The first step in establishing a game theory matrix involves the identification of opposing parties, termed “players.” Any given conflict will have a minimum of two opponents, determined either by using combating individuals as the level of analysis, or, alternatively, aggregating opposing factions into single actors. The second step then involves determining the strategies each player employs to conduct the game. There are again a minimum of two strategies per player; each player can either “cooperate” to achieve a bilateral outcome, or “defect” in the pursuit of a unilateral objective. The interaction of two players each with two strategies yields four possible outcomes to the conflict.¹⁴¹ These outcomes provide an expected utility to the players, a set of values

¹⁴⁰ Avinash K. Dixit and Barry J. Nalebuff, *Thinking Strategically: The Competitive Edge in Business, Politics, and Everyday Life* (New York, W. W. Norton & Company, 1991): 1. The book introduces the reader to game theory through the use of demonstrative examples of conflict in everyday life.

¹⁴¹ This assumes a “one-shot” or single iteration of the game. Players may also accord strategies and expected utilities in one game based on future iterations of the same conflict. See also Robert Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984).

which may be defined in a cardinal manner (i.e., quantitatively, by using a common value basis such as monetary amounts), or assessed by an ordinal scale (i.e., by priority, where preferences are ordered according to desirability and with no measured interval). The examination of these outcomes and their relationships to the players provides a comprehensive picture of how the conflict is conducted. The generic frame of that picture is illustrated in Table 3 below, in which competition between Players A and B results in a distinct set of outcomes that can be further qualified.

		Player B	
		Cooperate	Defect
Player A	Cooperate	R_1, R_2	S_1, T_2
	Defect	T_1, S_2	P_1, P_2

T = Temptation Payoff (i.e. unilateral defection)
R = Reward Payoff (i.e. multilateral cooperation)
P = Punishment Payoff (i.e. multilateral defection)
S = Sucker Payoff (i.e. unilateral cooperation)

Table 3. Generic Game Matrix ¹⁴²

The above matrix provides a standard structure for a game of two opponents with two strategies each (again, the minimum requirements). Additional strategies may exist, and these can be incorporated into the same matrix structure through the inclusion of additional rows, columns, and associated payoffs. As shown in Table 3, each payoff has

¹⁴² The generic framework depicted here is commonly accepted in game theory literature. Given the adapted “nested games” framework to be presented later in this chapter, Section B, for the sake of continuity it is here derived from George Tsebelis, *Nested Games: Rational Choice in Comparative Politics* (Berkeley, CA: University of California Press, 1990), Table 3.1, 61.

a unique quality for each player. The *Temptation payoff* reflects the attraction of acting unilaterally to achieve an outcome where the opponent is attempting to cooperate. The opponent in that case receives a *Sucker payoff* from cooperating while the other player is defecting. Mutual cooperation yields *Reward payoffs*, while mutual defection results in *Punishment payoffs*. The terminology applied to these values is somewhat biased in assuming a combating relationship between opponents, but then again that is the underlying premise of competition. What is objectively important is the relationship between payoffs, which in turn allows for a graphic representation of the conflict. For example, if $T_i > R_i > P_i > S_i$, a distinct set of four outcome points results. By applying those points to a graphic framework as illustrated in Figure 8 below, the underlying characteristics of a conflict become increasingly self-evident to the observer.

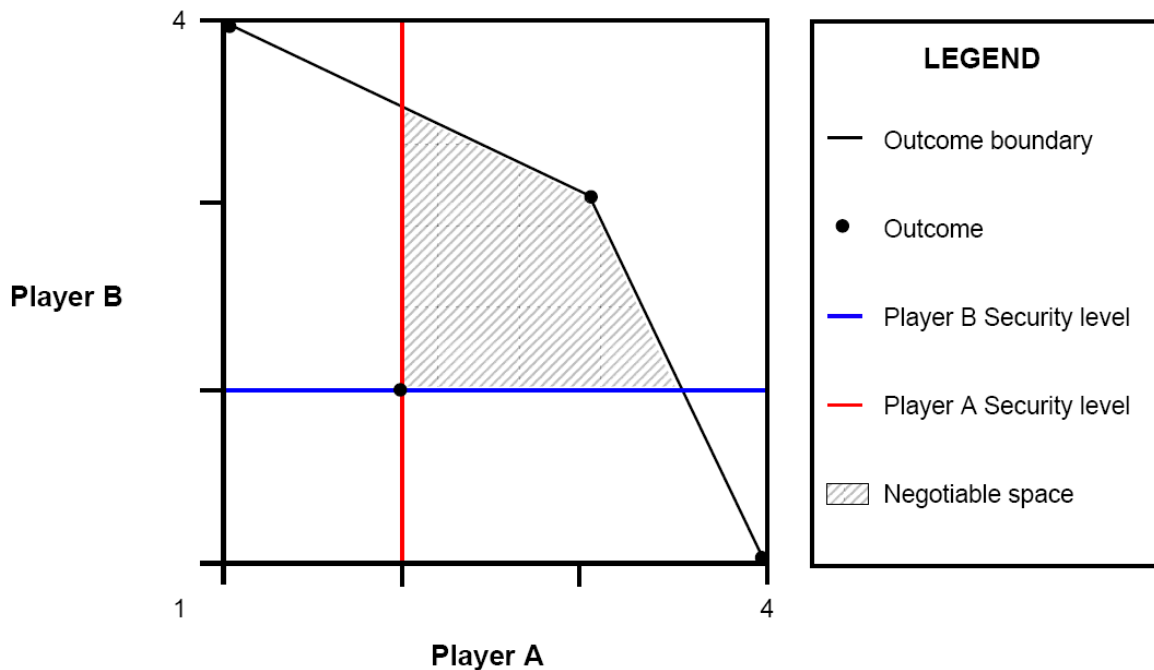


Figure 8. Generic Graphic Game Framework

Figure 8 visually illustrates the feasible outcome set of values accorded to Table 3 within the rules: $T_i > R_i > P_i > S_i$.¹⁴³ According each *outcome* a value of one to four for each player along their respective axes (*x*-axis for Player A and *y*-axis for Player B), four points depict the limits of the contested space. While all possible outcomes are assumed to provide a positive result to one or both players, only outcomes within the pareto-optimal *outcome boundary* are in fact achievable. For example, in Figure 8, both players cannot achieve a (4, 4), the upper-right limit of the game quadrant. For both sides to “win,” concessions must be made. In the game, as in reality, there are trade-offs inherent in a bilateral outcomes of competition. Each player also has a *security level*; that value achievable by unilateral strategy implementation regardless of what the opponents action. Anything less than that level is non-negotiable, no player will bargain over something achievable on one’s own. As illustrated above, any values in excess of the security levels define the *negotiable space* of the game. Here, a mutually beneficial outcome may be achieved that exceeds the likely payoffs of non-cooperative behavior.¹⁴⁴

Contrasting what can be achieved unilaterally and cooperatively assumes that the game is in fact solvable. Game theory is inherently married to the assumptions of rational-choice theory: actors or groups, when considered as unitary (or monolithic) players, are assumed to calculate and act in a manner that best serves their interests. This is the fundamental proposition of rational-actor models in international relations. It also underlies the expected-utility principle, a rule-concept which posits that “actors aim to maximize their expected utility by weighting the utility of each possible outcome of a given course of action by the probability of its occurrence, summing over all possible outcomes for each strategy, and selecting that strategy with the highest expected

¹⁴³ This rule set defines a “Prisoner’s Dilemma,” a game in which a mutually beneficial cooperative outcome is precluded by the tendency of both players to resort to a unilateral defection strategy. The result is the suboptimal outcome in which both players defect. See Dixit and Nalebuff, *Thinking Strategically*, 12-14. This game is commonly used to explain a Cold War arms-race analogy, where the risk of disarming under threat of an armed foe ends with both sides escalating their weapon inventories.

¹⁴⁴ Conversely, it is unrealistic to expect each side to negotiate over something it can readily achieve on its own. Thus, a negotiated outcome is one that inherently exceeds the unilateral capabilities of each player, while apportioning to each side the extent of all that can be feasibly gained. See also, Gordon H. McCormick and Guillermo Owen, “Factionalism, Violence, and Bargaining in Civil Wars,” *Homo Oeconomicus* XX, no. 4, (Munich: ACCEDO, 2004): 372.

utility.”¹⁴⁵ Such a set of assumptions incurs several limitations. Previously introduced in Chapter II, the limitations of a rational-choice approach are now discussed as they apply to game theory.

2. Limitations of Rational-Choice in Game Theory

Game theory assumes that players act with the full knowledge of both the strategic options and assessed outcome-utilities of their opponents. Bounded rationality theorists find that premise to be problematic in two ways. First, people “never have complete knowledge of everything they need to know to behave truly optimally, and few decision makers have the computational ability required to maximize complicated objective functions”; second, “when individuals know they are dealing with other individuals, they become ‘other regarding’ and consider their partner’s intent and the fairness of the transaction.”¹⁴⁶ Not only do individuals have trouble objectively assessing their own preferences; they are also likely to incorrectly assess and confuse their opponents’ preferences. Further complicating these issues is the notion of expected versus actual utility. As highlighted in Chapter II, popular preferences are based not simply on immediate gains, but instead on expected outcomes derived from a projected point in the future. It is exceedingly difficult, if not impossible, to give these expectations a quantified value. In applying game theoretic analysis to internal wars, initial iterations should justifiably use ordinal values in calculating game utilities, thus “bounding” rather than quantifying the payoffs incurred by each player.

The arguments of bounded rationality theorists identify a shortfall of game theory yet they do not invalidate the illustrative gains offered by a game-theoretic assessment of internal wars. Key to such an accepted relevance is the notion that iterative applications of the game, both in reality and analysis, will produce trend information that can be used to resolve inadequacies of the construct. As iterative games are played, learning occurs on the part of both player and observer as both sides refine their strategies and options

¹⁴⁵ Jack S. Levy, “Loss Aversion, Framing, and Bargaining: The Implications of Prospect Theory for International Conflict,” *International Political Science Review* 17, no. 2 (April, 1996): 180.

¹⁴⁶ Lawrence A. Kuznar, “Rationality Wars and the War on Terror: Explaining Terrorism and Social Unrest,” *American Anthropologist* 109, no. 2 (2007): 320.

based on experience. That gained knowledge may be reintegrated into future iterations of this thesis' overall analytic construct, the ASC.¹⁴⁷

Prospect theory, also addressing the limitation of assigned utilities, presents an alternative lens through which to evaluate popular choice. Prospect theorists argue that “people distort probabilities, that people feel the disutility of loss more than the utility of gain, and that decisions can be strongly influenced by the manner in which a problem is framed.”¹⁴⁸ Also referred to as “loss aversion,” prospect theory argues that not only are expected outcomes important, it is the expectation of losses or gains that asymmetrically drives people and groups to avoid the former. Prospect theory comes at the limitations of game theory from an opposite angle. Where game theory postulates a set of underlying assumptions of rational behavior, prospect theory is instead derived from the observed actions of individuals: “Unlike expected-utility theory, which is built on axiomatic functions, prospect theory is inductive in its origins.”¹⁴⁹

Prospect theory's critique of the rational-choice tenets underlying game-theory revolves around the definition of value as a conditional rather than subjective variable:

Value, or utility, functions are not necessarily private valuations over a good but, rather, are fundamentally conditioned in relation to the social environment, such as the distribution of wealth in a community. This represents a shift from purely private and subjective individual utility functions to an understanding of utility that emerges from social organization.¹⁵⁰

The premise of prospect theory thus allows for the joining of individual and group levels of analysis in defining opposing sides of the games played in this chapter. For example, the utilities of individual insurgents are a reflection and influence of the insurgency as a whole, while the same relationship characterizes “the government” as being composed of

¹⁴⁷ Axelrod, *The Evolution of Cooperation*.

¹⁴⁸ Kuznar, “Rationality Wars and the War on Terror,” 320.

¹⁴⁹ Jack S. Levy, “Applications of Prospect Theory to Political Science,” *Synthese* 135 (2003): 216.

¹⁵⁰ Kuznar, “Rationality Wars and the War on Terror,” 321. Such a characterization forms the basis for *sigmoid-utility theory*, in which the social status of an individual has specific implications for their choice-making process. See also Milton Friedman and Leonard J. Savage, “The Utility Analysis of Choice Involving Risk,” *Journal of Political Economy* 4 (1948): 279-304.

several sub-actors. Though factions within each side will have disparate interests, at the very least “each individual player’s utility . . . depends only on the share of the pie (or policy value) that is obtained by his or her organization.”¹⁵¹ Internal wars inherently reflect a popular socialization of “us versus them.” In producing collective action, it is the portrayal of an antagonistic “them” that can allow for the consolidation of “us.”

The social aggregation of popular preferences can be addressed in a game theoretic assessment of internal wars through the incorporation of a simple perceptual assumption: “The notion that the primary carriers of value are changes in assets rather than net asset positions is the central analytic assumption of prospect theory.”¹⁵² This identifies the importance of relative rather than quantified values assigned to opposing sides. Here, the representation of a reference point, the status quo, is crucial in achieving a sustainable assessment. “Expectation levels, aspiration levels, social norms, social comparisons, and recent losses can also influence the location of an actor’s reference point.”¹⁵³ Each side may also have different reference points leading to simultaneous perceptions of a defensive posture. “Because each side will see itself as defending the status quo, it will therefore have strong incentives to stand firm and—believing the adversary sees the situation as the state does—will expect the other side to retreat.”¹⁵⁴ The “irrational” behavior of one player may simply be a perceived reflection of the other.

Prospect theory thus offers several generalizations that may be applied to a game theoretic analysis of internal wars: First, “coercion can more easily maintain the status quo than alter it,” an argument that sustains an assumption previously identified by bounded-rationality theorists, namely that both actors (and sets of actors), are clearly aware of who the attacker is and who the defender is. This leads to a second implication:

¹⁵¹ McCormick and Owen, “Factionalism, Violence, and Bargaining in Civil Wars,” 369.

¹⁵² Levy, “Loss Aversion, Framing, and Bargaining,” 181.

¹⁵³ Levy, “Applications of Prospect Theory to Political Science,” 218. The author also cites a study that analyzed a set of 18 American military interventions in which the U.S. President publicly characterized the operations as either “promotive” or “protective” of American interests. Resultant increases in presidential popularity were six percentage points greater for interventions framed as protective (i.e. loss-averse) than those framed as promotive (p. 226).

¹⁵⁴ Robert Jervis, “Political Implications of Loss Aversion,” *Political Psychology* 13, no. 2, Special Issue: Prospect Theory and Political Psychology (June, 1992): 197.

“Conflicts and wars are more likely when each side believes it is defending the status quo.”¹⁵⁵ In an example relevant to Sudan, the government’s continued use of violence in both Darfur and the North-South divide is therefore not necessarily suboptimal.

States should be more often pushed into war by the fear that the alternative to fighting is a serious deterioration in their position than pulled in by the belief that war can improve the situation that is already satisfactory. . . . [E]ven if it leaves a great deal to be desired, the status quo is at least tolerable in the sense that the state is willing to live with it rather than running the risk of suffering the greater losses than a war might bring.¹⁵⁶

The application of prospect theory in correcting for the assumptions of rational-choice in game theory is most appropriate in qualifying the results of a “solved” game. As an inductive approach, prospect theory alone cannot offer a structure or frame for correcting game utilities, while it does provide limited justification in using aggregate players to represent opposing factions in an internal war. Prospect theory remains “a theory of individual choice under conditions of risk, not a general theory of politics.”¹⁵⁷ Still, when the theory’s individual assumptions are incorporated into a game theory analysis of internal wars, the tenets of prospect theory shed light on some of the underlying facets contributing to protracted and entrenched domestic conflict in Sudan.

B. MULTI-LEVELS AND “NESTED GAMES”

While concepts of interactive behavior are fundamental to international relations theory, less attention has been given to issues of intra-national or internal conflict. Robert Putnam has noted that, when applied to complex domestic dynamics, the formalized “rules” of nation-state behavior oftentimes seem inappropriate.¹⁵⁸ In internal wars in particular, insurgents and rebels, as well as the regimes they oppose, may appear to act in an irrational manner, thereby obscuring a clear intent on the part of the belligerents. An objective analysis of internal wars requires a familiarity with context

¹⁵⁵ Jervis, “Political Implications of Loss Aversion,” 192.

¹⁵⁶ Jervis, “Political Implications of Loss Aversion,” 193, 194.

¹⁵⁷ Levy, “Applications of Prospect Theory to Political Science,” 233.

¹⁵⁸ Robert D. Putnam, “Diplomacy and Domestic Politics: The Logic of Two-Level Games,” *International Organization*, 42, no. 3 (Summer, 1988): 427-460.

and history as provided in Chapter II. Game theory now provides an analytic framework to “measure” the sides of Sudan’s internal wars. Rather than quantify the individual capabilities of each side, it is just as important to understand the relationships between them. Game theoretic analysis examines when cooperative or unilateral behavior is likely to occur.¹⁵⁹ Yet how does one determine exactly which game is being played?

Game theory postulates opposing unitary actors. The previous section identified how rational-choice theory, as an underlying tenet of game-theoretic applications, oftentimes fails to account for the apparent suboptimal choices of political actors.¹⁶⁰ Where Putnam applies game theory’s principles in his discussion of a “two-level” game in interstate politics, George Tsebelis further refines the concept of multi-level games in *Nested Games: Rational Choice in Comparative Politics*. Tsebelis argues that the suboptimal choices political actors make are not irrational, but instead are only *apparently* suboptimal. It is actually not the actor that is mistaken, but rather the observer; the outside perspective of the conflict is incomplete. While the exterior focus is only on one game, the actors are actually involved in a network of “nested games.”¹⁶¹ Nested games include those where actors involved in a game readily apparent to an outside observer are themselves constrained by the outcomes and strategies of other sub-level games. Thus, the preferences in the observable game actually reflect the constraints of other games. This may result in an apparently suboptimal course of action that in fact reflects the most appropriate strategy in relation to a set of underlying (and perhaps hidden) conditions that affect the decision-maker. An apparently irrational action at one level may actually be dictated by the limitations and outcomes of another level altogether.

¹⁵⁹ Of several sources that derive connections between dynamics of cooperative behavior and game theory, illustrative is Robert Axelrod, *The Evolution of Cooperation*. For specific correlations between rational-choice theory and games across multiple levels of analysis, see Tsebelis, *Nested Games*, and Elinor Ostrom, “Review: Rational Choice Theory and Institutional Analysis: Toward Complementarity,” *American Political Science Review* 85, no. 1 (March, 1991): 237-243.

¹⁶⁰ For an initial comparison of the works cited in this paper and their contemporary literature, see Elinor Ostrom, “Review: Rational Choice Theory and Institutional Analysis: Toward Complementarity.”

¹⁶¹ Tsebelis, *Nested Games*, 7.

1. Games of Institutional Design

Tsebelis identifies two possible types of nested games. Both types explain suboptimal actor choices by providing a framework within which the influences of other game-levels affect what is being done in the observed game. In the first game-type of “institutional design,” the actor’s suboptimal choice is in fact an innovative step to expand the realm of available options for both players.¹⁶² Institutional design involves an attempt to change the rules of the game (i.e., an insurgent faction may sue for peace to its disadvantage because doing so allows it to gain a legitimate seat in a higher political game). A game of institutional design may enlarge the strategy space under contention; the change in rules directly influences that which is being fought over, thereby creating negotiable outcomes that did not previously exist.

Tsebelis’ second nested game-type is one of “multiple arenas,” in which the actor’s suboptimal choice in the principal arena, as viewed by an observer, is influenced by constrained outcomes in other arenas. For example, an insurgent group may elect not to sign a favorable peace-agreement because dominant factions within the group stand to gain from continued conflict.¹⁶³ The outcomes in such a game remain the same; instead the value of outcomes changes: “Games in multiple arenas have variable payoffs, and the variations of the payoffs in games in which contingent strategies are permitted produce the same outcomes *regardless of the nature of the game*; the outcomes depend only on the size of the payoffs” (emphasis in source).¹⁶⁴ Taken in sum, these two game-types exhaust the choices available to each player in that actors optimize their goals either by changing their methods or by changing the political setting that defines the conflict.¹⁶⁵

¹⁶² Tsebelis, *Nested Games*, 8. The author uses the term “institution” to refer to the “formal rules of a recurring political or social game” (p. 94). Hence the term institutional design instead of institutional game.

¹⁶³ McCormick and Owen, “Factionalism, Violence, and Bargaining in Civil Wars,” 366-7.

¹⁶⁴ Tsebelis, *Nested Games*, 72. In contrast to a game in institutional design, in a game of multiple arenas the contested space remains of equal size; it is a shift in the payoff structure that results in a distinct advantage for one side or another.

¹⁶⁵ Tsebelis, *Nested Games*, Chapter 4, 92-118. Tsebelis introduces the two nested games in the opposite order. The order is reversed here to better align with the pending illustration of Sudan’s North-South divide and Darfur within the context of these games. For additional examples, see also George Tsebelis, “Nested Games: The Cohesion of French Electoral Coalitions,” *British Journal of Political Science* 18, no. 2 (1988): 145-170.

If the only variants are the payoffs and strategies used to produce outcomes, there should be an underlying game structure that holds constant across multiple-levels of nested games. Within the generic game theory framework depicted in Table 3 (page 66), an internal war of institutional design retains the strategic options of “cooperate” and “defect” while including a third option that expands the feasible set of outcomes.

		Government		
		Cooperate	Co-opt	Defect
Insurgency	Cooperate	R_1, R_2	E_1, E_2	S_1, T_2
	Defect	T_1, S_2	U_1, U_2	P_1, P_2

U = *Undermining* Payoff destabilizing the payoffs of unilateral defection for both players

E = *Engagement* Payoff stabilizing the payoffs of conditional cooperation for both players

Where: $T_1 > U_1 > E_1 > R_1 > S_1 > P_1$
 $P_2 > E_2 > U_2 > T_2 > R_2 > S_2$

Table 4. An Internal War of Institutional Design

A nested game of institutional design as applied to internal wars is illustrated in Table 4 above. One of the players in this game, the “Government,” has adopted a third strategy that allows for an expansion of the feasible outcome set. This expansion is made possible by a prescribed allocation of payoff values as defined at the bottom of the table. A “Co-opt” strategy refers to one in which advantageous payoffs are provided to both players that though not maximized overall are still preferable to those of unilateral action. In effect, where a cooperative outcome was once not practicable, a strategy of *Cooperate/Co-opt* makes a similar result, an *Engagement Payoff*, possible. The defection tendency is mitigated by the outcome of *Defect/Co-opt*, which incurs an *Undermining Payoff* that when taken to a stable outcome is less preferable to both sides.

Table 4 reflects only one of many possible iterations of institutional design in game theory.¹⁶⁶ There may be additional strategies utilized by one or both players, but in the end they are structured to achieve the same effect: an outcome set that was previously non-advantageous to both parties has been expanded to allow additional benefits for both. The game of institutional design as presented here contrasts with an alternative game of multiple arenas, in which the size of the outcome set remains relatively constant but its distribution is skewed in favor of one of the two antagonists. A game of multiple arenas represents a unilateral move to reinforce or improve a status quo position on the part of one of the competitors in a given conflict.

2. Games in Multiple Arenas

A game of multiple arenas allows an external perspective that includes analytic corrections for sub-level games in which the payoffs of “opposing” partners are internally influenced. To maintain continuity between frameworks, the strategic options of “cooperate” and “defect” are retained, as is the added third strategy of “co-opt.” The co-opt strategy now has a different connotation. In the game of institutional design it reflected an effort to engage the opposition in expanding the possible outcome set and thus benefit both players. In a game of multiple arenas, co-option involves the solidifying of one player’s bargaining position through the internal coalescing of factional components. How a side is unified, or how the dissenting voices of an organization are addressed internally, creates distinct implications for both that player and the opposition.¹⁶⁷ Once again characteristic of nested games in general, it may be the external implications rather than the internal actions that are apparent outside observer. In another expansion of the generic framework depicted in Table 3 (page 66) a game representation of an internal war of multiple arenas is depicted below in Table 5.

¹⁶⁶ Tsebelis considers these two structures “mutually exclusive and collectively exhaustive classes of nested games,” *Nested Games*, 93. Though such an assertion is admittedly overstated, it in no way discredits the application of nested games in a study of internal wars.

¹⁶⁷ The effect of factionalism on both government and insurgent actors, as introduced in Chapter II, will be further applied to Sudan’s insurgencies in Chapter V, and is discussed in relation to Sudan’s internal games in section C of this chapter. For an academic discussion of factionalism’s effects on heterogeneous bargaining in internal wars, see McCormick and Owen, “Factionalism, Violence, and Bargaining in Civil Wars.”

		Government		
		Cooperate	Co-opt	Defect
Insurgency	Cooperate	R_1, R_2	U_1, E_1	S_1, T_2
	Defect	T_1, S_2	U_2, E_2	P_1, P_2

U = *Undermining* payoff minimizing the payoffs to the insurgents

E = *Engagement* payoff maximizing the unilateral payoffs to the government

Where: $T_1 > P_1 > R_1 > S_1 > U_2 > U_1$
 $E_1 > R_2 > T_2 > E_2 > P_2 > S_2$

Table 5. An Internal War of Multiple Arenas

Table 5 applies a framework of multiple arenas to a game of internal wars. Again, the government has adopted a third strategy that affects the game. The co-opt strategy does not expand or redefine the outcome set. Rather, it now allows for the government to increase the payoffs achieved by unilateral action. Where a defect strategy previously did not result in a clear advantage, co-option now allows the government to solidify its own position (via *Engagement payoffs*), while degrading the options of the insurgency (the *Undermining payoffs*). A game of multiple arenas benefits the payoffs of one actor, harms those of the other, and the outcomes remain the same.

C. GAMING SUDAN'S INTERNAL WARS

The first section of this chapter proposed the applicability of game theory in analyzing internal wars. The second section further developed existing academic endeavors to create an expanded set of game matrices by which internal wars may be examined. The final section of this chapter will apply the game frameworks of

institutional design and multiple arenas to case studies of conflict in Sudan.¹⁶⁸ Specifically, the opposing sides of the divide between northern and Southern Sudan will be examined within the institutional design framework, while the escalating conflict in Darfur will be analyzed from a perspective of multiple arenas. The selection of these two cases is based upon an apparent paradox of Sudan's internal wars, alluded to by the lessons learned from this thesis' QSE (Chapter II) and the introduction to this chapter. In the North-South divide, a peace agreement has been signed, the CPA, while each side's desire for unilateral sovereignty would appear to preclude a negotiated outcome. Thus it seems that the contested space has been expanded to allow for the reconciliation of both parties, a case of institutional design. In Darfur, a peace agreement, the DPA, has failed though the conflict appears reconcilable. This suggests that one or both actors in Darfur have employed strategic options to alter the payoffs of the game while remaining within the same contested space: a game of multiple arenas.¹⁶⁹

Each case study follows a simple progression. First, the context of the case study is reintroduced along the lines of information already gleaned from the situation estimate. The opposing actors are in each case defined as the "Insurgency" and the "Government." In the case of the North-South divide, the insurgents are primarily represented by the SPLM/A, while in Darfur a compilation of SLA, JEM, and factional actors comprise the insurgency. The government is the same de facto sovereign authority in both cases, though it may have distinct preferences in each situation. The second step of the progression involves the allocation of preferences. Each actor is accorded a priority of outcomes on an ordinal scale of 1-4 or 1-6 depending on the number of outcomes. Again, the value assigned to each outcome is based on information from the historical record, public statements made by the actors involved, and the official language of both the CPA

¹⁶⁸ Precedent for the application of nested games in analyzing internal wars exists in academic literature. Christopher Coyne has used the correlated concepts of meta- and sub-level games in "Reconstructing Weak and Failed States: Foreign Intervention and the Nirvana Fallacy," *Foreign Policy Analysis*, no. 2 (2006):343-360. Coyne's analysis remains purely qualitative with no attempt to concretely game conflict in Somalia. The present study attempts to move beyond such an effort.

¹⁶⁹ These two case studies are not the only instances of intrastate conflict in Sudan. Rebel activity has also occurred in the Red Sea province and along the eastern borders with Eritrea and Chad. It would be overly ambitious to attempt to discuss all of these conflicts in one academic endeavor. Hence, they are mentioned here as a brief suggestion for possible future studies.

and DPA. In the third and final step of each case study, the results of the allocated strategies and preferences are gamed to produce specific results. These are presented in both matrix and graphical formats to better underscore their analytic relevance.

1. Institutional Design in the North-South Divide

Over a half century of conflict in Southern Sudan has been primarily about autonomy. Southern opposition groups have repeatedly claimed a right to self-determination and independence, while successive regimes in Khartoum have asserted their sovereignty over the south.¹⁷⁰ From the perspective of an outside observer, one could argue that conflict in the North-South divide has occurred over issues in which resolution involves the unilateral victory of one party or the other; a conflict in which only one side can “win.” In view of the apparent zero and total-sum conflict between opposing sides, how is it that the Comprehensive Peace Agreement (CPA) exists? And, perhaps more importantly, from an engaged policy perspective of the international community, what are the actual and future expressions of the CPA likely to entail?

The entrenched imbalance in development and population demographics between northern and Southern Sudan predates independence. From the outset of Sudan’s independence, the “Khartoum, Northern and Kassala provinces were collectively obtaining approximately eight times as much private, governmental and public corporation investment as the three southern provinces.”¹⁷¹ Furthermore, in the absence of “coherent political organizations through which southern interests could be articulated and defended, the views of southerners could easily be disregarded (or deliberately overlooked) by the northern political elite.”¹⁷² Polarization between north and south continued under civilian government from 1956-1969. In February 1972, after years of civil war, a peace agreement incorporated the Regional Self-Government Act for the Southern Provinces, based on an underlying principle that the “Sudan could remain one

¹⁷⁰ Southern Sudan Civil Society, *The Constitution of Southern Sudan: Draft Constitution Framework Text*, proposal presented in Nairobi, Kenya, February, 2005.

¹⁷¹ Niblock, *Class and Power in Sudan*, 144. These statistics reflect the 1955/56 fiscal year. A detailed chronology and analysis of the transition to Sudanese independence can be found in Woodward, *Condominium and Sudanese Nationalism*.

¹⁷² Niblock, *Class and Power in Sudan*, 212.

country only if the multiplicity of its peoples was recognized and used as the basis on which to build [a] political system.”¹⁷³ To the extent a national Sudanese identity existed in the decade of tenuous peace that followed, authoritarian rule under the Nimiery regime brought with it a distinct pan-Arabic flavoring that worked to the further exclusion of the predominantly Christian and Animist Southern Sudanese populace. With the discovery of potential oil resources in the south in the late 1970s, the regime reversed its previous policy and in 1983 abrogated the Addis Ababa accords. “It was ironic that Numairi, who engineered a reconciliation based on respect for the diversity of the Sudanese peoples, later espoused a hegemonic religious formula that contradicted those tenets and deepened divisions during the renewed civil war.”¹⁷⁴ Those divisions persist today. Political marginalization of the south remains in the interest of the central regime in Khartoum.

The dispute over oil interests in the south also exacerbates political tensions. The current al-Bashir regime has maintained a monopoly on both the refinement and transportation of oil through a single pipeline to Port Sudan on the Red Sea. Exploitation of oil resources has occurred primarily in south-central Sudan, despite the projection of larger reserves in other regions of the country. The preeminent international actor in Sudan’s oil industry is also a major arms supplier to the regime, China.¹⁷⁵ Chinese interests have allowed for significant development and growth in Sudan’s oil revenues and industrial infrastructure. What is more ambiguous is the extent to which these improvements have been distributed throughout the population or are maintained within the hands of a privileged elite. In addition to political marginalization, resource allocation and economic constraints remain contentious issues in the North-South divide.

Despite the complexities of the issues involved, the opposing sides in the North-South divide can be broadly separated into the signatories of the Comprehensive Peace Agreement. These include the Government of Sudan, recently renamed the Government of National Unity, or GNU, and the Sudan People Liberation Movement/Army

¹⁷³ Lesch, *The Sudan*, 51.

¹⁷⁴ Lesch, *The Sudan*, 52.

¹⁷⁵ Anonymous, “Sudan,” *Oxford Economic Country Briefings*, February 28, 2007; ABI/INFORM Global. In 2005, China received 65.2% of Sudan’s export goods, primarily oil.

(SPLM/A). Since coming to power in 1989, the regime in Khartoum has faced three possible outcomes to conflict in the south: a fully united republic, a federally-autonomous south, or a completely independent south (see also Table 2, page 50). Several steps reflected in the CPA, to include the establishment of self-governing provinces “in the hope of erasing the rigid north-south demographic division,” suggest Khartoum might allow a moderated implementation of the second outcome.¹⁷⁶ The southern leadership, cognizant of its precarious geographic location, might entertain such an outcome were it not for Khartoum’s continued imposition of *Shari’a* law and an accompanying intolerance of non-Muslim religious practices. Opposition to Islamic influence has long underpinned the secessionist movement in the south, despite a lack of southern internal unity compounded by SPLA schisms and tribal differences.¹⁷⁷ This lack of cohesion can also be said to characterize the interim Government of Southern Sudan, composed largely of SPLM/A members, and united solely on the basis of opposition to the North.

The preceding contextual background can be reduced to an objective set of priorities. Having elected to examine conflict within the North-South divide as an expression of a game of institutional design, at least six distinct outcomes are possible. These are achieved based on the interaction of insurgency strategies of cooperation and defection, and government strategies of cooperation, co-option, and defection. The strategic approaches rest upon each player’s penultimate desire for sovereignty. Each player is assigned the basic strategies of game-theory, to either cooperate toward a bilateral solution, or defect toward a unilaterally beneficial outcome. For the insurgency, a cooperative strategy correlates to one in which the GoSS works with both legitimate and subversive methods to secure political representation for Southern Sudan. The defection strategy reflects open and armed conflict in opposition to the north and in an endeavor to achieve southern independence. For the centralized government, the cooperative strategy involves a negotiated outcome with southern factions toward a compromise that decreases northern claims to sovereignty over the south. The defection

¹⁷⁶ Edgar O’Balance, *Sudan, Civil War and Terrorism, 1956-99*, 3. Successive Sudanese regimes have repeatedly suggested the possibility of a semi-autonomous or federated Southern Sudan.

¹⁷⁷ O’Balance, *Sudan, Civil War and Terrorism, 1956-99*, 203-206.

strategy entails continued armed opposition against the insurgency. A third co-option strategy involves selective negotiation with key members of GoSS-leadership allowing for the exploitation of resources in Southern Sudan while awarding side-payments and political positions to insurgent leadership.¹⁷⁸ These strategies are summarized in Table 6.

OUTCOME	INSURGENCY	GOVERNMENT	RATIONALE
COOPERATE COOPERATE	(3) POST-2005 (3) PRE-2005	(2) POST-2005 (2) PRE-2005	INS – The INS barter for sovereignty = peace agreement GOV – The GOV accedes some demands = loss of resources
COOPERATE CO-OPT	(4) POST-2005 NA PRE-2005	(5) POST-2005 NA PRE-2005	INS – The INS accedes GNU legitimacy = peace agreement GOV – The GOV allows INS representation in GNU = peace
COOPERATE DEFECT	(2) POST-2005 (2) PRE-2005	(3) POST-2005 (3) PRE-2005	INS – The INS vies for peace; faces attrition = a slow demise GOV – The GOV eliminates “criminals” = a “police action”
DEFECT COOPERATE	(6) POST-2005 (4) PRE-2005	(1) POST-2005 (1) PRE-2005	INS – The INS has force adv. & control = self-determination GOV – The GOV has no ctrl. or forces in area = absenteeism
DEFECT CO-OPT	(5) POST-2005 NA PRE-2005	(4) POST-2005 NA PRE-2005	INS – The INS fights GNU’s joint forces = formal lawlessness GOV – The GOV faces divide loyalties = ham-strung politics
DEFECT DEFECT	(1) POST-2005 (1) PRE-2005	(6) POST-2005 (4) PRE-2005	INS – The INS openly fights armed units = conventional loss GOV – The GOV openly fights the rebels = conventional win
NOTES: Ordinal values are accorded players for each outcome by the following scale: 1-4 (Pre-2005) and 1-6 (Post-2005). Lower values are worse than higher values and vice-versa. All outcomes are assumed to provide at least a positive value to each player.			

Table 6. Preferences in Sudan's North-South Divide

To illustrate the dynamic shift in conflict characteristics, player preferences prior to the CPA (2005) are initially scaled from one to four without including the co-option strategy. Post-CPA player preferences are also prioritized and distributed in an ordinal manner, this time in whole integer intervals from one to six. The resultant two-by-three game illustrates an application of a nested game of institutional design, in which the

¹⁷⁸ See Lupai, “South Sudan needs strong leadership,” and Urban T. Kir, “Zigzagging Paths to the Precipitating Demise of CPA and the Post 2011 Era of Armed Struggles in South Sudan.”

government has adopted a third strategy since the CPA that in essence amounts to the co-option of a select leadership within the opposition (see Table 7 below).

		Government		
		Cooperate	Co-opt	Defect
Insurgency	Cooperate	(3, 2)	(4, 5)	(2, 3)
	Defect	(6, 1)	(5, 4)	(1, 6)

U = *Undermining* Payoff destabilizing the payoffs of unilateral defection for both players

E = *Engagement* Payoff stabilizing the payoffs of conditional cooperation for both players

Where: $T_1 > U_1 > E_1 > R_1 > S_1 > P_1$
 $P_2 > E_2 > U_2 > T_2 > R_2 > S_2$

Table 7. Institutional Design in Sudan's North-South Divide ¹⁷⁹

From the perspective of an outside observer, prior to the CPA the conflict in Southern Sudan appeared to be a zero-sum conflict where negotiation was impossible. Military action was unsuccessful in achieving a “winning” outcome for either side. From a political perspective, the interests of both sides appeared mutually exclusive. Yet politics rely upon a local context, and there are distinct expressions of factionalism that allow for player interaction on multiple levels. As demonstrated by its recent engagement policy toward the south, “the regime in Khartoum has succeeded to a large extent in co-opting and thus neutralizing many of the local tribal leaders because the

¹⁷⁹ This representation of a game matrix illustrates that while neither player has a dominant strategy, the government’s strategy of cooperation is dominated by any outcome achieved by the other two strategies. Though a Nash equilibrium (“fair” outcome) appears derivable by the computation of a strategy mix, the reader is reminded that no such value can be accurately derived in the absence of cardinal values.

latter lack their own economic resources to ensure their influence on their groups and had no other choices of political survival.”¹⁸⁰ This application of a divide-and-conquer approach may be occurring in several ways, of which the presented game illustrates one possibility. Using the model discussed thus far, one player, in this case the government, employs a third strategy by which structured mutual outcomes allowed for the partial satisfaction of preferences on both sides (a game of institutional design). This allows for an artificial expansion of the contested political space, sufficient to appease the required factional components of actors on each side. As depicted in Figure 9 below, the CPA then becomes possible in an environment that originally appeared non-negotiable. In this representation, pre-2005 outcomes remain on a scale of 1-4 (reference Figure 8, p. 67) while post-2005 outcomes are overlaid on the depicted scale of 1-6.

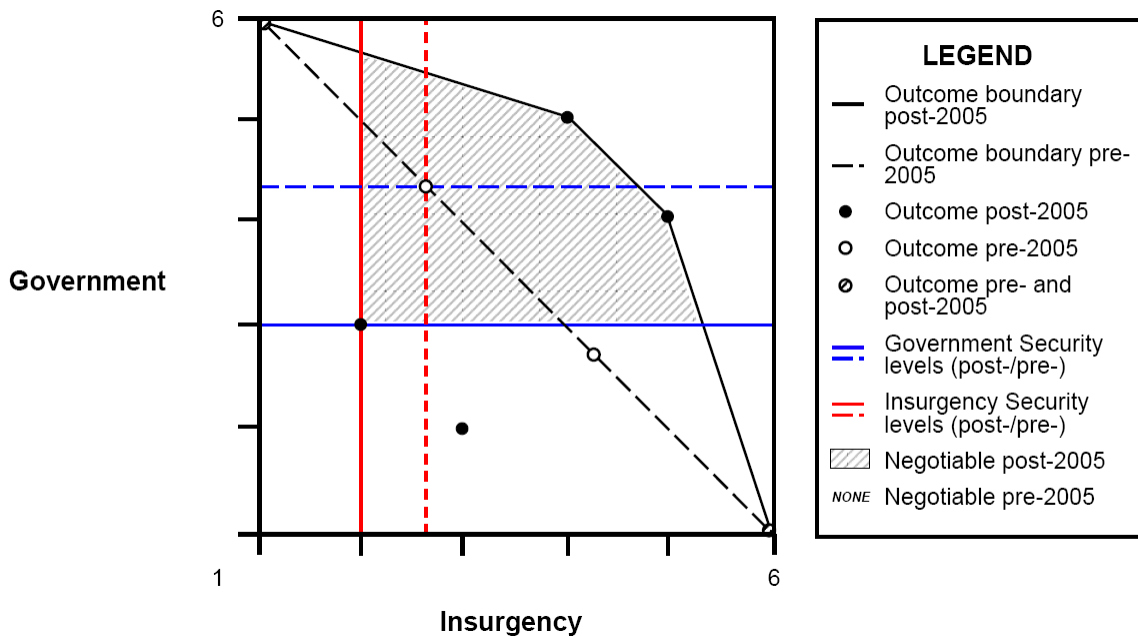


Figure 9. Institutional Design in Sudan's North-South Divide

It remains to be seen whether the engagement payoffs that comprise the expanded outcome boundary will remain stable throughout the interim period until the 2011

¹⁸⁰ Miller, “Power, Land and Ethnicity in the Kassala-Gedaref States,” 8.

referendum. The six protocols that comprise the CPA were signed by both the GoS and SPLM/A under mediation by the Intergovernmental Authority on Development (IGAD).¹⁸¹ The specific implementations of protocols on security, wealth, and power-sharing have thus far failed to materialize. SPLM/A soldiers, supposedly integrated into Joint Integrated Units (JIUs) of the GNU, are instead languishing in barracks outside of Khartoum. In November, 2006, “tensions between the former foes erupted into the heaviest fighting since the accord . . . killing 150 and injuring hundreds.”¹⁸² Though the “space” under contention has been expanded to satisfy elements on both sides, so far the implementation of the CPA appears to not reflect the geopolitical reality of the Sudan.

2. Multiple Arenas in Darfur

In contrast to the civil war in the south, the war in Darfur is not about independence, but rather about equality in representation within the national government of Sudan. The population in the Darfur region is predominantly Muslim. The northern part of the Darfur area is inhabited by camel-herding non-Arab and Arab tribes. The eastern and southern zones of Darfur are occupied primarily by the Arab tribes who subsist by herding cattle. The central zone mostly consists of non-Arab tribes who are sedentary farmers.¹⁸³ While the populations in the region have been popularly identified ethnically as African or Arab, in actuality, this ethnic identification is much more ambiguous. Years of socioeconomic cooperation and tribal intermarriage have blurred the actual delineations between ethnicities.¹⁸⁴

Historically, agrarian communities worked tracts of land at the base of the fertile Jebel Marra massif in the center of the Darfur region, while pastoralist tribes seasonally moved their herds throughout the region for grazing. These patterns of movement

¹⁸¹ Full-text access to the six protocols of the *Comprehensive Peace Agreement of The Sudan and The Sudan People's Liberation Movement/Sudan People's Liberation Army* is available online from the United Nations: <http://www.unmis.org/English/documents/cpa-en.pdf> (accessed August 13, 2007).

¹⁸² Skye Wheeler and Reuters News, “Sudan former north-south foes commit to joint forces,” *AlertNet.org*, January 23, 2007: <http://www.alertnet.org/thenews/newsdesk/L2328540.htm> (accessed August 13, 2007).

¹⁸³ Flint et al, *Darfur*.

¹⁸⁴ De Waal, “Who are the Darfurians,” 181-205.

fostered a social construct of interdependence that facilitated general stability in the region. This social construct was disrupted in the 1970s and 1980s as government-imposed reform measures exacerbated the effects of a period of widespread drought across northern Africa. The drought reduced the grazing land available to the pastoralists, in turn forcing them to move into areas occupied by sedentary farmers. This move increased the frequency of violent clashes between the two groups as they fought over land access and rights. Local leaders attempted to resolve these disputes through tribal channels, yet these had been greatly curtailed by the political agenda of the Nimiery regime. The situation rapidly outgrew the capability of traditional conflict resolution methods in Darfur.¹⁸⁵

The adverse effects of Darfur's environmental conditions were further compounded by a period of Arabization in the region. Arab supremacist attitudes in Darfur can be traced in part to the efforts of Libyan leader Muammar Qaddafi, who proposed Arab expansion into northern Africa in the 1970s and 1980s.¹⁸⁶ Political events in Sudan also began to formalize Arabization in 1983, when the Nimiery government began a shift away from a secularist agenda toward implementing Islamic political governance. Though the population in Darfur is primarily Muslim, practices vary widely between pastoralist and farming cultures. The farmers, who typically identify themselves as African, are more liberal in their practices and customs, and are often looked upon as being "less Muslim" than the Arabic tribes. The combination of marginalization and tribal fighting fostered ethnic polarization in Darfur as tribes began to identify themselves as either distinctly African or Arab. With the degradation of tribal conflict resolution methods, distinct and opposing sides became increasingly entrenched in the population.

Though militia attacks and government military actions occurred throughout the 1990s, the key event prior to the escalation of the crisis in Darfur was the April 2003 rebel attack on the GoS base at Al Fasher airport, humiliating the central regime and demonstrating the extent to which the insurgency was organized and possessed military capabilities. Prior to 2003, the Sudanese government had supplied sporadic support to

¹⁸⁵ Scott Anderson, "How Did Darfur Happen," *New York Times Magazine*, October 17, 2004, 56.

¹⁸⁶ Rolandsen, "Sudan: The Janjawiid and Government Militias," 155.

Arab militias in Darfur, aimed primarily at curtailing the emergence of competing power bases in outlying regions of the country. Sudanese military units had until then rarely operated in a concerted fashion in Darfur, preoccupied instead with operations against the SPLA in the south. In post-2003 Darfur, instead of reinforcing SAF units in the area, Khartoum pursued what has been called “counterinsurgency on the cheap.”¹⁸⁷ The government formalized and expanded Arab tribal militias, the Janjaweed.¹⁸⁸ The counterinsurgency strategy rapidly formalized into various combinations of Janjaweed and SAF raids and air strikes that were typically directed solely at African villages throughout the Darfur.

The polarization of violence in Darfur was not limited to African tribes, but also occurred among the nomadic and primarily Arab communities, where “the new government’s radical Islamism suited (at least in theory) the nomadic people, and the NIF regime saw them as useful allies and proxy soldiers.”¹⁸⁹ Using Janjaweed forces as part of the regime’s counterinsurgency strategy is of questionable value, as “the Janjawiid attacks and the central government’s involvement initially helped the rebels to gain the moral high ground.”¹⁹⁰ Having armed the Janjaweed to offset a lacking military capacity in Darfur, it will be exceedingly difficult to disarm them as part of a peace process. The interests of the Janjaweed themselves will have to be considered in attaining any negotiated outcome, thus suggesting a net decrease in the government’s possible compromise positions. However, through the use of proxy militias, the government’s net military effectiveness in Darfur has increased.

As was done in the examination of institutional design in the North-South divide, the preceding contextual background of Darfur can be reduced to an objective set of priorities. Again, at least six distinct outcomes are possible, based on the interaction of insurgency strategies of cooperation and defection, and government strategies of

¹⁸⁷ Flint et al, *Darfur*, 24.

¹⁸⁸ Oliver Read, “Sudan’s Janjaweed Militia.”

¹⁸⁹ Rolandsen, “Sudan: The Janjawiid and Government Militias,” 157.

¹⁹⁰ Rolandsen, “Sudan: The Janjawiid and Government Militias,” 161, and also Human Rights Watch, “Darfuf Documents Confirm Government Policy of Militia Support.”

cooperation, co-option, and defection. For the insurgency, a cooperative strategy is one in which rebel factions agree to cease-fire provisions and halt their armed struggle. The defection strategy reflects continued armed conflict against government forces and Janjaweed militias. For the government, the cooperative strategy involves a negotiated outcome toward a compromise that allows increased self-determination of local tribes in Darfur. The defection strategy entails continued armed opposition against the insurgency. A third co-option strategy in Darfur involves the recruitment of local Arab militias to conduct proxy warfare against the rebels. This third strategy, though employed sporadically over the past two decades, has only become formalized since 2003.¹⁹¹ In examining player strategies within a game of multiple arenas in Darfur before and after 2003, a distinct shift in preferences emerges, shown in Table 8 below.

OUTCOME	INSURGENCY	GOVERNMENT	RATIONALE
COOPERATE COOPERATE	(4) POST-2003 (3) PRE-2003	(5) POST-2003 (3) PRE-2003	INS – The INS compromises with peace accords = ambiguity GOV – The GOV compromises with accords = power vacuum
COOPERATE CO-OPT	(1) POST-2003 NA PRE-2003	(6) POST-2003 NA PRE-2003	INS – The INS fails in suing for peace = ethnic cleansing GOV – The GOV maintains proxy control = territorial purity
COOPERATE DEFECT	(3) POST-2003 (1) PRE-2003	(4) POST-2003 (4) PRE-2003	INS – The INS doesn't oppose GOV forces = subordination GOV – The GOV struggles for control = expensive campaign
DEFECT COOPERATE	(6) POST-2003 (4) PRE-2003	(1) POST-2003 (1) PRE-2003	INS – The INS fights to protect territory = self-determination GOV – The GOV accedes & disarms militia = loss of control
DEFECT CO-OPT	(2) POST-2003 NA PRE-2003	(3) POST-2003 NA PRE-2003	INS – The INS fights GOV supplied militias = lawlessness GOV – The GOV expends resources on militia = cash-drain
DEFECT DEFECT	(5) POST-2003 (2) PRE-2003	(2) POST-2003 (2) PRE-2003	INS – The INS holds its own vs. GOV = conventional war GOV – The GOV struggles to re-supply forces = tactical loss
NOTES: Ordinal values are accorded players for each outcome by the following scale: 1-4 (Pre-2003) and 1-6 (Post-2003). Lower values are worse than higher values and vice-versa. All outcomes are assumed to provide at least a positive value to each player.			

Table 8. Preferences in Sudan's Darfur

¹⁹¹ In this case, the use of proxy militias by the Sudanese regime refers specifically to Darfur. Government-sponsored militias were also used in Southern Sudan during the 1970s and 1980s. See Rolandsen, "Sudan: The Janjawiid and Government Militias."

Player preferences prior to the first large-scale rebel attacks in 2003 were initially scaled from one to four without the co-opt strategy. Post-2003 player preferences were also prioritized and distributed in an ordinal manner, this time in whole integer intervals from one to six. The resultant two-by-three game illustrates an application of a nested game of multiple arenas, in which the government has adopted a third strategy since 2003 that in essence amounts to the internal co-option of Arab militias to advance the government agenda in Darfur. The matrix of this game is presented in Table 9.

		Government		
		Cooperate	Co-opt	Defect
Insurgency	Cooperate	(4, 5)	(1, 6)	(3, 4)
	Defect	(6, 1)	(2, 3)	(5, 2)

U = *Undermining* payoff minimizing the payoffs to the insurgents

E = *Engagement* payoff maximizing the unilateral payoffs to the government

Where: $T_1 > P_1 > R_1 > S_1 > U_2 > U_1$
 $E_1 > R_2 > T_2 > E_2 > P_2 > S_2$

Table 9. Multiple Arenas in Sudan's Darfur

In the game of multiple arena's in Darfur, both player's have dominant strategies. The insurgency, representing marginalized groups deprived of any capacity in Sudan's political process, have a dominant strategy to continue armed insurrection. The government, hampered by logistical constraints in projecting military forces, while at the same time adamantly opposed to ceding political authority, has a dominant strategy of co-opting local Arab militias, the Janjaweed, to conduct counter-insurgency operations. The result is an intractable conflict from which a negotiated solution is increasingly unlikely.

A graphic portrayal of Darfur's game of multiple arenas is presented in Figure 10 below (again, pre-2003 outcomes are scaled from 1-4 and overlaid with post-2003 outcomes).

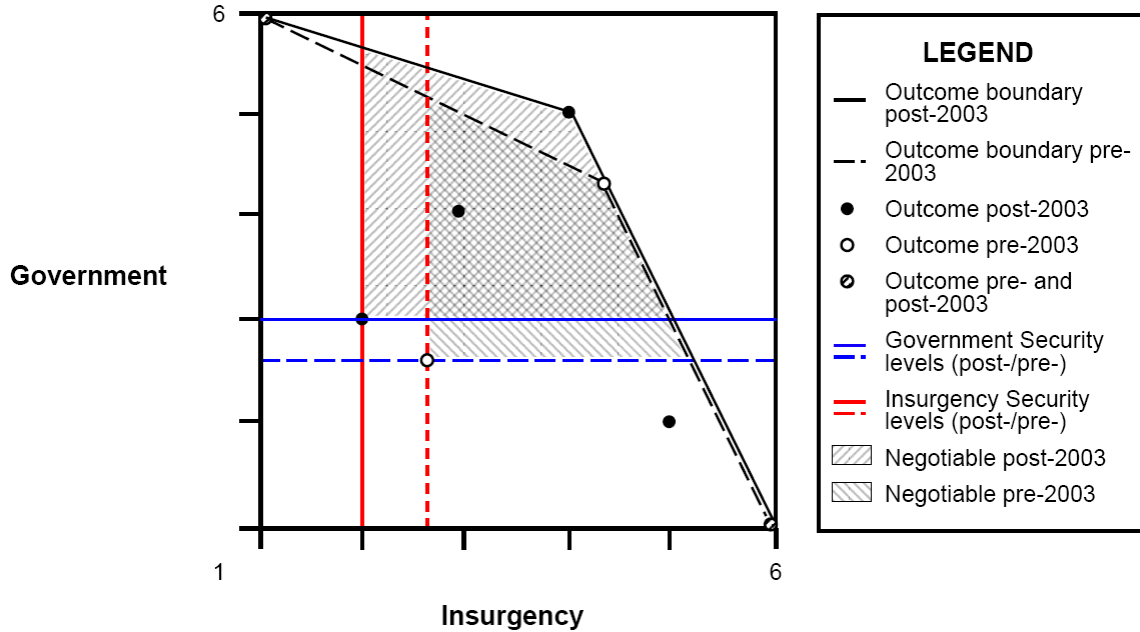


Figure 10. Multiple Arenas in Sudan's Darfur.

In comparing Figure 8 (p. 67) with Figure 10 above, it becomes clear that the conflict in Darfur, both before and after 2003, is an example of a prisoner's dilemma. In each time period, a mutually beneficial agreement is possible yet is prevented by the threat of unilateral defection by either side. Neither belligerent is likely to cease fighting while the other remains armed. The addition of a third strategy of co-option has shifted the balance of the prisoner's dilemma in favor of the government. The accompanying negotiable space also shows a relative decrease in the insurgency's security level, while the security level of the government has improved. Even the verbiage of the DPA plainly expresses the pro-government bias reflected in the negotiating space depicted above.¹⁹²

The insurgency is presented with a disadvantage that is difficult to mitigate. Differing agendas combined with factionalism have prevented any one party from

¹⁹² *Darfur Peace Agreement*. <http://allafrica.com/peaceafrica/resources/view/00010926.pdf> (accessed July 31, 2007).

forming a dominating coalition to negotiate with the government.¹⁹³ This has disaggregated any possible unitary bargaining position on the part of the insurgent groups. While Minawi was able to form a coalition to negotiate with the government for the DPA, that coalition was dominated by spoilers consisting of those parties who refused to sign the agreement. The DPA represents an agreement between signatories that does not accurately reflect the contested relationships on the ground. On the opposing side, the use of Janjaweed militias by the regime in Khartoum has added an additional set of vested interests to the equation.¹⁹⁴ These also have a net effect of increasing the subjective minimally acceptable outcome for the Sudanese government.

Applying game theory to contemporary Sudan illustrates both the intractability and the dynamic nature of internal wars. While conflict in the south superficially appears to have been resolved by the CPA, the underlying positions of both sides make the CPA's potential as a permanent solution tenuous. The conflict in Darfur suggests that an arbitrated solution may be possible, yet the strong tendency for both sides to pursue unilateral agendas has made cooperation near impossible. Thus the apparent paradox of Sudan's internal wars is largely one of perspective. The application of a framework of nested games aids in refocusing that perspective to better illuminate an objective examination of these conflicts. The strategies of both sides may gain an advantage from an appearance of cooperation, yet the basic issues of political marginalization and resource allocation remain unresolved. Game theoretic analysis provides a useful framework within which to examine the dynamic relationships of the issues and actors involved in Sudan's internal wars. Though the limitations of rational-choice theory make that examination incomplete, it is nonetheless a significant and illuminating step beyond the purely qualitative description offered by the QSE. Having clarified relationships and strategies through the gap-bridging lens of game theory, the DCM, the network analysis of the NT in Chapter V will be used next to quantify the specific actors involved.

¹⁹³ Eric Reeves, "Darfur rebel groups: SLA-United/SLA-G19 split from SLA-Nur and joined NRF," August 4, 2006, at: <http://sudanwatch.blogspot.com/2006/08/darfur-rebel-groups-sla-unitedsla-g19.html> (accessed August 13, 2007).

¹⁹⁴ Rolandsen, "Sudan: The Janjawiid and Government Militias," 157.

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V. NEXUS TOPOGRAPHY

In one way or another, it is through these networks that small-scale interaction becomes translated into large-scale patterns, and that these, in turn, feed back into small groups.

- Mark Granovetter ¹⁹⁵

A. DEFINING THE HUMAN FACTORS OF CONFLICT

Chapter IV provided a method that analytically accounts for the heterogeneous nature of opposing players and served to illustrate the overall net effects of their interactions. Based on game-theory applications, this component is critical as it allows the representation of the dynamic nature of the conflict. The intent of Chapter V is to delve deeper into the relationships and interactions of the players within the conflicts being fought inside Sudan. This process will allow a more refined understanding of what is shaping the conflicts in Southern Sudan and Darfur, as well as offering insight into possible avenues toward implementing solutions to the conflicts.

Intrastate conflicts, unlike many interstate conflicts, are often facilitated by issues embedded within the indigenous population. Historically, these types of conflicts have arisen due to religious, ethnic, and/or political marginalization or differences. Additionally, further issues can grow out of prolonged conflict over time as the population is affected by ongoing efforts of the warring sides. Identifying where attitudes and perceptions originate comes from an understanding of the human factors of the conflict. Nexus Topography (NT) allows the defining of the human factors in conflict regions under study.¹⁹⁶ When incorporated into this case-study application of the ASC, NT allows for an increased level of granularity, specifically oriented toward assessing the social composition, capabilities, and disposition of insurgent groups in Sudan.

¹⁹⁵ Mark S. Granovetter, "The Strength of Weak Ties," *American Journal of Sociology*, 78, no. 6 (May, 1973), 1360.

¹⁹⁶ The name "Nexus Topography" and the concept as applied to mapping social environments was first formalized by Steven Marks, Thomas Meer, and Matthew Nilson, *Manhunting: A Methodology for Finding Persons of National Interest* (Master's Thesis, Naval Postgraduate School, 2005). This study seeks to expand the concept from use in finding individuals or small groups to broader conflict assessments.

Nexus Topography uses a combination of ethnography, social network analysis, and geospatial correlation to determine patterns in the social interactions of a defined region. NT seeks to map “social forums or environments that bind people together” in order to describe the universe of existing and potential relationships that exist within societies.¹⁹⁷ This is done through a process of identifying relationships that have developed inside specific areas, to include regions and communities, based upon the concept of shared identities. These shared identities can be defined by familial, tribal, locality, ethnicity, educational, political, and religious factors among others. Outside of the theoretical, conceptual, and ideological factors, conflict has real and tangible components that play out on the ground. Geospatial integration in the NT process allows the visualization of the data on the physical ground which in turn allows for the identification and/or correlation of the physical factors that may be casual or contributable to the conflict.

This chapter seeks to define the participants and their relationships at a macro-strategic level affecting the conflicts in Sudan. The goal will be to understand what factors contribute to trust, influence, and power among the respective conflict participants, thereby providing the framework for a network analysis of those participants. This methodology will allow the study and quantifiable assessment of the factors influencing insurgent forces and the populations that exist within the conflict zones of Sudan. The information resulting from this analysis will be integrated into Chapter VI, which analytically correlates the results from all previous chapters and determine imperatives and approaches for the conflicts and process outlined in this thesis.

1. Social Capital and How It Affects Trust, Power, and Influence

The concepts of trust, power, and influence are key underpinnings to human relations.¹⁹⁸ These concepts exist in all cultures around the world and, typically, only vary in what factors define them. A useful concept in understanding the relationship of trust, power, and influence is the idea of social capital. While views and definitions vary

¹⁹⁷ Marks, Meer, and Nilson, *Manhunting*, 66.

¹⁹⁸ Piotr Sztompka, *Trust: A Sociological Theory* (New York, Cambridge University Press: 1999).

widely, it is broadly agreed upon that social capital is defined by social norms and networks that further define the trust and influence in societies as expressed by the following World Health Organization interpretation:

It [social capital] refers to the processes between people which establish networks, norms and social trust, and facilitate co-ordination and co-operation for mutual benefit. Social capital is created from the myriad of everyday interactions between people, and is embodied in such structures as civic and religious groups, family membership, informal community networks, and in norms of voluntarism, altruism and trust. The stronger these networks and bonds, the more likely it is that members of a community will co-operate for mutual benefit.¹⁹⁹

These social norms are key underpinnings of influence and reciprocity within and between groups in societies. As Francis Fukuyama wrote, “Virtually all forms of traditional culture-social groups like tribes, clans, village associations, religious sects, etc.- [sic] are based on shared norms and use these norms to achieve cooperative ends.”²⁰⁰ The concept of social capital plays an important role in the study of social networks as it helps define the interactions that individuals and groups have between one another. It is this concept of social norming at the group and organizational level that will be used to form the basis of the level of study used in the second half of this chapter.

A fundamental tenet of human interaction involves the expression of trust as “the crucial strategy for dealing with an uncertain and uncontrollable future”; further defined: “Trust is a bet about the future contingent actions of others.”²⁰¹ Trust and influence can serve to define the relationships between actors. Insurgency in particular presents a useful case study, as the rebel’s disadvantage in force minimizes the use of coercion as a means of deemphasizing trust. The application of sociological trust theory thus becomes an appropriate methodology for assessing the networked structure of insurgent factions. Trust is grounded within three bases of perception, those means by which individuals assess the “trustworthiness” of others: “reputation, performance, and appearance.” These

¹⁹⁹ World Health Organization 1998, *Health Promotion Glossary* (Geneva: World Health Organization, 1998), 19.

²⁰⁰ Francis Fukuyama, *Social Capital and Civil Society*, Paper presented to the International Monetary Fund Conference on Second Generation Reforms, (Washington D.C., November 8-9, 1999): ¶8.

²⁰¹ Sztompka, *Trust*, 25.

in turn exist within the frame of a “culture of trust,” alternatively referred to as the sociological context that is characteristic of a population. Institutional and individual accountability, specifics of a situation, and pre-commitments of actors serve to define this context and can be delineated by the following structural conditions:²⁰²

1. Normative coherence
2. Stability of social order
3. Transparency of the social organization
4. Familiarity of the environment
5. Accountability of individuals and institutions

Each of these conditions finds specific expressions within insurgent conflict in Sudan. Their expressions shape the perceptions and expectations of the local populace, and in turn derive the bases of power within insurgent factions. Those bases can also be further separated into seven categories of power: reward, coercive, legitimate, expert, information, referent, and network.²⁰³ The context of social capital in terms of trust, power, and influence within conflicts can be expressed as shown in Figure 11 below. Understanding these concepts allows the focusing of further analysis efforts by identifying the key components that make up the social capital of a society. In the case of insurgencies, this allows for a better understanding of what factors and components allow insurgent elements to be created, develop, be influenced, and ultimately succeed or fail. Additionally, it allows for the understanding of the reciprocity that can be expected between or within the assessed organizations. When used within the intended iterative framework of the ASC, this allows the formulation of more accurate values for players in the game-theoretic assessments of Chapter IV, especially in terms of non-cooperative strategies.

²⁰² Sztompka, *Trust*, 71, 87, and 122-125. These terms suggest common definitions; one is further expanded here. “Normative coherence” entails the ordering of social life by law, morality, and customs.

²⁰³ J. French and B. Raven, “The Bases of Social Power,” in D. Cartwright (ed.) *Studies in Social Power* (Ann Arbor, MI: University of Michigan Press, 1959), 150-167.

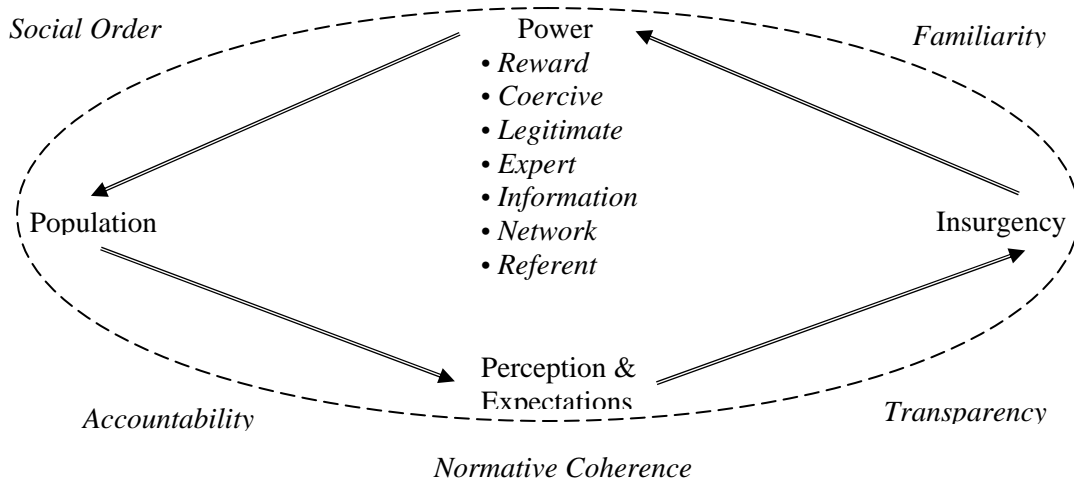


Figure 11. Social Capital ²⁰⁴

The relationships of power and popular perceptions as outline above can also be further detailed to illustrate an iterative process of social interactions. The identified variables serve as inputs to create a dynamic fabric which ultimately leads to a projected benefit for the group or individual being examined. Figure 12 below shows how this process plays out in social dilemmas.

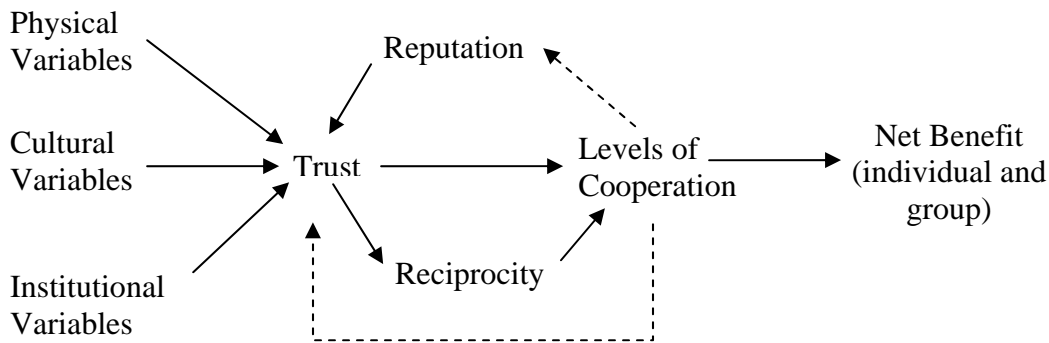


Figure 12. Feedback in Repeated Social Dilemmas ²⁰⁵

²⁰⁴ Adapted from Sztompka, *Trust*, and Dorothy Denning, *SO4104: Trust, Influence, and Networks*, class presentations (Naval Postgraduate School, CA: 2007).

²⁰⁵ Elinor Ostrom, "Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation," in *Trust and Reciprocity*, ed. Elinor Ostrom and James Walker (New York: Russell Sage Foundation, 2003), 51.

It is important to understand that influence does not always require direct interaction. Research on social influence has shown that “influence does not require face to face interaction; indeed the only precondition for social influence is information (which allows social comparison) about the attitudes or behaviors of other actors.”²⁰⁶ Ethnographical studies and social network analysis provide researchers the means in which to determine the relations that provide the interactions and information/idea flow within a society, group, or organization.

2. Ethnography and Social Network Analysis

Ethnography is the qualitative and quantitative study of human social interactions used in the fields of social and cultural anthropology. Ethnographical studies attempt to provide a holistic understanding of the human social environment. This contextual understanding then provides the basis for analyzing the human social networks that exist within societies. The use of ethnography as a part of and/or combined with network theory has a pre-existing basis in the social anthropological field.²⁰⁷

Social Network Analysis (SNA) is a research perspective that had its beginning in social anthropology studies, and has since grown to being applied in many diverse fields of research. The basic theory behind SNA is the focus on the relationships between entities in order to determine a social structure that exists within a society. These entities, known as *actors*, *nodes*, and *vertices* in SNA, can be people, places, groups, organizations, etc. This methodology differs from many other more traditional social science applications that focus on the attributes and/or behavior of individual entities. Noted SNA researchers Stanley Wasserman and Katherine Faust describe the underlying SNA principles as:²⁰⁸

²⁰⁶ Peter Marsden and Noah Friedkin, "Network Studies of Social Influence," in *Advances in Social Network Analysis*, ed. Stanley Wasserman and Joseph Galaskiewicz (Thousand Oaks: Sage Publications Ltd, 1994), 4.

²⁰⁷ Jeffrey Johnson, "Anthropological Contributions to the Study of Social Networks," in *Advances in Social Network Analysis*, ed. Stanley Wasserman and Joseph Galaskiewicz (Thousand Oaks: Sage Publications Ltd, 1994), 113-143.

²⁰⁸ Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and Applications*. (New York: Cambridge University Press, 1994), 4.

Actors and their actions are viewed as interdependent rather than independent, autonomous units.

Relational ties (linkages) between actors are channels for transfer or “flow” of resources (material or nonmaterial).

Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action.

Network models conceptualize structure (social, economic, political, and so forth) as lasting patterns of relations among actors.

Ties define the structure and resultant behavior of the network. Examples of ties are physical connections, associations, information flow, movement, a physical connection, formal and informal relations, and biological relations. Knowledge and understanding of these ties can help explain behavior that otherwise would not be explainable if the focus was on the entity. These ties can be quantitatively and qualitatively evaluated in terms of direction of the relationship or transaction, strength, and weight. Two general tie strengths will be explored in this paper: weak and strong.²⁰⁹

Strong ties are ties in which there is a direct interactive connection between actors, such as a relationship between two good friends. Weak ties are those ties that can be roughly described as less formal than direct connections. An example of a weak tie would be the ties between two people who are only acquaintances. Weak ties are often overlooked in SNA as they sometimes do not, on the surface, indicate importance and are often harder to identify. The importance of these ties was identified by Peter Blau:

Intimate relations tend to be confined to small and closed social circles . . . they fragment society into small groups. The integration of these groups in the society depends on people’s weak ties, not their strong one, because weak social ties extend beyond intimate circles and establish the inter-group connections on which macro-social integration rests.²¹⁰

²⁰⁹ Granovetter, “The Strength of Weak Ties,” 1360-1380.

²¹⁰ Peter Blau, “Parameters of Social Structure,” *American Sociological Review*, no 39, (1974), 623.

Weak ties are critical to insurgent group activities. It is through these ties that insurgent groups mobilize support for their activities, especially during periods of expansion. Examples of these ties include tribal, clan, regional affiliation, political association, etc.

SNA facilitates the identification of real and potential power bases within organizations. *Centrality* is one concept of SNA that allows this determination. The various methods of centrality assessment seek to establish the prominence of an entity within its network by examining the number, strength, and/or direction of the ties that the entity has in comparison to other entities within the network. The power of the concept of centrality within organizations was substantiated by Joseph Galaskiewicz, who found that organizational resources “on hand” do not necessarily determine the power base of the organization, but the level of resources that could be mobilized through social relations; or in other words, the network.²¹¹ Central actors, because of their ties, are more capable of mobilizing resources. Another important characteristic that can be identified with SNA is the role of *cliques* within an organization. A clique is “a subset of points in which every possible pair of points is directly connected by a line [defined as a relationship in a sociogram] and the clique is not contained in any other clique.”²¹² More simply put, a clique exists when everyone has a relationship to the others in the group and is the densest parts a network. Researchers have shown that:

People’s informal social relations tie them into cohesive sub-groupings [cliques] which have their own norms, values, orientations and sub-cultures, and which may run counter to the ‘official’ or formal social structures. The cliques were, they held, among the most important sources of a person’s identity and sense of belonging, and their existence was widely recognized in the everyday terms . . . that people used to describe their social world.²¹³

²¹¹ Joseph Galaskiewicz, *Exchange Networks and Community Politics* (Beverly Hills: Sage Publications Ltd, 1979), 151.

²¹² John Scott. *Social Network Analysis: A Handbook*. (London: Sage Publications Ltd, 1991), 117. A sociogram is a graphical representation of networks.

²¹³ Scott. *Social Network Analysis: A Handbook*, 103.

A similar but no less important concept to cliques is that of *factions*. Whereas cliques are defined by each actor having the same relationships with each other, factions have similar relationships and are thereby looser groupings of actors than cliques. As previous chapters have outlined, factions in intrastate conflict can play a critical role in the negotiation and settlement process either as participants or spoilers. Identification of factions allows for more focused engagement of actors who are either operating or potentially operating together. Factions can be identified through a process called *blockmodeling*. Blockmodeling is a SNA concept that allows for the detection of structures and cohesion within a network by grouping actors into clusters and analyzing the relationships of these clusters to one another.

B. STRATEGIC NEXUS TOPOGRAPHY IN SUDAN

The preceding sections of this chapter identify the utility of Nexus Topography in analyzing the social and geographical structures of groups and organizations. This section will apply NT to the two case studies of conflict in Sudan.²¹⁴ As stated in previous chapters, one of the primary components in intrastate conflict is the interaction and/or control of the population. The NT process will allow the defining of these interactions.

1. Geography of Sudan

As described in Chapter III, Sudan is a nation rich in diversity. Two major factors influence the cultures that have developed in Sudan: terrain and religion. The division of religions in Sudan has had profound influence toward creating the divide between Southern Sudan and the rest of Sudan. The dyadic nature of religion in Sudan was created when the rapid expansion of Islam through North Africa in the early First Century turned south and the native populace resisted this perceived Arab invasion for about a century until the divide of religions eventually stabilized along the zone that now defines Southern Sudan from northern Sudan. Later British conquest and subsequent colonial rule helped formalize this perceived “border”. In part, this dyadic relationship helped

²¹⁴ The analysis in this section will focus on the two primary conflicts in Sudan, Darfur and Southern Sudan, while taking into account some aspects of the insurgency in eastern Sudan.

solidify the population of Southern Sudan generally identifying themselves as Africans, their struggle as African against Arab, and Christian/Animist against Muslim.²¹⁵ This is in stark contrast to the Darfur region where the majority of the population is Muslim.

The second component that has shaped societies and their relations in Sudan is the terrain and climate. As Africa's largest country, the terrain and climate encompasses virtually every geographical feature that exists on the African continent, from the barren deserts of the north to the tropic rain forests in the south.²¹⁶ Generally, Sudan is a large plain bounded on three sides by mountains and cut by the Nile River system and can be divided into six semi-distinct areas: northern Sudan, eastern Sudan, the central clay plains, the southern clay plains, western Sudan, and the Jebel Hadid Plateau.

The northern part of the country lying between the Egyptian border and Khartoum is generally an open expansive desert divided into two parts by the Nile River Valley. The two deserts, the Nubian and the Libyan, receive little rainfall and are occupied by very small populations of nomads. The narrow Nile River valley provides the only sustainable land and is host to almost all the population of this region. Eastern Sudan is divided between desert and semi-desert and spans from the Red Sea to near the city of Kassala. The Red Sea Hills in the north of this section are low dry mountains that stretch into Egypt and are the home to the Beja people. The land south of the Red Sea Hills provides good seasonal grazing for livestock and progressively becomes more fecund as you move south where streams and rivers feed into the Nile River Valley. The central clay plains stretch from Khartoum south to the Nuba Mountains and east to Ethiopia and are defined by the Blue and White Nile Rivers as they flow to their confluence at Khartoum. The area is characterized by the gentle rolling hills and fertile lands of the Nile River basin flood plain that provide a backbone to Sudan's agricultural economy.

The most drastic change in terrain and climate occurs in the area of Southern Sudan and, in part, has helped develop its isolation from the remainder of Sudan. The

²¹⁵ Johnson. *African Issues: The Root Causes of Sudan's Civil Wars*, 4.

²¹⁶ While not inclusive, a more detailed general overview of the topography of Sudan can be found at the online Library of Congress Country Studies website at <http://lcweb2.loc.gov/frd/cs/sdtoc.html> (accessed August 11, 2007).

southern clay plains stretch in a band from the Central African Republic across to the southeast border of Sudan. Many large permanent lakes and the Sudd, one of the world's largest swamps, historically provided a natural boundary to expansion. This area also contains a large portion of the oil reserves of Sudan (see Figure 7 in Chapter III). This expanse of land then gives way to an area known as the Jabal Hadid Plateau. This plateau rises to the southeast and southwest from the Nile River basin and changes the terrain from desert and plains to tropical rain forests that extend into the neighboring countries to the south. Most of the Southern Sudanese population lives in this area.

Darfur and Kurdufan make up western Sudan. Kurdufan, geographically situated in the center of the country, rises out of the western Sudan plain and is composed of a region of dome shaped hills giving way to rolling plains to the east and the Nuba Mountains in the south. The land changes seasonally, from fertile during the rainy season, to arid and dry during the remainder of the year. This area is noted for the production of Gum Arabic, a substantial revenue generating crop for the Sudanese government. This area then gives way to Darfur which occupies the western edge of Sudan and is approximately the size of Texas or France. The area is centrally dominated by the Jebel Marra volcanic massif and can be divided into three distinct eco-zones, each of which defines the lifestyle of the population. Northern and eastern Darfur are relatively flat semi-desert regions that have little to no perennial surface water sources. The central area of Darfur west of the Jebel Marra is the dominant area of the region. Seasonal rains and the drainage system off of the Jebel Marra have historically provided for good grazing conditions in the lower elevations and crop farming along the higher elevations. The southern region of Darfur is a rolling plain that has more water sources available than other portions of Darfur, which has historically made it suitable for pastoralist activities.

2. Detailing Darfur

Relationships within Darfur are patrilineal in nature and are by in large tribally based.²¹⁷ The term tribe in Darfur has both a personal identification and political

²¹⁷ De Waal, "Who are the Darfurians," 181.

connotation attached to it. As Douglas Johnson writes, “most Sudanese, both Southern and Northern, recognize the existence of tribes and willingly assert their membership to them.”²¹⁸ While estimates vary depending upon studies and definitions, there are between 200 to 300 tribes in Sudan with up to 600 sub-tribes.²¹⁹ The lives and existence of the tribes in Darfur are defined by the terrain and climate. The northern part of the Darfur area is inhabited by the non-Arab Zaghawa and Bideyat tribes, and the Arab Rezeigat, Mahariya, Irayqat, Mahamid, and Beni Hussein tribes. All of these tribes are primarily camel-herding nomads who historically make their living moving livestock along ancient camel trading and grazing routes. The central zone mostly consists of non-Arab Bargu, Bergid, Berti, Fur, Masalit, Tama, and Tunjur tribes, who are sedentary farmers. The Fur tribe is the most prominent tribe in the area. The eastern and southern zones of Darfur are occupied primarily by the Arab Beni, Habbaniya, Halba, Maaliya, Rezeigat, and Taaisha tribes who subsist by herding cattle.²²⁰

The livelihood of the rural population in Darfur is focused on two types of farming and two types of herding. In the north and south of Darfur, farming is focused on small plots grown in wadis (66.1% of the population) whereas farming in the Jebel Marra region is focused on larger plots (7.2% of the population). The African Zaghawa tribe and Arab Rezaigat tribes in the north typically are nomadic camel herders (5.7% of the population). The southern Arab tribes such as the Rezeigat are typically cattle and goat herders who have significant migratory patterns as they move their herds north during the rainy season in search of grazing fields (8.6% of the population).²²¹

One of the main interactions of Darfur’s social structures is based on land tenure usage. Historically, the rights to land were held at a communal level where local leaders determined and mediated land usage agreements between the agricultural groups and the

²¹⁸ Johnson, *African Issues: The Root Causes of Sudan’s Civil Wars*, xvii.

²¹⁹ Multiple ethnographic studies and databases were examined in the research process, each having different listings of the number of tribes existing in the country. Those listing tribes by name based on field research were considered the most accurate for use in this study.

²²⁰ Flint, et al. *Darfur*.

²²¹ These figures represent the population that existed in the 1989 study and while dated are indicative of nature of the Darfur society. J. Swift and J. Gray, “Report on Darfur Region Food Security Policy and Planning: Darfur Regional Government, Republic of Sudan” (under assignment from ODA) mimeo, 1989.

nomadic elements.²²² These historic land usage rights were unbalanced with the 1970 Unregistered Land Act (ULA) which declared state ownership of almost all land not formally registered with the government. The act itself effected the usurping of the local populace and putting control of the land from into the hand of governmental elites and their proxies.²²³ Permanent and temporary population movements as a result of drought and other social events “developed into permanent residence[s], leading to conflicts, the legitimization of the administrative system eroded and left no-one in control.”²²⁴

Tribal relations in the area were historically defined by the changes of the seasons and the movement of the herding tribes. Arab camel nomads moved their herds north and south as the seasons changed, while cattle herders worked with local farmers for grazing rights. Increased desertification of the area changed these patterns and heightened tensions in the region as traditional nomad grazing lands were reduced, forcing these nomads to find new grazing lands that today infringe upon the traditional territory of the central farmers. This encroachment caused clashes that split down tribal and ethnic lines, occurring at a time during which the Khartoum regime was unofficially endorsing the “Arabization” of Sudan. The initial conflicts in the region were amongst the Zaghawa, Rezeigat, and the Beni Halba nomadic camel tribes as they fought between themselves for land usage rights. As the drought persisted in the 1980s, the traditional land owners in the Jebel Marra region began to stop sharing their resources with the nomadic tribes. The outcome was predictable in light of the chaos created by the ULA. The Rezeigat tribes began to make direct land grab attempts predominately from the sedentary Fur populace, arguing that the Rezeigat peoples, under the ULA declaration, had equal rights to the land. These efforts quickly escalated into larger scale violence as the “Arab” tribes had been heavily armed by both sides in the Chadian/Libyan war in the 1980s. The government also had a history of turning to militias during times of conflict, a notable example being the GoS sponsored militia effort to curtail the expansion of the Southern

²²² Leif Manger, “Resource Conflict as a Factor in the Darfur Crisis in Sudan”, (paper presented at the At the Frontier of Land Issues: Social Embeddedness of Rights and Public Policy, May 2006): 8.

²²³ Adam Mohammed, “The Rezaigat Camel Nomad of the Darfur Region of Western Sudan: From Co-operation to Confrontation,” *Nomadic Peoples*, vol 8/2, (2004): 234-235.

²²⁴ Manger, “Resource Conflict as a Factor in the Darfur Crisis in Sudan,” 10.

Sudanese rebels into the Kurdufan and Darfur regions after the failed SPLA incursion in 1992.²²⁵ The combination of the prevalence of weapons and tacit government support laid the groundwork for the violence to follow.

The tribes in the Jebel Marra area began to form local tribal and regional self defense forces for protection beginning in the 1980s in response to the attacks from the Arab militias and government forces. As the frequency and intensity of the attacks increased, the groups began to loosely cooperate in the later half of the 1990s to actively fight against the government and its proxy forces.²²⁶ Initially, the rebel forces were mainly composed of the Fur under the loose command of Abdul Wahid Nur, a Fur lawyer. Abdul Wahid Nur was successful in uniting with Zaghawa groups in July 2001 and Masalit groups in November 2001 forming what became known as the Darfur Liberation Front (DLF).²²⁷ The group shortly afterwards renamed themselves the Sudan Liberation Movement/Army (SLM/A) in early 2002, with a public declaration calling for creation of a new Sudan that was based on equality, complete restructuring and devolution of power, even development, cultural and political pluralism and moral and material prosperity for all Sudanese.²²⁸ The group began to grow as various other tribal self defense forces joined the alliance and subsequently formed a politically oriented opposition group, the Sudan Federal Democratic Alliance (SFDA).

The SLA initially operated as a loose federation of rebel factions and was nominally led by Adbul Wahid Nur with Minni Minawi, a Zaghawa, as a deputy. This arrangement held until the May 2006 Darfur Peace Agreement (DPA), when the alliance cracked under differences of opinion on the terms of the DPA. Minni Mannawi signed the DPA and his forces, the SLA-MM, engaged in a reticent process of cooperation with the government. A small faction made up of Tunjur, Masalit, Zaghawa, Berti, and Rezeigat tribes formed the SLA-Free Will (SLA-FW). Another small group composed of

²²⁵ Mohammed, "The Rezaigat Camel Nomad of the Darfur Region of Western Sudan," 236.

²²⁶ Flint et al, *Darfur*, 71.

²²⁷ Flint et al, *Darfur*, 76.

²²⁸ SLM/A political declaration posted at <http://www.sudan.net/news/press/postedr/214.shtml> (accessed August 13, 2007).

mainly Arab tribes formed the SLA-Peace Wing (SLA-PW). A group of 19 commanders from Abdul Wahid Nur's forces split from him and formed the Group of 19 (G-19). This group is composed of multiple tribes and has grown quickly since its founding and later changed its name to the SLA-Unity Command (SLA-UC) or SLA-Unity. Abdul Wahid Nur and his remaining forces, the SLA-Abdul Wahid Nur (SLA-AWN), continued their struggle unabated by the DPA.²²⁹

Splits among the SLA factions have continued as leaders and their supporters disagree politically and militarily. In August 2006, several Fur leaders left the SLA-AWN and formed a group under the leadership of Abdul Abdesh-Shafi, the SLA-AS, sometimes known as the SLA-Classic (SLA-C). In early 2007, the SLA-UC (formerly the G-19) began to fragment with Khamis Abdullah Abubaker, a Masalit, and Jar al-Neby Abdel-Karim, a Zaghawa, splitting away and forming their own commands, the SLA-KAC and SLA-JN, respectively. In February 2007, a group known as the Greater SLM (GSLM), led by Mahjub Husayn, formed from break away elements from Minawi's faction, due to the perceived failure of the DPA.²³⁰

A second rebel group emerging in Darfur in 2001 was the Justice and Equality Movement (JEM). The JEM was formed from followers of Hassan al Turabi, the former vice-President of Sudan, and is led today by Khalil Ibrahim. Unlike the SLA, the JEM was initially composed mainly of one sub-tribe, the Zaghawa Kobe, and had a robust political structure without a large number of fighters in the field. The JEM and SLA factions have had a tumultuous relationship due to the JEM's ambiguous religious overtones, relationship to previous NIF members, and narrowly focused tribal makeup. These factors initially limited the growth of the JEM beyond its narrow tribal base. As the JEM expanded their affiliations, their base of support also grew until it compared in size and power to many of the SLA factions.

²²⁹ The names for the various insurgent factions differ from publication to publication and even from the groups themselves which exacerbates the problem of identifying and classifying the participants of the conflict. In this study, the groups are referred to by their declared names or the name of their commander.

²³⁰ Declaration retrieved from <http://www.alwatansudan.com/index.php?type=3&id=4692&bk=1> (accessed October 30, 2007).

Like the SLA, the JEM has fractioned due to differing agendas, personalities and tribal relations. The first division came as several field commanders split from the political leadership to form the National Movement for Reform and Development (NMRD) in the spring of 2004. This element has drawn from mainly Chadian influenced tribes and remains relatively heavily controlled by Chad.²³¹ A second JEM split occurred when a small element of non-Zaghawa tribal members formed the JEM-Peace Wing (JEM-PW) in ideological support of the DPA. In July 2007 another small non-Zaghawa faction broke from the JEM to form the JEM-Eastern Command (JEM-EC) due to announced leadership differences.²³²

The commonly held perception that the struggle is in terms of African versus Arab identity groups is only partially correct. As discussed before, the true ethnic makeup of the tribes of Darfur has been blurred and cannot be anthropologically considered distinctly as either African or Arab. Studies have shown that traumatic events, such as the violence, can lead to polarizing ethnic self-identification within societies such as what is being seen in Darfur.²³³ This is especially true in cases where leaders use ethnic identity to mobilize the population for a cause, as illustrated by opposing factions in Darfur. Various “Arab” tribes have supported the rebel factions in Darfur, increasingly so as the conflict has progressed and the rebels have gained more power and influence.²³⁴ Also, Arab tribes have formed their own groups to fight the government forces as the conflict progressed through 2006 and 2007, the most notable group being the Progressive Front Forces (PFF) who are also known as the Revolutionary Democratic Front Forces (RDFF).²³⁵

²³¹ Victor Tanner and Jerome Tubiana, “Divided They Fall: The Fragmentation of Darfur’s Rebel Groups,” *Small Arms Survey* (Geneva: Graduate Institute of International Studies, 2007): 61.

²³² “New Breakaway Rebel Faction Claims Removal of Darfur JEM Leader,” *Sudan Tribune*, July 31, 2007. <http://www.sudantribune.com/spip.php?article23052> (accessed August 11, 2007).

²³³ A more complete analysis of the role of ethnicity in conflict is covered by Stefan Wolff, *Ethnic Conflict: A Global Perspective* (Oxford: Oxford University Press, 2006).

²³⁴ Tanner and Tubiana, “Divided They Fall: The Fragmentation of Darfur’s Rebel Groups,” 62.

²³⁵ “Darfur Arabs Create a Rebel Group, Repulse Army Attack,” *Sudan Tribune*, December 7, 2006. <http://www.sudantribune.com/spip.php?article23052> (accessed June 12, 2007). The phenomena of Arabs fighting on the side of the rebels is not new and in fact existed early in the conflict. It was, and is, often overlooked by media and international reporting. ICG, “Darfur Deadline: A New International Action Plan,” International Crisis Group Africa Report No. 83 (Brussels, International Crisis Group, 2004): 3.

Coalition forming among the rebel groups in Sudan has been a common occurrence in the conflict in Darfur and Sudan in general. The earliest coalition that the Darfur rebel groups joined was the National Defense Alliance (NDA) which was a coalition of opposition groups to the Bashir regime. The JEM and SLA elements formed the Alliance of Revolutionary Forces of Western Sudan (ARFWS) in January 2006.²³⁶ The JEM joined the Eastern Front coalition that included the Free Lions and Beja Congress fighting in eastern Sudan in February 2004. The next major coalition, and most powerful by many reports, was the National Redemption Front (NRF) which was formed by non-signatory rebel groups after the DPA in June 2006.²³⁷ In late 2006, several SLA factions formed a weak coalition known as the Non-Signatory Factions.²³⁸ The United Front for Liberation and Development (UFLD), formed from smaller but broad based rebel factions, was founded in Eritrea in July 2007.²³⁹

3. Detailing South Sudan

The Southern Sudanese population is estimated to be about 11 million people where mainly indigenous and traditional Animist beliefs are practiced, although many Christian faiths are also practiced, particularly Catholicism and the Assemblies of God. These practices stand in stark contrast to the remainder of Sudan, which is predominantly Muslim. The south also contains a large number of tribal groups and has many more languages than are used in the north. The Dinka are a group of African tribes of Southern Sudan, inhabiting the swamplands of the Bahr-el-Ghazal region of the Nile basin, Jonglei, and parts of southern Kurdufan and Upper Nile regions. They are mainly agro-pastoral people, relying on cattle herding at riverside camps in the dry season, and growing millet in fixed settlements during the rainy season. They number around 4.5 million people, constituting about 12% of the population of the entire country, as well as

²³⁶ “Darfur Rebel Unite as a Single Group,” AlJazeera.Net, January 22, 2006. <http://english.aljazeera.net/English/archive/archive?ArchiveId=18192> (accessed July 11, 2007).

²³⁷ Tony Lindsay, “Darfur: A Cultural Handbook,” *Conflict Studies Research Centre Special Series* (Watchford, Defense Academy of the United Kingdom, 2007), 52.

²³⁸ ICG, “Darfur, Revitalizing the Peace Process,” *International Crisis Group Africa Report*, no. 125 (Brussels, International Crisis Group, 2007): 10.

²³⁹ “Five Darfur Rebel Groups Agree to Unite,” Reuters, 14 July 2007. <http://www.alertnet.org/thenews/newsdesk/L14716449.htm> (accessed August 29, 2007).

being the largest ethnic tribe in Southern Sudan.²⁴⁰ The eastern states of Southern Sudan contain other tribes considered to be Lake Nilotes (agro-pastoral peoples of East Africa who speak Nilotic languages); those are the Shilluk, the Nuer, and the Masai. The Azande, and Jo Luo are Sudanic tribes in the west, and the Acholi and Lotuhu tribes live in the extreme south, extending into Uganda.²⁴¹

It was clear from early on in the history of modern Sudan that the Arab north had little intention of sharing power with the African south. Civil war between the north and south broke out in 1955, prior to independence, when a military unit made up of Southern Sudanese mutinied and fled to hide in the country's south. The nascent government of Sudan wanted to unify the country and attempts to do so through use of arms continued after Sudan became an independent nation in 1956. By 1970, both the rebel group Anya Nya and the GoS were receiving external support in military arms, ammunition and training, thereby escalating the fighting. In 1971, Joseph Lagu, the leader of southern forces opposed to Khartoum, created the Southern Sudan Liberation Movement (SSLM). Anya Nya leaders united behind him, and nearly all exiled southern politicians supported the SSLM. Although the SSLM created a governing infrastructure throughout many areas of Southern Sudan, real power remained with Anya Nya, with Lagu at its head.

When reserves of strategic minerals and petroleum were discovered in the south during the early 1970's, the president of Sudan, Jaafar Nimeiry, thought he had found the solution to Sudan's troubles. But before he could exploit these new sources of wealth, he had to unify the country under central authority. By the early 1980s, strikes, riots, and shortages of goods and services had paralyzed the nation. To rally support from the northern parties, President Nimeiry announced on September 8, 1983, that Sudan's civil laws had been revised to bring them into conformity with *Shari'a*, or Islamic Law. The people of Southern Sudan, most of them non-Muslim, took offense to this. With backing from Ethiopia and deserted Sudanese army forces, they formed the Sudan People's

²⁴⁰ Francis Mading Deng, *Dinka of the Sudan*, ed. Holt, Reinhart, and Winston, Inc. (Prospect Heights, IL: Waveland Press, 1972), 183.

²⁴¹ United States Department of State, "Background Note: Sudan," *Bureau of African Affairs*, February, 2007. <http://www.state.gov/r/pa/ei/bgn/5424.htm#people> (accessed October 30, 2007).

Liberation Army (SPLA) which was heavily dominated by the Dinka tribe.²⁴² In 1991, the SPLA split into factions and was virtually destroyed by the infighting that followed. The SPLA was able to rebuild itself and continue its armed struggle while the factions signed a peace accord with the government in 1997.

The peace accord in 1997 led to factional fighting among the Nuer who were part of both the SPLA and the government militias. In response, many western Nuer and some Dinka banded together to form the South Sudan Liberation Movement in alliance with the SPLA.²⁴³ Like the SPLA, the SSLM has a goal of self determination under a federalist Sudan. Seven protocols concerning wealth and power sharing, conflict resolution, and governance were tied together and signed as the Comprehensive Peace Agreement (CPA) on January 9, 2005. This agreement appealed to many groups in the south as it mandated national elections in 2009 and a referendum for southern independence in 2011. This agreement has mitigated a majority of the fighting but has led to the upwelling of underlying tensions within the Government of Southern Sudan. Pending elections, seats in both the Southern Sudan Assembly and the Government of the Southern Sudan are to be divided in a fixed proportion between the SPLM, the NCP, and "other Southern political forces."²⁴⁴ The concentration of Dinka leadership in the SPLM and in the political arena has led to a neglect of the concerns of many other tribes in the south. Thus, an underlying feeling of racism against the Dinka has grown, especially in cities such as Yei, which has a majority Kakuah population.

Many in Southern Sudan considered former president (and first vice president of Sudan) John Garang their leader because of his efforts in the fighting and for independence. Garang, however, died and was succeeded by Salva Kiir Mayardit, who was sworn in as first vice president of Sudan on 11 August 2005.²⁴⁵ Mayardit does not

²⁴² Arop, *Sudan's Painful Road to Peace*, 512.

²⁴³ This SSLM group is not related to the earlier rebel group under the same name.

²⁴⁴ Gurtong, "The Structure of the Government of Southern Sudan," *Gurtong Peace Trust*, February 26, 2007: http://www.gurtong.org/resourcecenter/gov/GOSS_Structure.asp (accessed October 30, 2007).

²⁴⁵ The circumstances surrounding Garang's death in an aircraft accident continue to remain a source of speculation undermining the current peace process. See Dagne and Congressional Research Service, "Sudan: The Crisis in Darfur and the Status of the North-South Peace Agreement."

hold the same level of public support as Garang did. The natural resource revenue provided by the CPA has been controversial in amounts provided by the GoS as well as its allocation and use by Mayardit and the GoSS. The lack of ability to govern effectively, stem corruption, and its failure to improve the economic conditions in Southern Sudan to date has led many among the Dinka, Nuer, and other southern tribes to lose faith in the GoSS.

The SPLA is the military arm of the ruling Sudan People's Liberation Movement. In many areas of Southern Sudan, they continue to clash with the GoS for territorial control over natural resources. The formation of Joint Integrated Units (JIUs), mandated by the CPA and consisting of Sudanese Armed Forces and SPLA members has stagnated, resulting in lapses in security for many areas. The resultant internal tension in non-Dinka areas of Southern Sudan has forced the SPLA to act as an occupation force to keep the peace and deter support for GoS-sponsored militias such as the Ugandan Lord's Resistance Army.

4. Social Network Analysis

The ethnographic studies outlined in the previous section serve to form the basis for the initial iteration of SNA.²⁴⁶ The ethnological study shown in the previous section points to the importance of tribe and clan in Sudan, as these ties can cut across and override political goals and ambitions. It is important to note that when we talk of tribe, we are not talking solely about tribal leadership structure, but common identification within a social structure. The qualitative contextual study of the situation in Darfur allows the formation of a hypothesis that the rebel groups are formed along tribal and clan lines. This study uses SNA both to validate this hypothesis and as an exploratory tool to determine how it compares to, contrasts with, or substantiates other relationships of the rebel organizations.

The methodology used in this chapter sets the rebel organizations as the nodal level of analysis; i.e. the organizations are the actors (nodes) in the network. The analysis

²⁴⁶ The data used to formulate the following presentation was collected from multiple sources (books, publications, and news reports) with each data point being verified with at least two independent sources, with only few exceptions.

examines the following relationships: 1) Group objectives, 2) Declared coalitions, 3) Tribal relations, and 4) Operational relations. Additionally, the analysis will look at multiplex relations consisting of combinations of the above relationships. The Group objectives are defined as the publicly stated end state objectives of the organization, conveyed through either official proclamations or public declarations. Announced coalitions are officially stated coalitions between rebel groups which, for the purpose of this paper, are a defined set of actors that have officially announced cooperation for a common cause. The tribal relations show relationships of the rebel organizations to the tribes in the region. Operational ties indicate whether organizations have conducted combat operations focusing on the same targeted objectives together.

Different insurgent factions within a conflict zone can have differing desired objectives for the outcome of their struggles.²⁴⁷ Broadly speaking, the rebel groups in Sudan have three stated objectives that serve as the underlying rationale for their struggles: regime change, self determination, and equal representation. Regime change is the most drastic and entails removal of the leadership and or government structure that exists within Sudan. In the case of Sudan, self-determination is the right to exist as a federalist state in the context a greater Sudan as was outlined in Chapter III. It is important to note that this is not separation which, though is a common stated goal of the southern Sudanese population, is not a stated goal of any rebel group currently (late summer 2007) in Sudan. The final objective is equal representation. This goal can be viewed as an end to marginalization and the right and ability to actively participate and be represented within the government. Figure 13 below shows the rebel groups with their declared objectives. The rebel factions are represented by the round nodes in the sociogram and the tribes are represented by red square nodes. The colors match the ethnicity that respective groups have either publicly stated or are popularly (within the regions of conflict) perceived as such, while the size of the rebel group node reflects the comparative sizes of the groups to each other.

²⁴⁷ The method of declaring group objectives by the various factions ranges from formal political statements to media interviews and press releases by group leaders. Typically, the larger and more established organizations have formal stated political objectives.

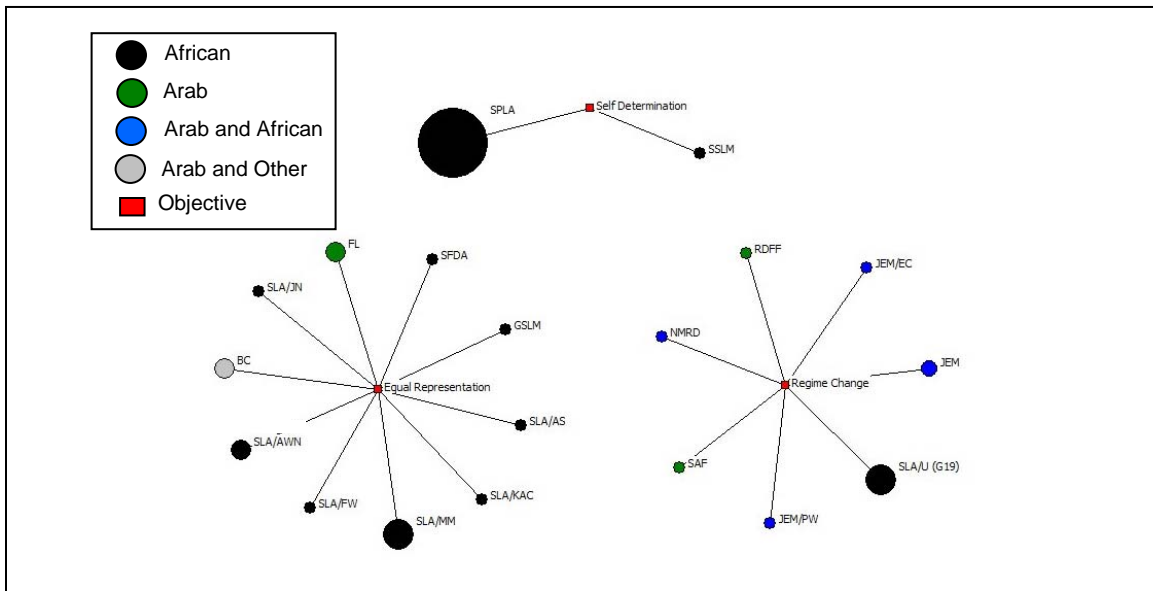


Figure 13. Rebel Group Objectives ²⁴⁸

Figure 14 below shows the tribal relationship of the rebel organizations.²⁴⁹ It should be noted that the declared ethnic identification of a rebel group does not always match the identification of the tribal makeup of the organizations, especially in the case of the northern based commonly “African” labeled SLA elements such as SLA-MM, SLA-FW, and the SLA-UC. These rebel groups contain Arab Rezeigat tribal members in addition to African tribe members. Finally, it is critical to note that there are tribal ties between elements of the northern based SLA factions and elements of the Janjaweed supported by the government. This point is important, as it was these northern factions who took part in the DPA negotiations in part or in whole, whereas the other groups such as the JEM factions and the SLA-AWN did not. Northern tribal relations may have influenced the rebels that did come to the DPA negotiating table to negotiate with the government, whereas the lack of these ties may have played, or more importantly, failed to play a role in these other elements participation in the DPA negotiations.

²⁴⁸ All social network analysis was conducted using the SNA program UCINET for Windows. S. P. Borgatti, M.G. Everett, and L.C. Freeman. 2002. *UCINET 6 for Windows: Software for Social Network Analysis*. Harvard: Analytic Technologies.

²⁴⁹ Sub-tribe unit of analysis is one level below the major tribe. For example, the Zaghawa is the major tribe and the Kobe is the sub-tribe. The levels of analysis in this study will not explore lower sub-level tribal divisions or clans.

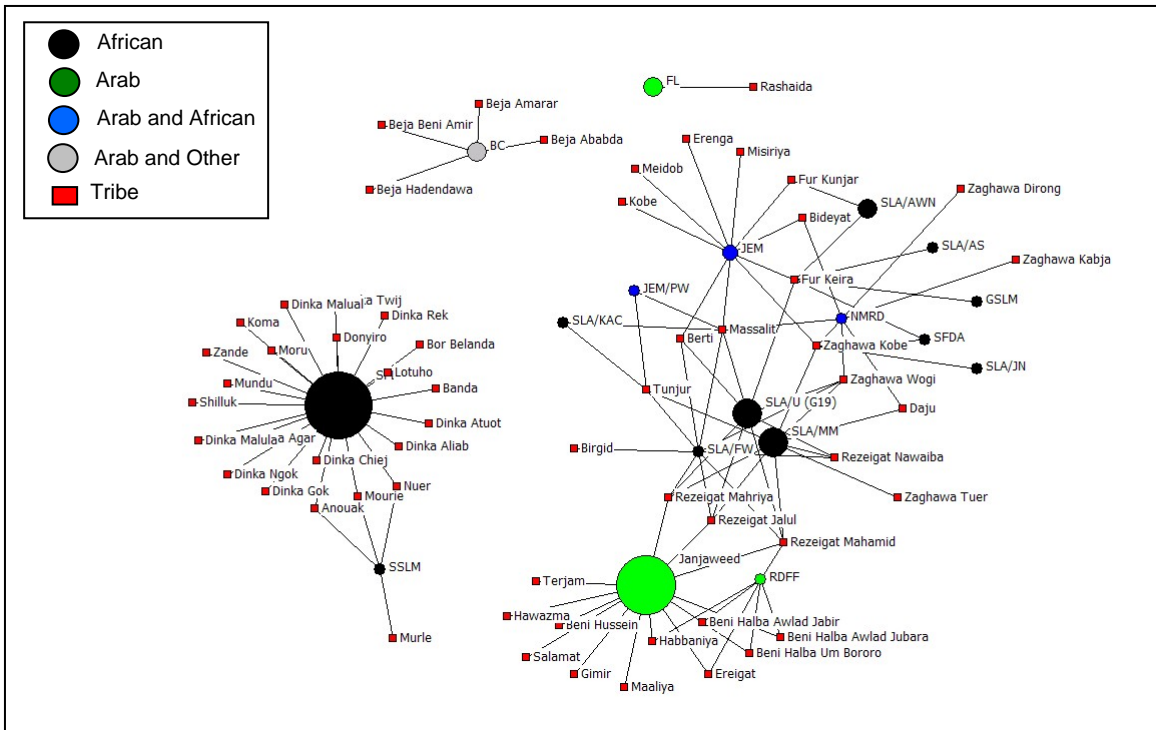


Figure 14. Rebel Group Tribal Associations

Coalition-forming is an action aimed at increasing an organization’s capabilities, and is especially important for organizations that are weaker than their opponents or peers in terms of power and influence. By unifying through the formation of coalitions, these groups potentially increase their combat power against the government and its proxies, gain increased influence over the relative population base, and increase their bargaining power in both local and international negotiations.

Figure 15 below shows the rebel group membership in Sudan distributed along the lines of declared coalitions. The majority of the rebel groups belong to at least one announced coalition. Five belong to more than one and six belong to none. The networked portrayal of these groups appears to indicate that their respective ethnicities do not seem to influence the formation or composition of the coalitions themselves. Coalitions are perhaps instead formed as a matter of political convenience, rather than existing due to the strength of personal associations, protracted objectives, or a general common sense of unifying purpose amongst combative groups.

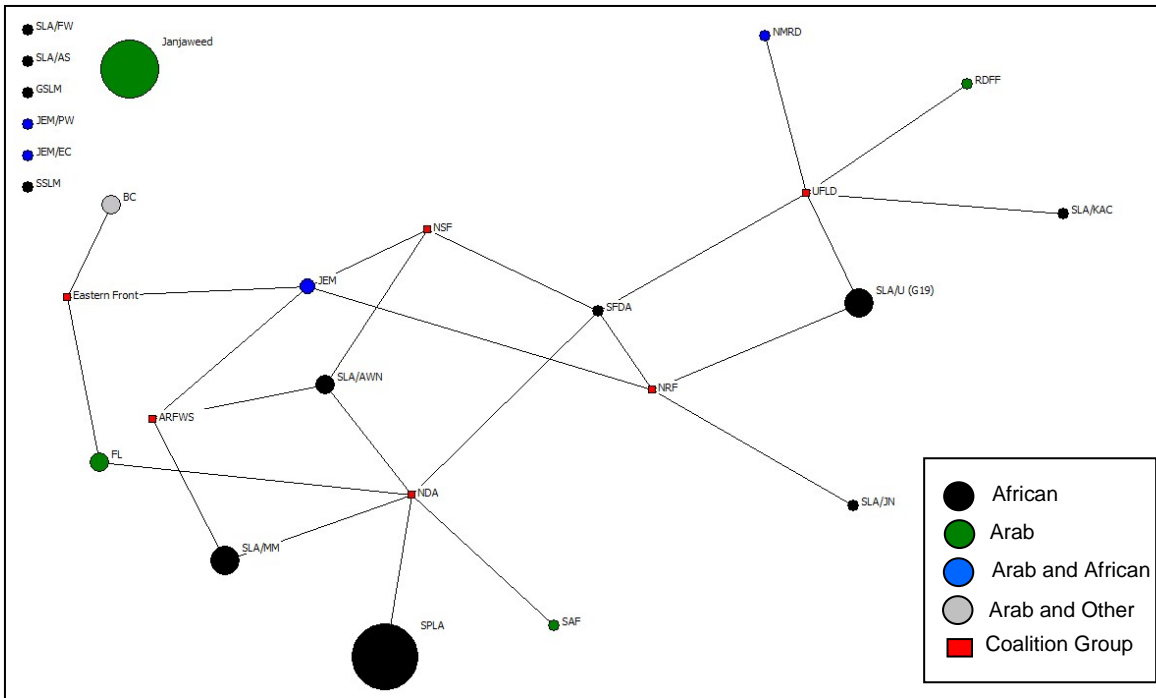


Figure 15. Declared Rebel Coalitions

Aggregation of relationships forms *multiplex relationships* in SNA. Multiplex relationships allow us to compare, identify, and understand important ties and central nodes with the overall network. Figure 16 below provides a baseline positional representation for the rebel groups and is provided to be used as a reference for comparison of the following multiplex relationships.

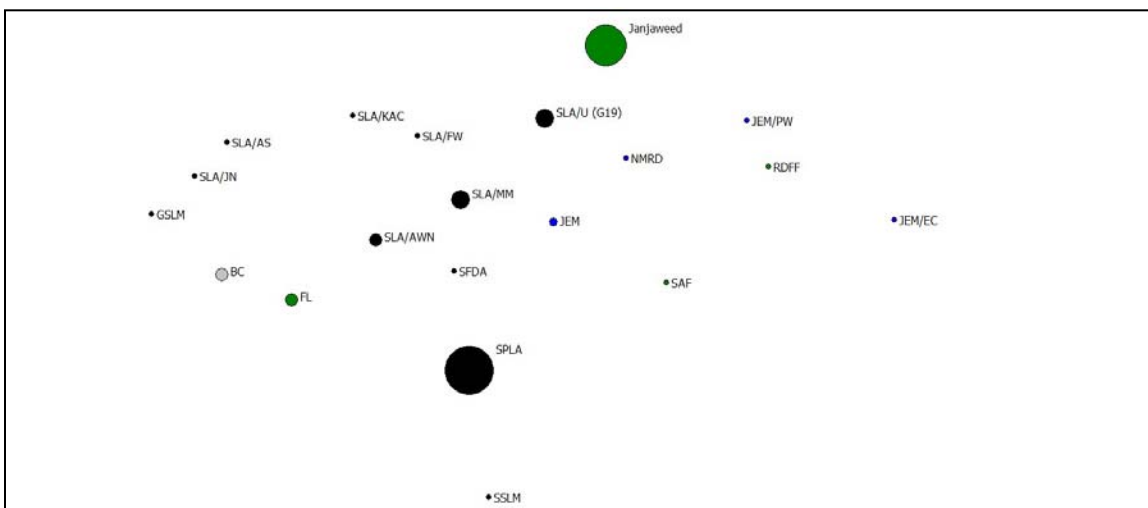


Figure 16. Reference Rebel Group Locations in Multiplex Sociograms

A reasonable assumption from a rational unitary actor approach would be that the rebel groups in Sudan would form coalitions with other rebel groups who have the same or similar objectives to present an aggregated side in their opposition to the government. Figure 17 below shows a comparison of the objective ties and coalition ties of the rebel groups. It is immediately apparent from the diagrams that rebel coalitions are not being formed to support common objectives, suggesting that there are other reasons that define the coalitions or, possibly, that coalitions are being used for boundary-spanning purposes.

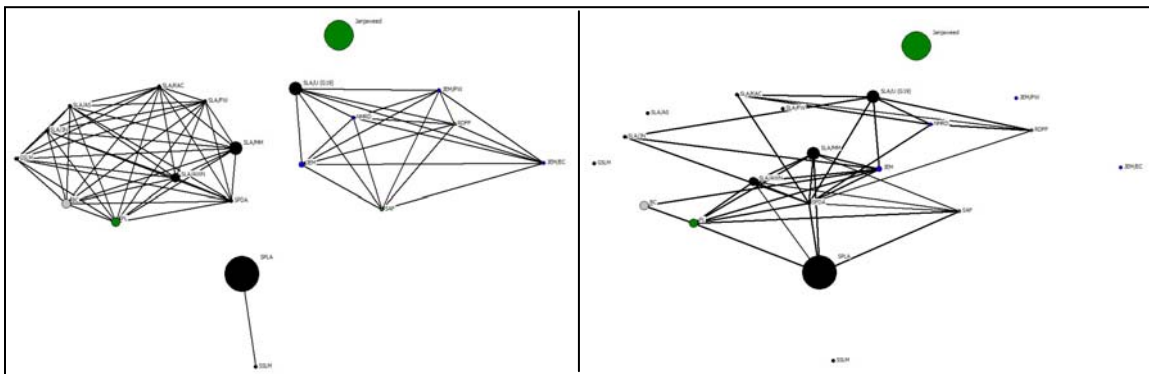


Figure 17. Objective (left) and Coalition (right) Ties

A second assumption to be tested is whether the rebel operational cooperation, irrespective of coalition forming, has been in support of overall rebel group objectives. Figure 18 below shows that operational ties between groups are not reflective of common objective ties, while Figure 19 shows that coalition ties are more reflective of operational ties, though the overall commonality of ties in the two networks is still less than 50%.

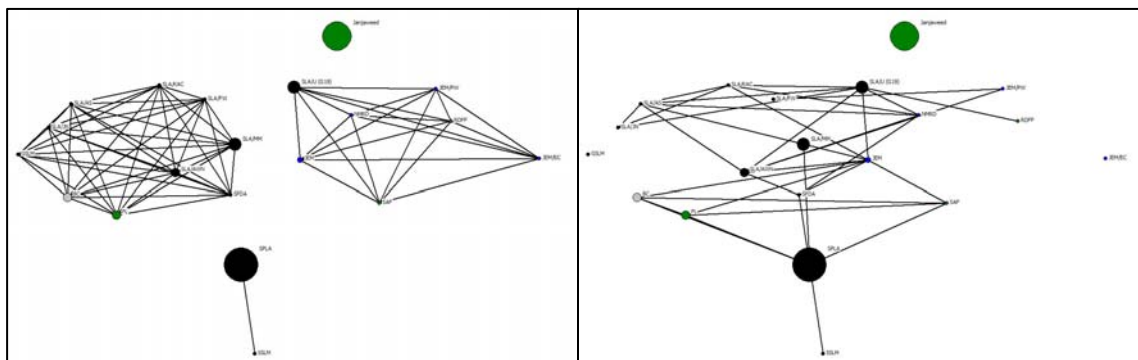


Figure 18. Objective (left) and Operational (right) Ties

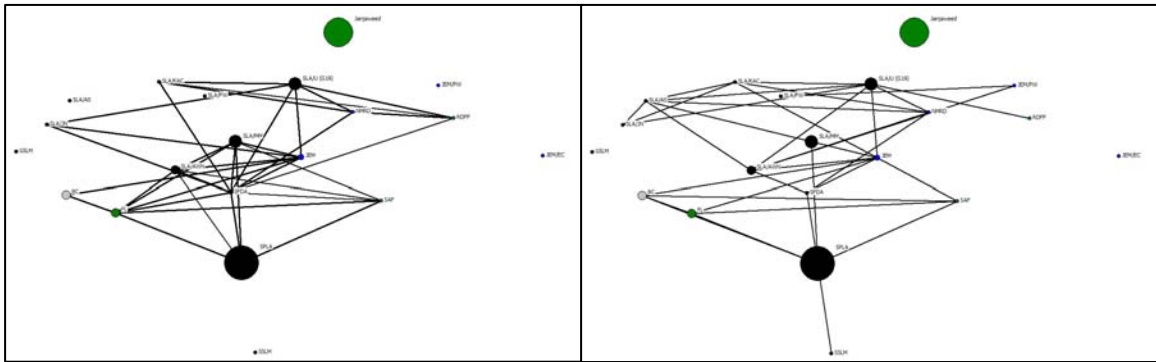


Figure 19. Coalition (left) and Operational (right) Ties

Figure 20 below shows the operational and tribal ties. A key point is that the tribal ties are inclusive of a significant portion of the operational ties with the major exceptions being the operational ties with geographically displaced rebel groups (an example of such a boundary-spanning role would be the JEM in western Sudan forming an alliance with the Beja Congress and Free Lions in eastern Sudan). A comparison of the coalition and tribal ties in Figure 21 below shows that in a significant portion of the ties of the coalitions are not based upon tribal relationships. This lends validation to the theory that the coalitions are formed for reasons not associated with ethnic identity or objective goals.

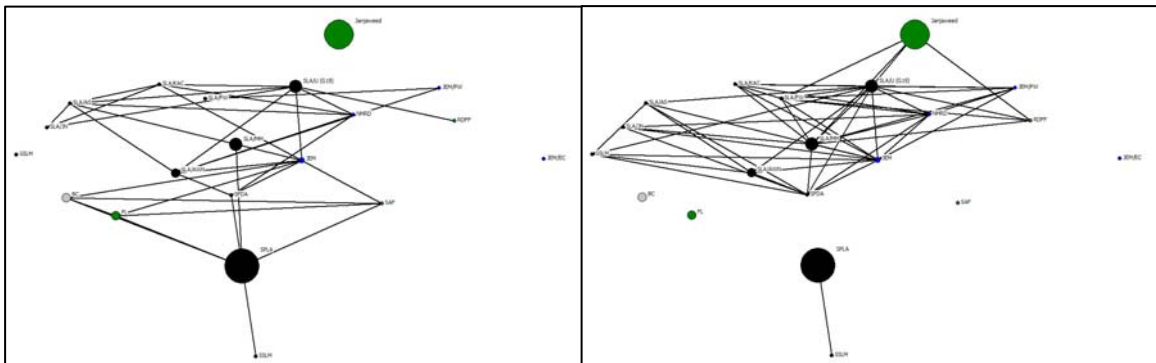


Figure 20. Operational (left) and Tribal (right) Ties

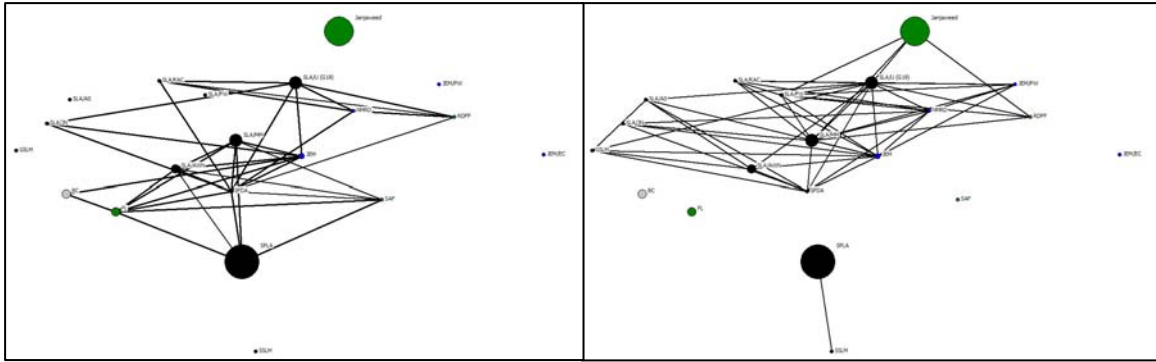


Figure 21. Coalition (left) and Tribal (right) Ties

The above analysis indicates that the rebel groups within Darfur are operating along tribal lines. This understanding is critical in the case of Darfur as many Western analysts and negotiators deal with the rebel organizations in a manner more suited to dealing with national level organizational bodies. It is not surprising that these approaches have met with failure and frustration as agreement after agreement has failed as the groups have fractioned along tribal lines between those who agree and disagree with the terms of the settlements. The degree of importance of tribal ties in Southern Sudan is not apparent in this level of analysis. This analysis reinforces the idea that the coalition ties seem to mainly provide a weak binding mechanism to tie geographically diverse groups together. Contextual analysis conducted based on these results seems to indicate that these coalitions are used to provide a unified external (to Sudan) “political” opposition front to the GoS than any other reason.

SNA mathematical analysis of the operational network gives the ability to determine sub-groups (cliques) within the network. This analysis, conducted using the UCINET SNA program and the rebel group tribal affiliation data determined that there were nine operational cliques:

1. SLA/AWN, SLA/UC (G19), SLA/AS, JEM
2. SLA/AWN, JEM, SFDA
3. SLA/KAC, SLA/UC (G19), SLA/AS, JEM
4. JEM, BC, FL
5. SLA/KAC, SLA/UC, (G19), SLA/JN, SLA/AS

6. SLA/AWN, SLA/UC (G19), SLA/AS, NMRD
7. SLA/AWN, NMRD, SFDA
8. SLA/KAC, SLA/UC (G19), SLA/AS, NMRD
9. BC, FL, SPLA

A notable point is that none of these operational cliques found in the analysis align with declared coalitions. This information helps to validate the initial assessment that the coalitions play less of a factor in the rebel activities in Darfur than are commonly perceived. Two centrality measurements were conducted on this same dataset. The first, *degree centrality*, shows the centrality based upon direct tribal relationships and results in the following in order of centrality: SLA-UC, SLA-FW, SLA-MM, JEM, the Janjaweed, NMRD, RDFF, SFDA, JEM-PW, SLA-KAC, SLA-AWN, GSLM, SLA-AS, SLA-JN, SSLM, SPLA, JEM-EC, BC, and the FL. The second, *eigenvector centrality*, measures the centrality based upon not only direct ties of the actor, but of the ties of the other actors in the network that the actor under analysis is connected to. This centrality measurement provides the following results in order of centrality: SLA-MM, SLA-AWN, SLA-KAC, SLA-UC, SLA-JN, SLA-FW, SLA-AS, GSLM, JEM, JEM-PW, JEM-EC, NMRD, BC, FL, SFDA, RDFF, SPLA, SSLM, and the Janjaweed.

The first measurement reflects importance of an actor based upon their ability to mobilize resources (personnel, supplies, etc.) and influence situations through direct tribal ties. The second measurement shows an actors importance for potential to mobilize resources through not only its ties, but the ties of others that it is connected to. Current operational patterns determine the immediate influence and impact on the population. Degree centrality analysis gives us the ability to determine the central organizations based upon operational ties.²⁵⁰ This analysis reveals the following rebel organizations in order of operational centrality ranking: JEM, SLA/UC, SPLA, SLA/AWN, SLA/AS, SLA/KAC, NMRD, SFDA, SAF, FL, BC, SLA/JN, JEM/PW, SLA/MM, SLA/FW, RDFF, SSLM, JEM/EC, GSLM.

²⁵⁰ Note that this only reflects operations ties between the groups and does not represent the size, number, or effectiveness of the operations which would require further research and analysis.

What is critical to note is the analysis validates perceptions of who are the current operationally key players (such as the JEM, SLA/UC, and SLA/AWN) and shows that others who are often thought of be key players (SLA/MM and the GSLM) are less so. In total, each of these measures using the appropriate data allows the determination of current, future, and potential key actors within the network or networks.

Blockmodeling analysis was conducted on the same rebel group tribal affiliation data reveals the following factions which matches long term cooperation patterns:²⁵¹

1. RDFF
2. SLA/FW, JEM/PW
3. SLA/JN
4. SFDA
5. GSLM
6. JEM/EC
7. Janjaweed
8. SSLM
9. SLA/MM
10. BC, FL, SPLA
11. SLA/AWN, SLA/KAC, SLA/UC (G19), SLA/AS, JEM, NMRD

The results shown above match actual rebel group operational cooperation patterns. This information allows the identification of “true operational coalitions” vice the declared coalitions and allows for the focusing of engagement on specific sets of actors. Blockmodeling can also provide insight into possible coalitions that can form or split (due to existence of binding ties) within the network by adjusting the block numbers used to model factions within SNA modeling programs.

Figure 22 below shows the geospatial relationship of the rebel groups in Darfur overlaid on the ethnic map shown in whole in Figure 5 (Chapter III). As can be seen in

²⁵¹ The results shown were compiled using a block number of 11. The block number can be changed to determine best fits of data.

the overlay, the rebel groups are generally operating within their tribally affiliated territories. This provides a tertiary measure by which to verify the salient factor in rebel operations, namely that they are tribally based. The underlying importance of this factor must play a distinct role in any engagement options aimed at either coalescing or dividing insurgent groups, and will be further addressed in Chapter VI. The importance of the networked relationships in Sudan is also apparently reflected in the current status of the DPA in Darfur, the failure of which suggests that a rebel groups willingness to attend or sign a peace agreement may not be nearly as important as who they are related to.

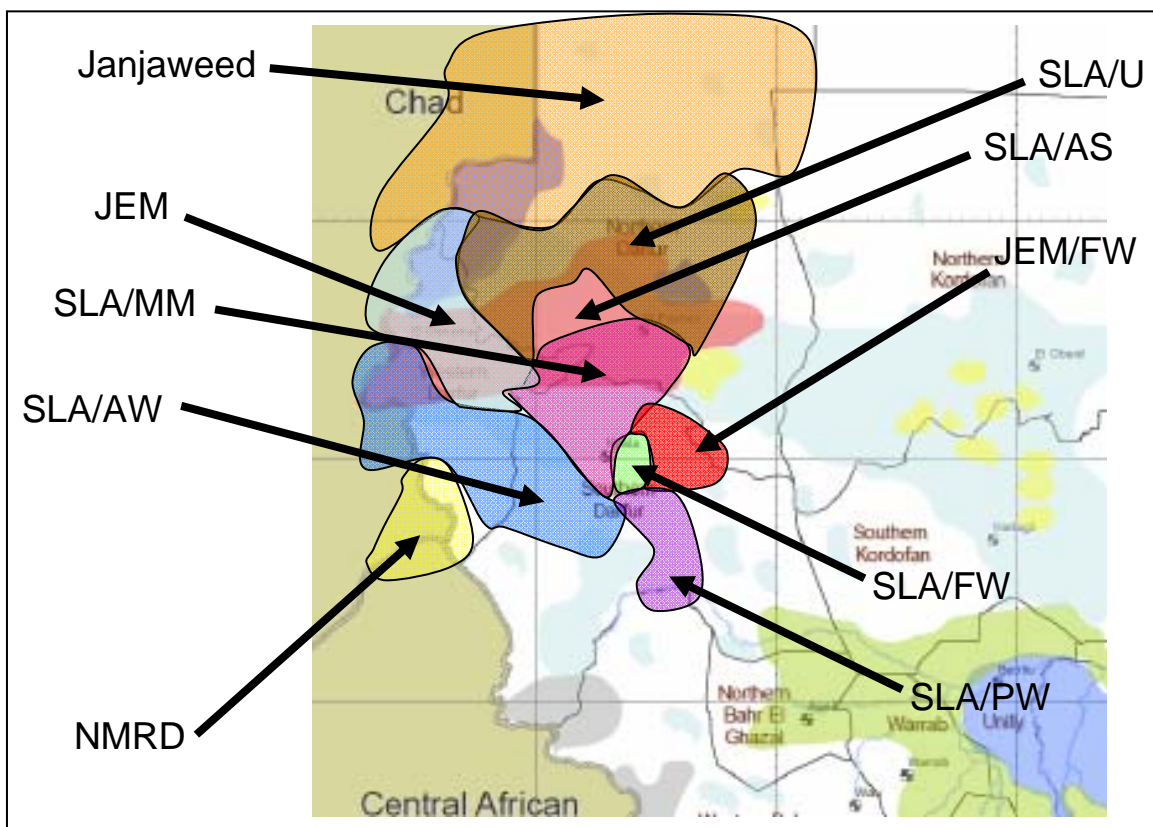


Figure 22. General Darfur Rebel Organization Operational Areas ²⁵²

Nexus Topography analysis offers insights into the complexity of the situation in Sudan while at the same time providing a clearer understanding of the relationships involved. While this initial assessment was broad but not deep in terms of information

²⁵² Data for map compiled from reporting on rebel home base areas and reports (news, UN, and AMIS) on rebel operations.

and analysis, NT suggests that the route to influencing the conflict in Sudan is through the tribal elements and their various affiliations. This runs counter to conventional conflict resolution thinking which seeks to engage the conflict participants as political entities where social capital (and hence trust, power, and influence) is defined by organizational structure and western social norms. Published accounts at the time of the writing of this paper suggest that the approaches being used in both Darfur and Southern Sudan are mainly based upon these conventional approaches. Problems arise, then, when trust, power, and influence are rooted in concepts such as tribal and clan affiliation that are foreign to outside mediators or intervention agencies. It should be apparent from this analysis that the situations in Sudan are in fact based upon these types of relationships and, therefore, come as no surprise that the attempts to negotiate long term stable solutions to the conflicts have generally failed.

NT analysis can continue using the imperatives learned in the initial run to focus further data collection and analysis to substantiate or deny initial perceptions and to further refine the concept of social capital for the players. Additionally, this chapter focused mainly on the rebel organizations and their interaction with the population. Further analysis using this methodology can and should be used to examine the interactions of the other cornerpoints in the Diamond Model; namely the state and external actors. The observations that result from this NT analysis can be fed back into the Dynamic Conflict Model to adjust values for the players for subsequent iterations, as well as being useful for a more specific framing of the situation estimate. This process of analytic correlation will be further explained in Chapter VI.

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VI. ANALYTIC CORRELATION

Occurrences in this domain are beyond the reach of exact prediction because of the variety of factors in operation, not because of any lack of order in nature.

- Albert Einstein ²⁵³

A. THE FRAMEWORK OF CORRELATION

Internal wars and intrastate conflict defy quantification by classical methods of conflict study. Traditional metrics do not accurately describe the nature of the players, their motives, or their capabilities. Attempting to utilize these methods leads to an inaccurate understanding of the conflict and can lead to misguided attempts to influence the outcome. Internal wars are complex, and are influenced by factors that are not contained in the traditional analysis of interstate conflict. These internal struggles create a situation that presents itself as irrational, with unexplainable actions that are inconsistent with western patterns of behavior. If the proper lens is applied, these elusive factors reveal themselves, making the same actions not only rational and explainable, but also consistent with local and regional societal patterns of behavior. The ASC provides a framework through which these factors can be identified in order to gain a clearer understanding of the conflict. In doing so, general imperatives and specific approaches to engagement can be formulated, and their outcomes can be more accurately anticipated.

As a concept, correlation is commonly used in research to identify a mutual or causal relationship between two sets of variables. Here, the products of multiple, distinct analytic lenses are considered for their relationships to each other and how they apply within the context of the situation. Analytically, the resultant products of each analytic lens are correlated and classified toward their application as imperatives applicable to the broad scope of internal wars, or, alternatively, situation specific approaches.

²⁵³ Albert Einstein, "Science and Religion," presented at *The Conference on Science, Philosophy and Religion in Their Relation to the Democratic Way of Life, Inc.*, New York, 1941: <http://www.davidson.edu/academic/anthropology/erlozada/classes/03spr/ant261/einstein.pdf> (accessed October 12, 2007)

The Analytic Correlation (AC) portion of the construct evaluates and organizes lessons derived from the three analytic lenses. The Qualitative Situation Estimate provides a base understanding of the environment. It is a cumulative picture based on the level of knowledge prior to the inception of the study and what has been accrued through the process of research and data gathering. It is critical because it lays the groundwork for the cognitive filter through which the analysis takes place. The Dynamic Conflict Model reveals the nature of the conflict from a two-player game theory perspective. It identifies the type of game being played, the presence of nested games, and whether or not a negotiable space exists. Possible co-option strategies that have been or could be used to create such a space become apparent and any current agreements are evaluated for validity and maintainability. The third input, Nexus Topography, exposes the existing bonds of trust and reciprocity that are influencing the behavior of the actors in the conflict. Why coalitions form, what common interests are most influential, and why organizations fracture into sub groups, are among the products from this lens.

The correlation process (depicted in Figure 23) begins by listing the lessons derived from each of the three analytical lenses: the Qualitative Situation Estimate (QSE), the Dynamic Conflict Model (DCM), and the Nexus Topography (NT). The lessons are then defined as each concept is derived from a particular lens that has been evaluated through the cognitive filter of insurgency theory (Chapter II). These lessons are in no particular order; some arise from a single analytical lens, while others may be echoed or mutually supported in multiple lenses. The lessons are categorized within a framework that captures the entire range of means or effects for achieving national goals. The framework is selected by the construct user based on the decision maker's intent.

Diplomatic, Intelligence, Military, Economic, Financial, Information, Law Enforcement (DIMEFIL) is used to designate a space of actions or options. Political, Military, Economic, Social, Intelligence, and Infrastructure (PMESII) is used to describe a range of effects to be considered. Both stress the factors that contribute to and define the entire socio-cultural environment surrounding the conflict.²⁵⁴

²⁵⁴ National Research Council, "Defense, Modeling, and Simulation Analysis", *The National Academies Press*, Washington, DC (2006): 12.

For the purposes of this case study, the most inclusive framework of means and effects to achieve national goals, PMESII is used. Expertise in each of these areas is necessary in evaluating the validity and applicability of the lessons for each area. The lessons that may apply outside of the specific conflict of study are grounded historically, and, being supported by established theory, become imperatives. Those imperatives are then applied back to the specific area of conflict and evaluated for their feasibility and likelihood of producing a desired effect. Those that meet the criteria become possible approaches to influence the outcome of events.

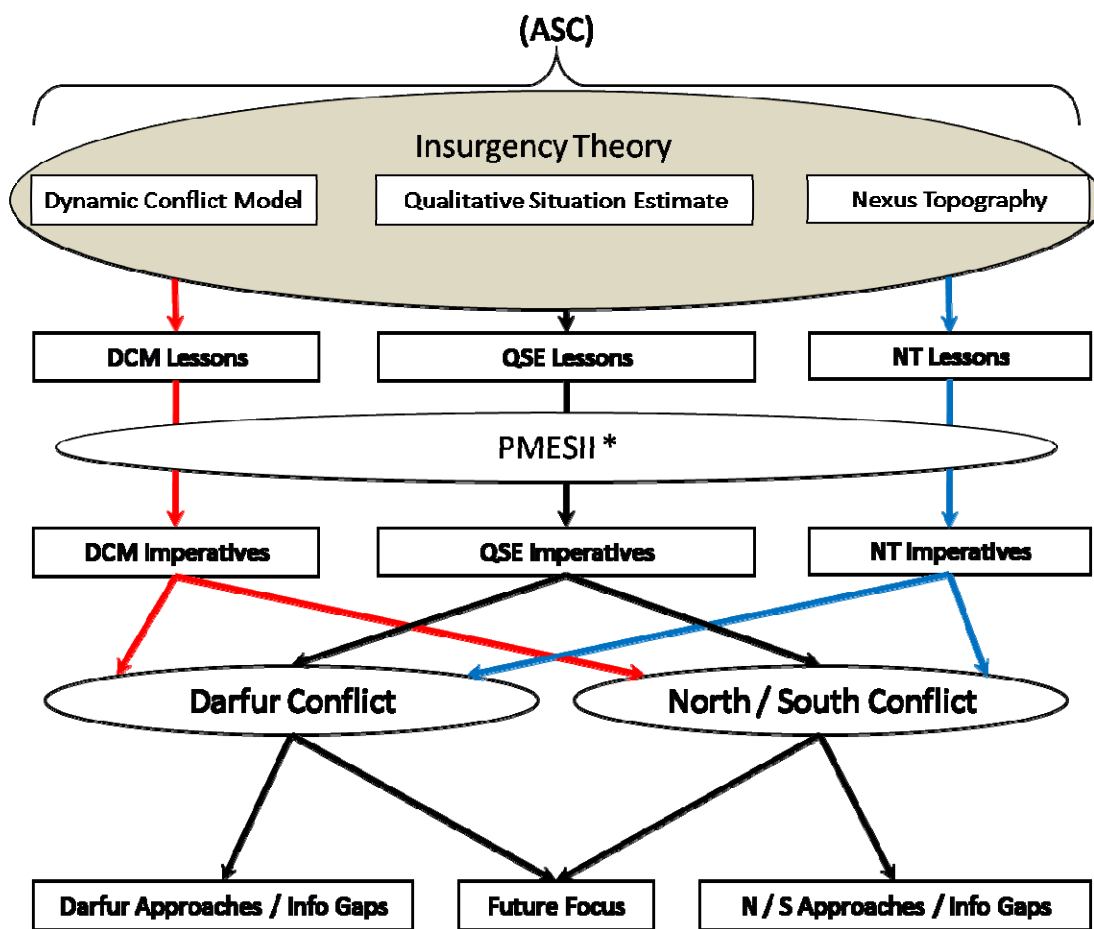


Figure 23. Analytic Correlation Process ²⁵⁵

²⁵⁵ (*) Political, Military, Economic, Social, Intelligence, Infrastructure (PMESII). Additional models of means for achieving national goals such as DIME, or DIMEFIL can be selected by the ASC user.

To be properly conducted, analytic correlation requires in-depth knowledge in multiple areas of expertise to act as cognitive filters for the derived outputs. An understanding of insurgency theory is required, as the construct is designed to focus on the security situation and the conflict between the state and sub-state actors. Insurgency theory serves as the basis by which the factors that influence the conflict under study must be evaluated. Knowledge of how and why insurgencies begin, how they sustain themselves, and how they end, provides an understanding of the specific conflict in regard to previously studied internal wars. It also allows for the interpretation of events and actions with respect to how insurgencies progress and attempt to achieve their goals. Finally, it provides insight into how the conflict may be evolving, and fosters the ability to anticipate the effects of attempts to influence the situation. In order to understand these effects, and to generate feasible imperatives and approaches, an understanding of international diplomacy, military capabilities, economics, social functions, and information operations is necessary. This understanding will greatly enhance the effectiveness of using methodologies such as PMESII.

How much diplomatic influence one nation may have in regards to a conflict within another sovereign nation is only possible if the capabilities and methods of diplomatic engagement are known. Knowledge of economic theory, coupled with an understanding of the local economy in the conflict area, can help explain the success or failure of sanctions, or determine the type of assistance necessary to afford one side a quantified advantage. An understanding of military capabilities, strategy and tactics is critical to assessing the types of operations the actors are capable of and the effects military intervention might have. Expertise in these areas can also help to interpret the way the actors in the conflict interact with each other along those lines, as well as determine what options are available for third-party attempts to influence the conflict via one or a combination of these means. There are certainly some approaches that may be optimal for effect, however they are not always feasible based on the resources available and the capability to bring those resources to bear. The analytical correlation therefore lends itself to the use of subject matter experts in each of these fields. Available experts

can review the lessons derived from each of the three frameworks, interpret them, and assist in their correlation into imperatives and approaches.

The analytic correlation yields two major outputs. These are classified as general imperatives and specific approaches. These outputs are the product of a single iteration of the construct, and also serve as inputs for subsequent iterations of the construct within a feedback loop. The imperatives derived are concepts that *should* hold true throughout future iterations of the construct as it progresses to a more detailed level. These imperatives *may* also hold true if the construct is utilized for the evaluation of a different instance of intrastate conflict. Thus, they are maintained as imperatives until it is demonstrated that they no longer apply. Specific approaches become options for engagement nuanced to the conflict being studied and are applicable only down to the level of examination. The final output is identified informational gaps to fill in further research. Once the gaps are filled, the approaches should be tested for anticipated outcomes through the conduct of a follow on iteration prior to employment.

B. LESSONS LEARNED AND DERIVED IMPERATIVES

The lessons learned are listed in order of the analytical lens they are derived from, and are stated in the context of the conflict in Sudan. Examples that demonstrate these lessons, and the analysis that supports them, are found in the respective preceding chapters of this thesis. The lessons are sometimes derived from a single lens but often are products of output from multiple lenses of analysis. The imperatives listed in the end of each of the following sections are a synopsis of the lessons, stated in objective terms, and organized along the lines of the PMESII framework.

1. Qualitative Situation Estimate Lessons and Imperatives

Conventional diplomatic efforts have been limited in their ability to assuage intrastate conflict within Sudan. Diplomatic engagement unilaterally and through international organizations such as the United Nations is a commonly used method for influencing the behavior of state actors. With respect to the Sudan, U.S. foreign policy

efforts to engage the Bashir-led GNU have been difficult from the start, hamstrung by efforts to delegitimize the Sudanese regime while not offending the greater community of Islamic states as a whole.

The QSE provides examples of attempts by the United States Government and other nations to influence actors within Sudan, to include the GoSS, the GNU, and the Darfur rebel groups. The continuation of conflict within the Darfur region, and the reluctance of the GNU to take any action to reduce the fighting and displacement of civilians are examples of the failure of these efforts. The CPA is often used as an example of successful diplomatic efforts, however, as the QSE and the DCM show, this agreement was made possible mainly through the coercive consolidation of power in the south by the SPLM/A, the introduction of resource and governmental position sharing, and the promise of a transparent election and referendum for succession in 2009 and 2011 respectively. The true effect of the CPA will not be known until the outcome of these votes is seen, if they ever take place, and if tensions do not once again rise to the level of violence preceding the CPA signing. The civil war in Southern Sudan has had short periods of relative peace and it is still unclear whether or not the current situation is the beginning of a peaceful era, or just another tensioned pause between conflicts.

Conventional economic means of influence have not produced the intended effects on the GNU or the mitigation of the humanitarian crisis. In some cases they have exacerbated micro-conflicts within the larger conflict they were meant to resolve. The United States and other nations have often relied on economic sanctions in support of their diplomatic efforts to influence the actions of unruly nations. This has seen success in many cases and therefore remains a viable and commonly used method for international bodies such as the United Nations. Humanitarian assistance has become a large scale global tool for well-off nations to assist in humanitarian crises resulting from natural disasters and conflict. The effort following the Indian Ocean Tsunami in 2004 was an example of this.²⁵⁶ Aid also comes in the form of non-lethal and lethal items

²⁵⁶ Eva-Lotta Hedman, "The Politics of Disaster Response," *Forced Migration Review, Tsunami: Learning from the Humanitarian Response*, Special Issue, (July 2005): 4.

provided to a country in order to bolster its ability to conduct internal defense such as Plan Colombia, the United States' assistance to Colombia to facilitate counter-narcotic production and trafficking.²⁵⁷

The QSE identified two major reasons why conventional sanctions are near predestined to have little effectiveness with regard to Sudan. First, through sanctioning of the GNU, both the government and insurgent groups feel the effect. The civilian population is included and affected under both those groups. By sanctioning the GNU, the GoSS, which is trying to develop sorely needed economic infrastructure in the south, is hampered in its efforts. Without improvements the southern populace will continue to lose faith in what is already considered a corrupt and ineffective governing body. Second, Sudan's primary resource export is petroleum, which the U.S. has already divested from and consequently has little influence on the companies and nations that buy the product.

Without resolution, or at least a reduction of violence in Darfur, the humanitarian assistance organizations will continue to be frustrated in attempts to help the displaced refugees and civilians within Darfur.²⁵⁸ In Sudan, where most participant sides of the internal conflict are suspected of human rights abuses, non-lethal humanitarian aid may serve only to reward actors for improper behavior. In the case of Southern Sudan, the United States for years maintained a policy to provide food aid to Southern Sudan through the SPLM even though their strong-arm tactics to consolidate power in the south were often brutal in nature.²⁵⁹ This included non-lethal military assistance to the SPLM which, while assisting them in their fight against the Khartoum regime, further facilitated their ability to forcibly coerce opposing tribal factions throughout the diverse Southern Sudan region.²⁶⁰

²⁵⁷ S. Johnson, "Helping Colombia Fix Its Plan to Curb Drug Trafficking, Violence, and Insurgency," *The Heritage Foundation* (April 26, 2001) available at <http://www.heritage.org/Research/LatinAmerica/BG1435.cfm> (accessed September 21, 2007).

²⁵⁸ Scott Baldouf, "Darfur's Aid Lifeline in Danger", *Christian Science Monitor* (July 11, 2007), <http://www.csmonitor.com/2007/0611/p01s04-woaf.html> (accessed September 25, 2007).

²⁵⁹ Kenneth Roth, Executive Director, Human Rights watch, "Food aid and Human Rights Abuses in Sudan," Letter to United States Secretary of State (December 10, 1999).

²⁶⁰ Catherine Bond, "Sudan Worn Down by Years of War", *Cable News Network* (September 22, 1999), <http://www.cnn.com/WORLD/africa/9909/22/sudan.conflict/index.html> (accessed September 25, 2007).

The ecological, religious, ethnic, and tribal reasons that are the initial underlying conditions for the conflicts within Sudan do not continue to exist as the operative causal reasons for continued fighting. Simply put, the reasons fighting began are no longer the sole reasons the fighting continues. As noted in the QSE, competition for arable land between farmers and nomadic herders in the Darfur region led to inevitable conflict as desertification spread. Political marginalization of some of the western tribes sparked a call for better representation within the newly formed GNU. The introduction of proxy militias as a control measure as noted by the DCM, and the influx of massive amounts of modern arms to rebel groups through Chad pushed these conflicts beyond the means of traditional tribal resolution. As the NT analytic lens points out, the effects of prolonged conflict, fresh in the memory of the populace, propagated the violence and caused further fractioning amongst rebel groups along tribal and clan lines.

The GNU, dominated the National Congress Party (NCP), enjoys de facto sovereignty regardless of the method by which it came to or maintains its power. Once recognized by legitimate international bodies such as the United Nations, other states are forced to work with and through it to affect the conflict and humanitarian crises within its borders.²⁶¹ The NCP, which itself relies on informal patrimonial governance as seen in the QSE, becomes not only an obstacle for outsiders, but entrenches political marginalization of its opposition within the country. The GNU has consistently hampered the timeliness and effectiveness of the African Union Mission in Sudan (AMIS) and the deployment of United Nations Peacekeepers in accordance with Security Council Resolution 1706.²⁶² The ability for international state intervention and for marginalized groups within the state to effect change is hence controlled by the sovereign regime. Placing its own goals first in priority, the GNU has been able to extend the conflict in Darfur. It has forced the rebel groups to rely on violence and therefore has reduced their legitimacy in the eyes of the world.

²⁶¹ Adam Lebor, "With Sudan a Member, the UN is Pointless", *The Times* (October 24, 2006), http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article610761.ece (accessed September 26, 2007).

²⁶² Amnesty International "Sudan: Human rights situation deteriorating in Darfur five months after peace agreement," News Service No. 257 (October 5, 2006) and United Nations, *Security Council Resolution 1706*, (31 August, 2006).

The Khartoum regime and the GNU do not rely on popular consensus to maintain state strength. Instead, they rely on sponsored coercive measures and centralized resource control to accomplish this. In the majority of democracies, popular consensus is the balancing factor that forces a governing body to create and follow policies consistent with the populace's views. In the case of Sudan, the government maintains and controls an army and enlists proxy forces to suppress and coerce opposition groups such as the western tribes in Darfur. Because the authority for resource allocation is centralized, they also withhold necessary rule of law and essential food supplies to areas within the country that are lacking.²⁶³ The combination of military force, and the lack of necessary resources provided to a section of the populace leads to what some have referred to as genocide. Nations with democratic forms of government recognize that popular support is necessary to maintain power. History has shown however, that oppressive, autocratic regimes have been able to achieve and maintain power through harsh coercive measures such as the removal or killing of an entire segment of the population. The use of these coercive means and the centralized control of national resources have enabled the Khartoum regime to maintain power while suffering little in the international arena.

These lessons learned, stated objectively and reframed outside the context of Sudan, are possible imperatives that may hold true in the evaluation of other intrastate conflicts. Organized along the lines of PMESII, the imperatives derived from the Qualitative Situation Estimate are listed in Table 10. It is important to note that these imperatives were generated from a first-run iteration of the ASC, in many ways they are intended to both address the case-study conflict analysis of the Sudan, as well as possible assessment methods for conflicts in general. The ASC, along with the imperatives derived from its application, is designed to be applied in an iterative manner. The imperatives of the QSE provide serve both to feed the other lenses of the ASC and to stand-alone in the absence of further (or timely) data. Nothing is certain until it is substantiated by reality, nor can effective engagement options be undertaken in hindsight (though many a political leader may wish otherwise). The imperatives of the QSE serve as an adaptive guide.

²⁶³ Prunier, *Darfur*, 97.

Imperatives Derived from Quantitative Situation Estimate

Political / Economic:

- **Conventional diplomatic incentives such as political and economic pressure, sanctions, resolutions, and agreements may have limited efficacy in intrastate conflict.**
- **Existing regimes are provided with de-facto sovereignty together with informal patrimonial governance is a combination that entrenches the political marginalization of any political opposition.**

Economic / Social:

- **Humanitarian and Non-lethal aid may exacerbate the existent, causal nexus of the conflict they are meant to help resolve.**

Military / Economic:

- **Sponsored coercive measures can replace popular consensus in maintaining state strength, a state with highly centralized authority controls its modes of resource allocation.**

Table 10. Qualitative Situation Estimate Imperatives

2. Dynamic Conflict Model Lessons and Imperatives

The DCM provides a two player perspective of conflict and highlights the need for a distinct perspective of intrastate conflicts. The paradox of Sudan's internal wars becomes apparent from analysis within the DCM. The North-South divide and Darfur each represent different types of games. Nested game theory describes and identifies the types of conflicts in each area. The Comprehensive Peace Agreement (CPA), when signed on 9 January 2005, addressed but did not completely resolve long term issues seen as critical by the insurgent groups (mainly the SPLM/A). Instead, the agreement introduced an artificial expansion of the contested space, creating enough justification for the government and the SPLM/A leadership to sign, but not providing long term guarantees that the promises will be ever be implemented. In this sense, the document, and the political pressure to sign it, was enough to attain an agreement but is likely not enough to maintain that agreement over time. The focus of the agreement is in three

areas: power sharing, wealth sharing, and conflict resolution.²⁶⁴ The strategy of co-opting the newly formed Government of South Sudan by providing petroleum revenue, positions within the GNU, and the integration of SPLA forces and the Sudanese Armed Forces is described in the DCM as a game of institutional design.

The Darfur Peace Agreement (DPA), signed on 5 May, 2006, was an attempt by the parties to codify an agreement that appeared possible but was doomed to failure. The product simply formalized a shift in conflict advantage toward the regime but did not meet the insurgency's minimum requirements. The focus of the document, similar to the CPA was on power sharing, wealth sharing, and conflict resolution.²⁶⁵ The rebel groups in Darfur did maintain a loose coalition until the signing of the DPA, where in fact only northern tribal factions participated, with only one, the SLA-MM, being a signatory, as pointed out by the NT analysis. The "game" between Darfur rebel groups and the GNU through analysis is one of a prisoner's dilemma. The introduction of a proxy force to fight the Darfur rebels simply shifted the advantage of the prisoner's dilemma to benefit the government. This is pointed to in the DCM as a game of multiple arenas.

The key to an effective analysis with the DCM are accurate player strategies and preferences. Since the Sudan is not easily accessed, and the organizations involved in the conflict are even less so, the DCM relies on the two other lenses for this data. As the construct is reapplied in future iterations, all new research data gathered for either lens builds a more thorough Qualitative Situation Estimate. It is critical therefore to take insights from other lenses and update the estimate continually. An example of this is the discovery through the NT lens that the main rebel groups in Darfur, the SLA and the JEM, were fractioning due to differing agendas and that this fractioning took place mainly along tribal lines. This information yielded a more accurate assessment of the player preferences, allowing the DCM to better describe the nature of the prisoner's dilemma taking place in Darfur.

²⁶⁴ *Comprehensive Peace Agreement between the Government of the Republic of Sudan and the Sudan People's Liberation Movement/Sudan People's Liberation Army* (2005).

²⁶⁵ *Darfur Peace Agreement* (2006).

Identifying the nature of the game in Darfur as a prisoner's dilemma allows the analyst to research possible solution venues pre-described in the relevant literature. Game theory is a well-established area of study, and each type of game has a field of work already conducted that discusses possible solutions to those types of games. This is a powerful tool that can offer a decision maker options on how to approach a conflict, using established strategies to resolve games of the type identified. This field is one most commonly used for economics; however, there are strategies that can be assessed for use in the context of the conflict under assessment. This allows analysts and planners to focus research in a direction that may address the situation more appropriately.

In Darfur, through development of player preferences in the DCM, it became clear that the interests of the Government of Sudan did not align with the interests of the rebel groups. It also became evident that the interests of the various fractioned rebel groups were not universal. In the south, the interests represented by the SPLM/A were the only ones accounted for, because as seen in the QSE, the SPLM/A had marginalized all opposing factions in the south prior to the time of the agreement. During the DPA process, it became evident that interests of different rebel groups were not represented, resulting in a failed agreement. In terms used in the DCM, this can be accounted for as one side exhibiting loss-aversion as was the case for many rebel groups in Darfur. The government on the other hand, came to the table seeking to maximize possible gains. This is explained through the government's introduction of proxy forces to the Darfur region. The rebel groups, faced with an armed opponent were more inclined to maintain their security level, and stay armed to fight. The risk in disarming, as demonstrated by previous acts of the government in support of the proxy Janjaweed forces would have been a total loss. The majority of rebel factions refused to sign. The government had little to lose by offering to disarm the Janjaweed. With a successful agreement, they could reduce international pressure and possibly have sanctions lifted on their economy. Experience taught the rebel groups that the government would not disarm proxy militias; instead, they were transformed into border security forces and Popular Defense Forces. This has only reinforced the rebel decision to fight. The DPA and the Sudanese

Government's decisions have only made the future possibility of a successful agreement more difficult. Table 11 lists the imperatives derived from the Dynamic Conflict Model.

Imperatives Derived from the Dynamic Conflict Model
<u>Political / Economic:</u> <ul style="list-style-type: none">• An agreement such as the CPA in a game of institutional design can introduce an artificial expansion of the contested space but may not address the underlying grievances of insurgent groups for the long term. It helps attain an agreement versus maintaining an agreement.• An agreement such as the DPA in a game of multiple arenas attempts to formalize a shift in conflict advantage toward the regime without satisfying insurgents' minimum acceptable outcomes, thus only giving the appearance of a successful agreement.
<u>Social / Information:</u> <ul style="list-style-type: none">• A thorough Qualitative Situation Estimate continuously updated through research and insights from other analysis yields increasingly accurate accordance of player strategies / preferences.• Interests are not universal. Some players may be attempting to limit losses while others may be seeking to maximize gains.
<u>Political / Economic / Military:</u> <ul style="list-style-type: none">• Identifying the nature of the game provides solution venues pre-described in the relevant literature.

Table 11. Dynamic Conflict Model Imperatives

3. Nexus Topography Lessons and Imperatives

The Nexus Topography (NT) analytical lens provides insight through social network analysis focused on organizations using geospatial orientation. By analysis of the ecological, tribal, ethnic, and religious background of a conflict, coupled with the stated coalitions, stated objectives, and operational actions of the actors, a number of insights can be made into an intrastate conflict. These lines of research and type of analysis produce lessons not apparent through other contemporary methods of analysis.

Conflict in a region comprised of social structures such as those present in Darfur will likely divide along tribal and clan lines rather than along lines defined by coalitions or even stated objectives. This phenomenon serves to create and reinforce ethnic and/or racial identification. The NT chapter highlights that in Darfur, an area of prolonged, brutal conflict, the basic building block of society becomes the default position. The government's continuous military and economic pressure, exacerbated by the introduction of proxy militias such as the Janjaweed, is perceived by the rebel groups as a threat to their existence. When the tribes are forced to choose between members of a coalition, or the interests and, therefore, survival of their tribe, they break from the coalition. This is clearly represented in the signing of the DPA and has been echoed by further fractioning at an astounding rate in the months since. As demonstrated in Figures 17 - 21 of the NT chapter, the tribal and ethnic differences are fractional junctures that supersede objective and/or ideological allegiances.

NT analysis of the Darfur conflict in particular helps to sort the many factions into groups that are central players, and therefore must be engaged, and spoiler groups that can be marginalized without threatening conflict resolution. The analysis identifies that grouping factions by objectives, announced coalitions, and tribal affiliations does not reveal which groups are more important players in the area of conflict. Figure 15 in the NT chapter (page 116) identifies that even the ethnicity of a group does not significantly influence the coalitions that an organization joins. In fact there is some tribal association between opposing groups, to include identified Janjaweed elements and SLA factions. This can be accounted for in age-old disputes between sub-tribe and clan elements that continue to manifest themselves. The answer to the key centrality measure with regard to conflict abatement and impact on the population is found in operational centrality. The organizations, listed by operationally centrality ranking as noted in NT identifies the key organization such as the JEM, SLA/U, and the SLA/AWN. Even more revealing is that it identifies organizations that are thought to be key but are much less so, such as the SLA/MM and the GSLM. In a dynamic conflict with so many organizations that continues to see further fractioning, this knowledge can help focus the efforts of a third party to address the interests of the true key players to more effectively influence the

situation. A common approach of identifying operational affiliations by announced coalitions can be seen here as an avenue to readjust failed policy.

The NT analysis not only identifies the lines along which various groups fraction over time and under pressure. It also provides lines along which, if the conditions are set properly, cooperation may be produced. Factors such as common goals and interests may not be as critical as tribal affiliation for cooperation, but it is shown here that they are more important than announced coalitions. Once key players are identified through operational analysis, and their ethnic association is considered, offering an agreement that focuses on themes of common interests and goals, where previous trust bonds existed can determine main tenets for successful coalition building. Once again the reliance on announced coalition ties may result in policy failure. The NT analysis reinforces the concept that announced coalitions in Darfur and in South Sudan are formed for pragmatic purposes. They may serve to link geographically separated groups and serve “boundary spanning” purposes such as the appearance of a unified front to appeal to foreign actors, international organizations, and the government of Sudan, their opponent. The endurance of these coalitions is as fluid as the dynamic conditions that foster them.

The conduct of NT as an analytic lens forces researchers to gather data on the social structure and the values of trust, influence, and power that shape the human environment. Most methods of conventional analysis do not require the acquisition of this level of knowledge, resulting in the mirror imaging of Western ideas and values on the players under analysis. A similar pitfall is illustrated in the tendency to generalize conflict in one region of a country to other areas, even though such “wars” are oftentimes inherently defined by the very local context within which they exist. The conditions of internal wars will vary from conflict to conflict, to include two regions of conflict within the same country, such as is the case in Sudan. NT analysis of Darfur, built upon the preceding QSE and DCM, each of which enables further levels of granularity in data resolution, reveals the true nature of this human terrain, which in turn serves to guide the development of strategies and policies towards the different players. These imperatives, as derived from the NT lens, are listed in Table 12.

Imperatives Derived from Nexus Topography

Political / Social:

- **Common goals and interests may produce cooperation, and may be used in favorable coalition building.**

Social / Information:

- **Conflict in regions of certain social structure divides groups along tribal and clan lines creating and reinforcing ethnic identification.**
- **Tribal and ethnic differences are fractional junctures that supersede objective and ideological allegiances, as well as announces coalitions.**
- **Western ideas and values of trust, influence, and power do not always directly correlate to those in other societies.**

Political / Military / Intelligence:

- **The identification of operationally central players and "spoilers" provides an engagement guide as to which groups to include and which groups can be marginalized.**
- **Operational affiliations are not defined by announced coalitions.**

Table 12. Nexus Topography Imperatives

C. SPECIFIC APPROACHES AND INFORMATION GAPS

The imperatives are finally applied back to the specific area of conflict in order to develop possible approaches. For an approach to be effective it cannot be planned for or executed in a vacuum. It is the synergistic effect of multiple approaches, executed multilaterally that provides the best opportunity for success. Hence, the approaches are no longer specific to the particular lens that they were derived from; instead, they are correlated along the same PMESII lines as the context of the particular conflict they are meant to influence. They are lines of operation that based on the Adaptive Security Construct iteration lead to the intended outcome based on the policy action selected. The development of approaches will generate information "gaps" that should be addressed prior to the execution of any approach. The final step of analytic correlation is the identification of these gaps that will be critical in the further consideration of and refinement of the identified approaches. The gaps are incorporated into the recommendation for a further iteration and provide a focus for research resources,

allowing for a more refined set of approaches to be developed. For correlation purposes, the gaps are stated as questions and listed along with the specific approach from which they are derived.

1. Approaches and Information Gaps of the North-South Divide

During his remarks at the United Nations General Assembly on September 19, 2006, President Bush appointed a Special Envoy to Sudan, Andrew S. Natsios. Following his travel throughout Sudan, the Special Envoy held a press conference in Khartoum. In reference to the North-South conflict and the CPA, he commented:

The reason for focus on the South is that we are deeply concerned with the health of the Comprehensive Peace Agreement. Important deadlines have been missed, and key issues like Abyei have not been resolved, and trust is slowly being lost and tensions – especially along the border areas where armed units of the Sudanese Armed Forces and the SPLA confront each other – are rising. This, we believe is very dangerous.²⁶⁶

The ASC is a dynamic construct and its strength relies on current information. Key tenets of a specific approach are that they must be feasible, reasonably achievable, and fall within current US policy. The above-quoted example of a policy statement guides the creation of approaches to the North-South conflict. Having an understanding of current policy allows for the filtering of approaches that do not fit these criteria and are no longer suitable for consideration. The imperatives that drive that approach are still maintained as they may have application to different areas of conflict towards which the US has differing policies. While approaches cannot provide generic solutions to internal wars as a whole, nor even to all areas of intrastate conflict in Sudan, they do integrate local specifics into a contextual approach to conflict resolution in regard to each of Sudan's internal wars. The same specifics also serve to highlight information gaps to be addressed in future ASC iterations. Table 13 lists the specific approaches and their associated information gaps as applied to Sudan's North-South divide.

²⁶⁶ Andrew Natsios, Special Envoy to Sudan, remarks made during a press conference in Khartoum, Sudan, (October 6, 2007), <http://www.state.gov/p/af/rls/rm/93460.htm> (accessed October 13, 2007).

North / South Sudan Conflict Approaches and Information Gaps

Specific Approaches

Information Gaps

Political:

• Engage external actors such as Egypt, Ethiopia, Uganda, and the Democratic Republic of Congo through traditional diplomatic means to create a multilateral effort in support of CPA goals.

• What are the interests of these external actors and can they be leveraged to bring them into the process? Are these actors in support of a successful CPA or will they gain by its failure?

Political / Social / Economic / Information:

• Facilitate the further implementation and maintenance of the CPA by prioritizing common objectives of central groups in Southern Sudan.

• Do the identified groups have sufficient common objectives? Can they be convinced that the agreement will bring these goals to fruition?

Political / Social / Information:

• Establish an international monitoring process and facilitate its implementation for the 2009 national elections and referendum in 2011.

• Can previous successful international monitoring efforts be used as a model for Sudan? Is the NCP within the government of Sudan willing to allow such a monitoring?

• Assist the Government of South Sudan (GOSS) in gaining popular consensus in the South by becoming a more effective governing body through increased transparency, less corruption, and tangible effects that address the central interests.

• Is the GOSS willing to take the steps necessary to reduce corruption? With current global commitments, does the US have the resources and capability to achieve this?

• Engage the NCP within the government of Sudan to codify revenue sharing and Southern positional authorities within the GNU.

• Is the government of Sudan willing to take this step? What multilateral actions or leverage can the US generate to facilitate their participation?

Table 13. Approaches to the North-South Conflict with Information Gaps

2. Approaches and Information Gaps of the Darfur Conflict

The derived specific approaches regarding Sudan's North-South divide, as presented in the preceding section, do not apply in the same manner in Darfur. Though there are commonalities, specific actions must once again be tailored to a situational context, as also recognized in US policy statements regarding the region. Special Envoy Natsios made the following comments regarding the conflict in Darfur:

On Darfur, we are focused on preparations for the Darfur peace Talks in Libya. We strongly condemn the criminal act attacking the Nigerian peacekeepers in Haskanita. This underscores the need for a robust, powerful peacekeeping force immediately – one that can defend itself and provide security for innocent civilians. We also know that the Darfur talks have to be as inclusive as possible – with the rebel movements, IDPs, civil society, women, and traditional chiefs, and marginalized Arab tribes somehow represented and their voices heard. We are calling and pressing for all rebel movement, all rebel movements, to attend the Libya talks on Darfur if they are invited.²⁶⁷

Factoring in this policy statement, and other current policy tenets, specific approaches for the Darfur conflict can be developed from the correlation along PMESII lines the imperatives and a contextual understanding of Darfur. The intractable nature of violence in Darfur remains self-sustaining due to the inherent mistrust of opposing sides. This inherently suggests a requirement for external arbitration in both gaining, and subsequently maintaining, a lasting peace in the region. International efforts in this regard have thus far fallen woefully short, a trend likely to continue unless either a peacekeeping force operates independently of current Sudanese government interference, or, alternatively, a strong “push” is made in favor of one side or the other (with a corresponding likelihood of increased violence in the short-term). In either option, successful intervention ultimately resides in an acknowledgement that both sides are composed of disaggregate rather than unitary factions. Table 14 provides a listing of these approaches and information gaps.

²⁶⁷ Natsios, remarks made during a press conference in Khartoum (October 6, 2007): <http://www.state.gov/p/af/rls/rm/93460.htm> (accessed October 13, 2007).

Darfur Conflict Approaches and Information Gaps

Specific Approaches

Information Gaps

Social / Information:

• Identify, Promote, and reinforce existing trust bonds amongst rebel groups identified as central players to catalyze unification prior to, during and following the peace agreement process. Facilitate the formation of a true opposition coalition based on these bonds to garner respect from the government of Sudan and to internally reduce "spoiler" group activity and influence.

• What are these bonds and how can they be tested for viability? Can the rebel groups in Darfur be convinced that there is more to gain through coalition given the damaging effects of the continuous conflict?

Political / Social / Economic:

• Identify and introduce deliverable external co-option payoffs to create negotiable space amongst the rebel groups. Use the tactic that made the CPA attainable while avoiding the pitfall of difficulty in agreement maintenance.

• What external co-option payoffs are available? Can the rebel groups be convinced to reverse their interest for minimizing loss enough to take the actions required to receive the introduced payoff gains?

Political / Economic:

• Facilitate through diplomatic means the involvement of all applicable external and internal actors to develop an inclusive and actionable peace agreement.

• What are the interests of these external actors and can they be leveraged to bring them into the process? Are these actors in support of a peaceful Darfur or do they stand to gain from continued conflict?

Political / Military / Social:

• While diplomatically engaging the identified central external and internal players, facilitate the UN/AMIS/UNAMID peacekeeping forces ability to engage and focus efforts on identified "spoiler" groups and their actions to possibly undermine any agreement.

• Will the UNAMID force be able to exercise its full authorities under the UN resolution? What can the US contribute to the UNAMID force to facilitate its success?

Table 14. Approaches to the Darfur Conflict with Information Gaps

D. CORRELATION SUMMARY

The analytic correlation presented in this chapter is two-fold in purpose. First, it is the culmination of a first iteration of the Adaptive Security Construct conducted with respect to internal conflict within Sudan. Second, it is an example of a methodological protocol for executing this same step during future iterations, or when applying the ASC to other cases of internal conflict.

Of note, the ASC is a conflict-focused construct, yet when the correlation is conducted along the lines of PMESII, only one approach is military in nature. PMESII is a set of identified means a nation possesses to achieve its goals. It is a testament to the validity of this construct that it has the ability to produce a broad range of approaches and imperatives, not ones solely focused on traditional military approaches. This is not to imply that when used to analyze other instances of internal conflict or emerging violent crises, military approaches will not be produced. In the case of Sudan and its internal conflicts, however, it is clear that successful approaches will be a synchronized effort of predominantly political, social, and economic means.

Ultimately, the analytic correlation of the assessment lenses used in the ASC relies upon a human-interface to produce accurate results. The modular nature of the chapters of this thesis provides a grounded conceptual method for each of the analytic lenses utilized. These, in turn, can achieve further levels of granularity through the use of available commercial software and computational tools that can better incorporate the vast amount of data available in country studies of this magnitude (i.e. simulation programs that can “game” several hundred players in the DCM). Yet at the outset of this first iteration of the ASC, the human user must be familiar with the conceptual foundation of the assessment methodology prior to relying on computational analysis. In the inherently local focus of intrastate conflict, accuracy occurs as a result of contextual familiarity, not as a result of statistical details. The importance of the human element in understanding and assessing internal wars cannot be overstated. Familiarity matters, all the more so in situations where external actors seek to influence the domestic affairs of others. The final chapter of this thesis will review the important facets inherent in this perspective, illuminated in turn through the process-guidance provided by the ASC.

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VII. CONCLUSION

The universe is wider than our views of it.

- Henry David Thoreau²⁶⁸

A. ASSESSING THE ADAPTIVE SECURITY CONSTRUCT

The introduction to this thesis defined its purpose as the development of a construct that allows for the iterative assessment and engagement of the factors influencing insurgent conflict in Sudan. Two assumptions supported that purpose: first, an interpretation of internal wars as a distinct form of conflict, and second, an acknowledgement that the perceptions of external actors are markedly different from the domestic views of intrastate combatants. In concert, these two assumptions exemplify the need for an objective process and perspective of assessing internal wars, presented in this thesis as the Adaptive Security Construct. As a process, the ASC allows for an adaptive and iterative analysis of internal conflict; it defines a method of assessment. As a perspective, the construct relies upon a familiarity with the history and contemporary relevance of the internal war being examined; it defines the context of assessment. Using insurgent conflict in Sudan case study, this thesis has formalized the ASC through a first-run iteration of a multi-disciplinary framework that allows for the comprehensive and objective engagement of emergent security environments of concern.

The development of the ASC took place in conjunction with the integration of three analytic lenses: the Qualitative Situation Estimate (Chapter III), the Dynamic Conflict Model (Chapter IV), and Nexus Topography (Chapter V). These allowed for the integration of both qualitative and quantitative methods in generating a comprehensive assessment. Chapter VI encompassed an Analytic Correlation of that assessment, identifying lessons learned for both the continuing evolution of both Sudan's internal wars and for the ASC itself. Building on that correlation, the present chapter brings this thesis full circle in two sections. First, the current state of the ASC is critiqued to suggest

²⁶⁸ Henry David Thoreau, "Walden" in *The Writings of Henry David Thoreau*, vol. 2 (New York: Houghton Mifflin, 1906), 352.

possible future iterations of the construct. Second, and reliant upon the ASC's inherent nature as a contextually based framework, the possible futures of Sudan are expanded upon to further guide engagement options. This comprehensive evaluation of both Sudan and the ASC should serve as a reminder that if "we are dealing with a system, the whole is *different from*, not *greater than*, the sum of its parts."²⁶⁹ The Sudan and the ASC suggest interactive rather than additive relationships in both the conduct and assessment of internal wars. Neither Sudan's problems nor any proposed solutions can be defined by cumulative measures; they instead require a relational understanding of dynamic Sudan.

1. Critique of the Assessment Process

As an attempt to bridge academic theory with practical (or operational) applications, the ASC, much like any analytic product, requires the progressive structuring of information. Rather than rely on universalistic (and Western) notions of broadly applicable frameworks, the ASC proceeds from local context to general conclusions. Based on the probable and limited amount of data available in an emergent region of concern, the ASC at the outset relies upon subject matter expertise and readily available literature to bound the scope of the issue at hand, in this case Sudan. The importance of establishing scope rests upon an appreciation of time and space, an inclusion of history and a geospatial representation, both of which provide continuous threads throughout the ASC. Here, "history also confirms that features often neglected in explanations of contemporary war do matter: features like a country's specific long-run history, its patterns of production and class formation, the political effects of economic policy and the play of contingency."²⁷⁰ Inherently qualitative in its description of the environment, the situation estimate then iteratively feeds the remaining analytic lenses.

The Dynamic Conflict Model relies upon the assumed aggregation of opposing actors within a game-theoretic matrix, while Nexus Topography extracts a more precise composition and structure of the specific actors involved. Though presented sequentially

²⁶⁹ Robert Jervis, *System Effects: Complexity in Political and Social Life*, (Princeton: Princeton University Press, 1997), 12 (emphasis in original).

²⁷⁰ Cramer, *Violence in Developing Countries*, 199.

in this thesis, they are intended to operationally complement one another. While game theory identifies which actors should be examined, network analysis defines how important those actors are, in turn supplying the conflict model with refined value determinations. As to whether game theory or network analysis should come first, to crudely quote Robert McNamara, “there is a kind of chicken-and-the-egg debate going on about which [is] preeminent. To me that is like trying to argue about which blade of the scissors cut[s] the paper.”²⁷¹ Both lenses are required for each to individually succeed.

The Dynamic Conflict Model is inherently based on an assumption of value-maximizing behavior: each side will act to secure its best outcome. There are limitations to such a premise: “Because rational-choice models are tautological, they have two distinctive characteristics. The first is that if a rational-choice model leads to predictions that turn out to be false, the assumptions have to be modified. . . . The second . . . is that they permit the cumulation of knowledge.”²⁷² Within the overall process of the ASC, these characteristics serve as advantages. First, when predictions are false, they are so not because the modeling process is faulty, but because the assigned valuation of outcomes is inaccurate. Thus, the process may be iteratively repeated to both establish a more realistic model output, and to observe trend behavior over time that serves to anticipate future occurrences. That leads to the second advantage, in which “cumulation” of observed behavior in and of itself provides an information source that can be further applied in the ASC. This, “points to the conclusion that political context matters in ways that are predictable because they influence different actor’s payoffs in nested games, and these payoffs influence the choice of strategies.”²⁷³ The strategies are oftentimes apparent in the progression of actions themselves; it is the quantification of actor payoffs that requires a third analytic lens.

The Nexus Topography lens is network analysis based rather than decision based; it is intended to further quantify actor behavior rather than suggest what it should be. “It

²⁷¹ As quoted in Allison and Zelikow, “The Cuban Missile Crisis,” 129. The U.S. Secretary of Defense was discussing the relationship of nuclear and conventional forces as part of a deterrence posture.

²⁷² Tsebelis, *Nested Games*, 43.

²⁷³ Tsebelis, *Nested Games*, 246.

is then a mistake to apply a decision-theoretic rather than a game-theoretic framework to cases in which the actors' behavior is based on their expectations of what others will do. That is, we cannot look at one side while holding the other side constant because even to explain one side's decisions, we need to capture its estimate of the other side's likely response, which in turn is influenced by what it thinks the other thinks the state will do."²⁷⁴ Network analysis, especially when enfolded within both abstract and map-based visual representations, allows the observer an effective perspective of assessing not only who the "players" in an internal war are, but more importantly, how significant they are.

The correlation of the three analytic lenses, dependant on a human-interface, provides the ASC an internal validation mechanism by which to identify both important and discrepant pieces of information. Here again, the idea of situation context is critical, which lens becomes most important will vary by both the specific situation and the time available for completing an assessment. The accommodation of this spectrum of operational necessity speaks to how strategic assessments of conflict are conducted in general: "There are two main ways to study the problem of causes in war: to develop individual case studies and to extract and compare categorized features of a large number of wars, generating statistical analyses."²⁷⁵ The former is often criticized as a "cherry-picking" approach, while the latter attempts to shoe-horn local specifics into artificial compartments. More useful is an integrated approach reliant upon situational context to refine and adapt a universal methodology. The ASC provides such an approach.

2. Future Iterations of the ASC

The end-state of this thesis provides the first iteration of an ASC-application. The general imperatives and specific approaches offered in Chapter VI serve to respectively guide future ASC-iterations and operational engagement options. Concluding comments regarding the latter are provided in section B of this chapter, it is now appropriate to highlight the "way forward" for the ASC itself. Adaptability and an iterative application of the construct are an imperative, as when "elements interact it is difficult to apportion

²⁷⁴ Jervis, *System Effects*, 85.

²⁷⁵ Cramer, *Violence in Developing Countries*, 92.

the responsibility among them as the extent and even the direction of the impact of each depends on the status of the others.”²⁷⁶ The ASC is internally complementary between lenses, and that same perspective must be continued through future iterations of the construct as a whole: “Additive and linear operations cannot capture what happens because the impact of one variable or strategy depends on others as actors both shape and are shaped by their environments.”²⁷⁷ Accurately identifying variables of intrastate conflict requires an integrated approach that fundamentally relies upon defining exactly who is fighting and over what. Identifying various “forms of collective identity . . . is instrumental in bridging the gap between many reasons for political conflict and the brute facts of violence,” particularly as what “matters to how a given source of collective identity works on individuals and to how deftly it can be exploited by political leaders is largely a matter of specific histories rather than fixed and eternal properties.”²⁷⁸ Again, the ASC is a means of identifying these properties and their situational expressions.

Ultimately, the ASC is intended to provide a process for objectively assessing internal wars, phenomena whose impartial interpretation is oftentimes obscured by emotional appeal and biased interests. “The purpose would be to tease out analytical and policy implications . . . as a basis for a policy response that would admit its limitations and would not prescribe a single off-the-shelf remedy for a wide range of problems.”²⁷⁹ When it comes to Sudan, to date the response has been largely composed of the latter.

B. FUTURE TRENDS OF INSURGENCY IN SUDAN

Both the apparent conclusion of a peace agreement in Southern Sudan and the recent explosion of violence in Darfur, have served to skew external perspectives of the intransigence of Sudan’s internal wars. “Given the depth of the conflict over the identity of the Sudan, it is important to place the current tensions in historical perspective. Although that history establishes a framework for the struggle, the historical experience

²⁷⁶ Jervis, *System Effects*, 40.

²⁷⁷ Jervis, *System Effects*, 91.

²⁷⁸ Cramer, *Violence in Developing Countries*, 102, 108.

²⁷⁹ Cramer, *Violence in Developing Countries*, 136.

itself is contested by the parties [involved].”²⁸⁰ Put another way, not only are the conditions of conflict fluid in Sudan, so are the perceived affiliations and preferences of the opposing combatants involved. Such a complex and convoluted melee makes an emphasis on a singular and “democratic solution” to these wars largely untenable:

It is of course fashionable . . . to assert that liberal democracy is the currency of legitimacy globally, but in Sudan’s case at least liberal democracy is no straightforward path to legitimacy and stability of government. Sudan has had three periods of liberal democracy based on a first-past-the-post electoral system in a unitary state, and the political system that re-surfaced each time was a repeat of its predecessor with no sign of any prospect of reforming its clear shortcomings.²⁸¹

Sudan’s history has been defined by insurgent conflict. The mere continuance of these conflicts in light of attempted peace negotiations demonstrates both the intransigence and apparent paradox of Sudan’s internal wars. In the south an agreement exists in apparent opposition to the underlying secessionist movement. In Darfur, an agreement would theoretically appear possible but has been extremely difficult to put into practice. The complex perspectives that illuminate this paradox exist both internal to the Sudanese people and have been interpreted from an external perspective as well.

1. Internal Sudan

A common bias identified in contemporary assessments of conflict in Sudan, as portrayed by both media and non-governmental organizations, exhorts a need to solidify the Sudanese identity, to ensure popular equality and just representation. In many ways, such an endeavor contradicts the very history of Sudan:

The concept of nation-state prevalent in the Sudan has been based on an ethnic nationalism in which the Arab-Islamic majority defines the country’s identity according to its image. When coupled with an autocratic

²⁸⁰ Lesch, *The Sudan*, 25.

²⁸¹ Peter Woodward, *The Horn of Africa: Politics and International Relations* (London; New York: I.B. Tauris, 2003), 61.

political system . . . ethnic nationalism leads to an attempt to eliminate differences by defining them away and/or by instituting structures that marginalize minorities.²⁸²

Social identity plays a key role in quantifying insurgent conflict in Sudan. Chapter V showed that tribal affiliations rather than objective or coalition concerns are actually what define operational actions amongst Sudanese insurgent groups. But ethnic identity is far from pre-determined, rather, it is a dynamic and volatile variable: “Elites and leaders (re)structure ethnic identity for instrumental reasons, such as to enhance their own power and to mobilize the populace behind their goals. Identity can be manipulated and certain aspects can be more salient at certain times and in certain contexts.”²⁸³ Nowhere is the depth of this manipulation more obvious than in Darfur, where populations of millions have been displaced in the pursuit of pragmatic objectives.

The crisis in Darfur illustrates that “sustained genocidal warfare need not be organized and precipitated by national governments; it can easily emerge from the interactions of individual, unconnected individuals out of extreme environmental circumstances and competition over resources.”²⁸⁴ Such interactions have a long history in Sudan, having predated independence and only having been recently exacerbated by a combination of ecological drought and political marginalization. The DPA, doomed at the outset by its untenable propositions, illustrates that from the perspective of the GoS, the lack of alternative strategies can itself strengthen an actor’s position.²⁸⁵ Having “proven” the stubborn nature of its adversaries, Khartoum is now empowered to pursue its unilateral agenda. “This perspective makes clear that power is a function not only of the relative strengths of the actors and relationships between them, but also of the existing and possible relations between each of them and third parties.”²⁸⁶

²⁸² Lesch, *The Sudan*, 213-214, 218. The author states that this process today is one of redefinition and realignment, in which the notion of a single Sudanese identity is wholly lacking and coercively enforced by the regime in Khartoum. This presents a challenge to external engagement options; effective arbitration is difficult when one side is politically discounted by the other in any cooperative process.

²⁸³ Lesch, *The Sudan*, 4.

²⁸⁴ Kuznar and Sedlmeyer, “Collective Violence in Darfur,” 14.

²⁸⁵ Schelling, *The Strategy of Conflict*.

²⁸⁶ Jervis, *System Effects*, 193.

Common amongst Sudan's internal conflicts, and especially in Darfur, "warfare has . . . involved 'asset transfer', or theft and expropriation of land, livestock and people as labourers. At the same time warfare has displaced large numbers of people."²⁸⁷ This represents the overlapping of necessary but insufficient conditions of Sudan's internal wars: ecological constraints and political marginalization. Internally instigated reform in Sudan is unlikely, as even opposition groups seek to secure or supplant, rather than replace, current modes of governance. The agendas of rebels and regime use ethnic affiliations to mobilize animosities, resulting in a pervasive aura of mistrust. External arbitration presents a fragile means by which this aura can be bridged. In the North-South divide, the involvement of the Intergovernmental Authority on Development (IGAD), as well as other international actors, contributed to the signing of the CPA. The spoilers that threatened the peace talks in Naivasha have not gone away, and the need for continued international supervision of the agreement was recognised even prior to its signing.²⁸⁸ Since then, monitoring of compliance and accountability has been lacking, as "modern-day Wilsonians assume that because a nation-state exists on paper, they can dispense with the need to forge alliances and compacts among sectarian, tribal, ethnic, and religious factions."²⁸⁹ The record of the international community in arbitrating internal wars is not good, and on its present course in Sudan, it will only get worse.

2. External Sudan

The continued intransigence of Sudan's internal wars questions the likely or even possible success of external intervention. Echoing the general liberalist perspective of war, international community reconstruction efforts are underpinned at the outset by what one author has termed the "nirvana fallacy."²⁹⁰ The assumption inherent in such nation-building is that foreign intervention is always preferable to the absence of domestic

²⁸⁷ Cramer, *Violence in Developing Countries*, 217. See also David Keen, *The Benefits of Famine: A Political Economy of Famine and Relief in Southwestern Sudan, 1983-1989* (Princeton, NJ: Princeton University Press, 1994).

²⁸⁸ ICG, 'Sudan's Comprehensive Peace Agreement,' 25.

²⁸⁹ J. Hulsman and A. Debat, "In Praise of Warlords," *The National Interest*, 84, (Summer, 2006), 52.

²⁹⁰ Coyne, "Reconstructing Weak and Failed States," 344. Coyne uses Somalia as a case study to support his hypothesis.

security based on international standards. Perhaps ironically, the same concept drives domestic populations to look for solutions elsewhere: “Whether because the government has ordered them to . . . or because they simply do not trust the state to provide them with reasonable security, individuals and private industry have, in fact, been looking after themselves to a growing extent and on a constantly increasing scale.”²⁹¹ Thus, nation-building efforts have by and large proved to be abject failures, and “if there is one generally applicable lesson that can be learned . . . it is that each weak and failed state will be characterized by a unique set of nested games that preclude a one-size-fits-all policy by the international community.”²⁹² There are dangers in oversimplifying success or failure within a defined population: “Whether a country disintegrates or not after its state institutions collapse in many cases may reflect more the opportunities and inclinations of local and national elites than the sentiments of local people.”²⁹³

These dangers suggest that an accommodation of local context is critical in examining external avenues toward conflict resolution in Sudan. It is blatantly insufficient to insist on reform policies based on European models that have little historical relevance in Africa. Rather than insist on a multi-lateral adherence to norms of governance that do not apply across the board, “[o]ur relationships to possible opponents should be such . . . that our options toward both of them are always greater than their options toward each other.”²⁹⁴ It remains for external actors to apply such a perspective in arbitrating an end to Sudan’s conflicts. To wit, the application of broad-brush punitive measures such as economic sanctions disregards the specific political context of Sudan.

²⁹¹ Martin Van Creveld, *The Rise and Decline of the State*, (Cambridge, UK: Cambridge University Press, 1999), 403. The author presents a historical account of the rise and projected decline of the state-centric system.

²⁹² Coyne, “Reconstructing Weak and Failed States,” 356. Applied to a case-study of post-UN-intervention Somalia, the author uses the concept of embedded political contests as developed and outlined by Tsebelis in *Nested Games*.

²⁹³ William Reno, “Congo: from State collapse to ‘Absolutism’, to State failure,” *Third World Quarterly* 27, no. 1 (2006), 52. The article discussed the initial ‘success’ and subsequent decline of a nationalized state industry in the former Zaire under Mobutu Sese Seko, in which limited economic prosperity was retained within the hands of the regime elite. Of particular relevance is the extent to which Mobutu manipulated ethnic affiliations, as “ethnicity provided a sensible means to take direct control over commercial opportunities,” 51.

²⁹⁴ Henry Kissinger, *White House Years*, (Boston: Little Brown, 1979), 165. See also, Jervis, *System Effects*, 192.

Ironically, rather than support reform, such policies instead encourage patrimonial mechanisms that reinforce the status quo. To even suggest success requires local intervention in which the settings that encourage conflict are molded to allow resolution.

The Adaptive Security Construct does not purport to offer a means by which the specific conflicts in Sudan will be resolved, let alone provide a solution to internal wars in general. Rather it proceeds from an underlying supposition that dealing with internal wars requires a contextual perspective grounded within a holistic framework, rather than a singular reliance on postulated causalities. The application of such a perspective to Sudan has revealed several distinct lessons. In the North-South divide, it is apparently in both sides' interest to assert the validity of the CPA while using it to work toward fundamentally opposed outcomes. Though this has resulted in an artificial and temporary overlap of opposing interests, the long-term implications are not encouraging. In Darfur, the nature of the conflict is self-reinforcing. As expected outcomes yield less for each side, fighting is all the more likely and there is no "going back."²⁹⁵ Ecological trends alone emphasize this latter point, as the increase in desertification and a lack of arable land will in the future only serve to exacerbate inter- and intra-tribal competition and conflict over local resources.

As exemplified by this thesis' case-study of Sudan, "distinctions such as those between state and society and public and private, which are so central to transformative expectations of African states, are difficult to discern."²⁹⁶ In the south, the GoSS faces a conflict in identity; its majority representatives from the SPLM now possess a legally defined and vested interest in the "enemy" GNU. In Darfur, factions of the SLA and JEM, complimentary only in their opposition to the regime status quo, work toward conflicting goals that preclude a unified insurgency. Superficial analyses of internal wars gloss over their historic origins; such conflicts are not spontaneous. Others have "argued that the stakes involved in sub-state conflicts are both unusually high and effectively zero sum, either because they are naturally indivisible or because both sides come to define

²⁹⁵ Kuznar and Sedlmeyer, "Collective Violence in Darfur."

²⁹⁶ Reno, *Warlord Politics and African States*, 29.

these stakes in antithetical ways.”²⁹⁷ While the stakes are undoubtedly high, examining the manner in which belligerents mobilize them is no less important than how they were raised in the first place. Assessing Sudan’s internal wars requires a familiarity with their specific chronology and context, not a premature attempt to attribute causality. The Adaptive Security Construct provides a perspective and process through which such an assessment is possible. Internal wars are a complex not simple phenomenon. If they were the latter, they would likely have been “solved” some time ago.

When viewed in sum, the Adaptive Security Construct encompasses a multi-disciplinary methodology that grants the outsider a better view of an internal war. In the progression of this thesis, each analytic lens offers its own distinct point. The Qualitative Situation Estimate illustrates how viewing internal wars through an objective actor-based framework identifies the contextual complexities of intrastate warfare. The Dynamic Conflict Model frames those complexities in a game-theory based analysis, in turn illuminating the extent to which externally supposed suboptimal choices in fact reflect underlying rational contests between and amongst the involved belligerents. Nexus Topography further analyzes the insurgent factions themselves, in this case revealing that networked ties formed along tribal and clan affiliations supersede the stated coalition and operational objectives of Sudan’s rebel groups. When correlated, these points create an adaptive security assessment of internal war, an assessment whose process is universally applicable while the output remains contextually specific. The assessment completed in this thesis provides a starting point from which to proactively engage Sudan’s internal wars. Only with such an objective start can one begin to influence those wars to an end.

²⁹⁷ Gordon H. McCormick and G. Owen, “Factionalism, Violence, and Bargaining in Civil Wars,” 362. As referenced by the authors, see also, I.W. Zartman, *Ripe for Resolution: Conflict and Intervention in Africa*, (New York: Oxford University Press, 1989), and Anna Simons, “Making Sense of Ethnic Cleansing,” *Studies in Conflict and Terrorism* 22, no.1 (1999), 1-20.

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