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Framing an Understanding of Sociocultural Dynamics for Civil-Military Operations

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Chris C. Rewerts, and Timothy K. Perkins

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Under Project P2 335530, "Cultural Reasoning and Ethnographic Analysis for the
Tactical Environment (CREATE)"

Abstract

To provide continual and accurate characterization of operational environments, Department of Defense intelligence analysts need to understand the strategic and operational implications of sociocultural dynamics. The validity of analysis is highly dependent on a sound basis in social science theory, but such knowledge is difficult for analysts to access rapidly due to the lack of time needed to identify and synthesize such material.

To address this problem, the authors developed an analytical framework for conceptualizing instability situations of interest to the Army. To develop a methodology for applying the framework to specific operating environments, the authors compiled an extensive corpus of social science literature to help explain situations of interest to intelligence analysts. For this work, Africa was selected as the hypothetical operating environment. Themes (i.e., factors) related to the formation of insurgency movements there were identified and then implemented as a Factor Map, which organizes and distills the theoretical claims contained in the corpus. The Factor Map is intended to serve as the basis for developing case-specific sensemaking tools, and may be developed for any environment covered by the social science literature. The report concludes with a discussion of the applicability of this product to intelligence sensemaking.

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Preface

This study was conducted for Headquarters, US Army Corps of Engineers, under Research, Development, Test, and Evaluation (RDTE) Program Element 622784 T41, “Military Facilities Engineering Technology”; Project P2 335530, “Cultural Reasoning and Ethnographic Analysis for the Tactical Environment (CREATE).” The CREATE Program Manager was Hany H. Zaghloul, CEERD-CV-T.

The work was performed by the Land and Heritage Conservation Branch (CN-C) of the Installations Division (CN), US Army Engineer Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL). At the time of report preparation, Dr. Christopher M. White was Chief, CEERD-CN-C; Michelle J. Hanson was Chief, CEERD-CN; and Michael A. Tischler (CEERD-TV-T) was the Acting Technical Director for Geospatial Research and Engineering. The Deputy Director of ERDC-CERL was Dr. Kirankumar Topudurti and the Director was Dr. Ilker Adiguzel.

COL Jeffrey R. Eckstein is the Commander of ERDC, and Dr. Jeffery P. Holland is the Director.

1 Introduction

1.1 Background

This technical report describes the first phase of applied research (fiscal year 2011–12) in the Modeling and Analysis of Social and Cultural Factors in Civil-Military Operations (MASC-CMO) project, which is included in the work package entitled “Cultural Reasoning and Ethnographic Analysis for the Tactical Environment (CREATE).” The main purpose of the MASC-CMO effort is to develop and prototype methods and tools to enhance the sensemaking capabilities of intelligence analysts working to help the US Army and Department of Defense (DoD) to understand the social conditions that may impact the success of civil-military operations (CMO). The methods and tools developed in this work will provide analysts with access to the argumentation of social science so it can be more effectively applied to intelligence analysis. At present, the access to social science knowledge by analysts is constrained due to a lack of familiarity with the structure and content of its argumentation and the expenditure of time needed to identify and synthesize relevant material. This phase of the work addresses the research foundations for developing a suite of analysis-support tools, which will be completed and documented in the second phase of the project.

DoD intelligence assessment seeks to provide an ongoing, accurate characterization of the operational environment. This requires understanding of the strategic and operational implications of sociocultural dynamics so as to be able to plan for mission success. Flynn, Pottinger, and Batchelor (2010:11) argue that

top decision-makers and their staffs emphatically do need to understand the sub-national situation down to the district level. For the most part, this is precisely where we are fighting the war, which means inevitably, this is where it will be won or lost

This is particularly the case in asymmetrical warfare. One could argue similarly for Phase Zero operations that will involve small-unit engagement at numerous localized yet strategically related locations. Understanding of the sociocultural dynamics contributes to the ability to foresee their poten-

tial impacts on the mission and the security of US and partner-nation forces and the host population.

The ability to understand the sociocultural dynamics of a situation necessitates interpretation of the context relevant to the mission. Understanding develops when addressing questions of who, what, where, when, how, and why. This involves not just providing description, but explanation for how and why observed events are occurring. Research for several decades across the disciplines of social science, particularly anthropology, history, political science, and sociology, has contributed to better understanding of the sociocultural dynamics associated with political instability likely to be encountered by current and future civil-military operations. However, each social science discipline has its own language and way of knowing, and that presents a challenge to the uninitiated military analyst who seeks to make sense of the argumentation and draw conclusions pertaining to its relevance to a given situation.

Accurate and timely assessments of the impact of the sociocultural conditions to the mission can be useful before US forces have the opportunity to perform direct reconnaissance of a situation or as analysts contemplate the emergence of new information about a situation.

1.2 Objective

The objective of the methods and tools developed in the MASC-CMO project is to enhance the accuracy of intelligence assessments by facilitating easier access to social science knowledge, thereby improving the timeliness of its use in analysis.

1.3 Approach

The suite of tools offers an analyst-driven knowledge modeling capability that helps to identify social science knowledge relevant for understanding the sociocultural dynamics of a situation under investigation. To demonstrate this capability, the research team executed the foundational work documented in this report.

First, an analytical framework was developed for conceptualizing the structure of situations of instability likely to be encountered in CMO. Since this framework was thought to be most applicable for organizing analysis before troops were on the ground, it was named the Pre-Intervention Ana-

lytical Framework (PIAF). Although useful as a general orientation, the PIAF lacks a collection of claims (i.e., theories), based on evidence, about sociocultural reality that could be interrogated in order to explain a particular situation.

Next, to operationalize the framework, a factor map was developed for application of the PIAF to a particular topic covered by a body of literature that *does* make claims about the nature of that topic. The Factor Map serves as the foundation for tool development. It is a knowledge map that organizes and distills the claims contained within a corpus of social science literature on the creation and maintenance of insurgency located on the continent of Africa, and represents the themes contained within the claims as factors.

1.4 Scope

This research project was carried out as the United States withdrew troops from Iraq in December 2011 and contemplated major troop withdrawal from Afghanistan by 2014. Discussions about the mission of the future Army forces imagine a larger role for Phase Zero operations in which strategically-defined civil-military operations (CMO) are critical for mission success. The primary goal of Phase-Zero-operations is to shape the dynamics of the operational environment to stabilize the situation and to foster support for the legitimate government. These shaping activities can continue from beyond Phase Zero to Phase I, which is deter, through Phase V, which is enable civil authority (Joint Publication 5-0 2011:III-39). For this project, we limited our focus to a consideration of CMO within a Phase Zero context.

Civil-military operations are conducted for a variety of missions as DoD doctrine implies in its definition of civil-military operations:

The activities of a commander that establish, maintain, influence, or exploit relations between military forces, governmental and nongovernmental civilian organizations and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations, to consolidate and achieve operational US objectives. CMO may include performance by military forces of activities and functions normally the responsibility of the local, regional, or national government. These activities may occur prior to, during, or subsequent to other military actions. They may also occur, if directed, in the absence of

other military operations. CMO may be performed by designated civil affairs, by other military forces, or by a combination of civil affairs and other forces. (Joint Publication 1-02 2011:52).

The development of the PIAF was useful in assimilating the literature on the content and function of analytical frameworks and determining how a framework could be used to inform the modeling of a particular situation (which is analogous to the challenge for the analyst). The PIAF can be linked to the Factor Map in an analysis, as described in Chapter 4 of the present report. To whatever extent the concepts are useful, theory is still needed to build a model. This need for a model to be based on theory, which an analyst would develop to explain a particular situation, was the motivation for developing the Factor Map.

In the present report, Chapter 4 describes a hypothetical application of the Factor Map to a use-case that based on the Joint Intelligence Assessment of the Operational Environment (JIPOE) process. The model for an intelligence assessment used in this project is the Joint Intelligence Preparation of the Operational Environment (JIPOE), which is conducted at a geographic Combatant Command (COCOM), such as Africa Command (AFRICOM) or Pacific Command (PACOM), and/or by its services components, such as US Army Africa (USARAF) or US Army Pacific (USARPAC). Although JIPOE is a joint product, the Army deploys from joint regional commands. Army service components, such as USARAF, already use JIPOE in intelligence assessment that incorporates sociocultural analysis.

1.5 Mode of technology transfer

The results of the PIAF and Factor Map studies have transitioned to a second phase of development under RDTE Program Element 622784 T41, in which computationally-enabled analytic capabilities are being designed and developed to support rapid, theory-based sensemaking in new and emerging areas of operation.

Other follow-on work has sought to apply the design for Factor Map development to US Army Training and Doctrine Command Intelligence Support Activity (TRISA) simulation development and documentation; and to a US European Command (EUCOM) knowledge structure.

2 The Function of Frameworks

2.1 Concepts defined

The concept of *framing* has been used in the behavioral and social sciences for decades. For example, Piaget (1952, 1954), who contributed fundamental concepts to social psychology, conceives of framing as manifested in a schema that is a mental representation of the persistent features and attributes of objects, which enables learning. Goffman (1974), whose thinking is fundamental to sociology, sees framing as apparent in a culturally relative system of rules that organizes society and guides individual behavior.

Frameworks are used by researchers to delineate the problem space, organize theories relevant to the problem space, and conceptualize how the theories may or may not be related to each other. Social scientists, who seek explanation for complicated and often puzzling human social behavior, construct frameworks at different levels of abstraction depending on how they are to be used to define the problem space and evaluate what is known about it.

The concept of framing has been evident over the past two decades in the development of frameworks used in assessing ecosystem, conflict, counterterrorism, environmental and social impact, and economic development. When frameworks are used to structure assessments in applied work, they help the user to frame the right questions to ask. They encapsulate and make accessible the knowledge of the experts who developed the frameworks.

The process of *sensemaking* has been characterized by Sieck et al. (2007:8) as fitting data into a frame or framing. In that context, Sieck et al. (2007:vi) define *frames* as “fragments of local cause-effect connections, rules of thumb, patterns of cues, and other linkages and relationships between cues and information to guide the sensemaking process.” In the sensemaking process, these frames function to “(a) define the elements of a situation, (b) describe the significance of these elements, (c) describe their relationship to each other, (d) filter out irrelevant messages while highlighting relevant messages, and (e) reflect the context of the situation, not just data” (Sieck et al. 2007:8).

Sieck et al. (2007:24–26) argue that experts use their accustomed frames when they assess new situations and form initial explanations. Furthermore, their research determined that during the process of sensemaking, frames are elaborated upon, questioned, compared, and either preserved or revised (Sieck et al. 2007:24-26). During the process of analysis, there is iterative interaction between frames and situational data that continues as the analyst forms a model to describe and explain the situation (see Figure 1 in Sieck et al. 2007).

2.2 Distinguishing frameworks from models and theories

When developing tools designed to support the analytical process, distinguishing between frameworks, models, and theories becomes important. These concepts play distinct, related roles in the analytical process.

Although frameworks are often described as conceptual models, McGinnis (2013:4) makes a distinction between a framework and a model. A framework serves to orient and guide the assessment of a particular type of situation, e.g., one determined to require an environmental or a conflict assessment. In contrast, a model is situated to the specific place and problem associated with a situation and is contextualized with data. An analytical framework is not designed to generate a model but suggests, instead, what an analyst may need to consider when developing a model.

A model employs theories that express causal relationships among variables. A theory tested with data produces explanation. McGinnis (2013:4) explains that a theory “posits general causal relationships among some subsets of these variables or categories of factors, designating some types of factors as especially important and others as less critical for explanatory purposes.” In the social sciences, explanation must be context-specific (Flyvbjerg 2001). Thus, a framework has to be applied to a context using a model that employs theories and data to enable explanation.

2.3 Examples of frameworks

Frameworks are recognized by many practitioners as useful for assessment in that they focus the user on the identification of data relevant to the problem being addressed, and orient and structure the analysis. Examples of frameworks currently in use for the purposes of conducting assessments are the Millennium Ecosystem Assessment Framework, Conflict Assessment and Peace-building Planning (CAPP), Interagency Conflict Assess-

ment Framework (ICAF), District Stability Framework (DSF), Counterterrorism Analytical Framework (Joint Publication 3-26, 2009), and environmental and social impact assessment frameworks. The work of Elinor Ostrom and her colleagues at Indiana University, in Bloomington, IN, on the Institutional Analysis and Development Framework, offers the most systematic and academically grounded methodology for developing a framework and relating a framework to models.

2.3.1 Millennium Ecosystem Assessment Framework

The Millennium Ecosystem Assessment Framework is the result of a four-year effort, initiated by the United Nations (UN) in 2001, designed to meet the needs of the international community for scientific information on the relationship between ecosystem change and human wellbeing. It facilitates assessment on how changes in ecosystem services affect human wellbeing now and in the future and what types of responses can be adopted at local, national, or global scales to improve ecosystem management and contribute to human wellbeing (Ecosystems and Human Wellbeing: A Framework for Assessment 2001). The Millennium Ecosystem Assessment Framework is incorporated into a guide to help decision makers understand how development goals both affect and are affected by ecosystem services. These services have consequences for human wellbeing, whose components are health, the material minimum for a good life, freedom and choice, health, good social relations, and security. (Ecosystem Services: A Guide for Decision Makers, World Resources Institute, 2008).

2.3.2 Peace-building Planning (CAPP), Interagency Conflict Assessment Framework (ICAF), District Stability Framework (DSF)

The Interagency Conflict Assessment Framework (ICAF) of the US Department of State and USAID, Conflict Assessment and Peace-building Planning (CAPP) used by universities and NGOs, and District Stability Framework (DSF) developed by USAID and currently employed in Afghanistan by US and coalition partners and civilian personnel, are all examples of assessment tools used for operational planning. A company called Frontier Technology compares these frameworks in terms of background, purpose and objectives, applications, social science theories employed, sociocultural factors represented, data required for an assessment, and role in the planning process (Frontier Technology, Inc., ERDC BAA CERL-29 Phase I Final Report, Pre-Deployment Sociocultural Analysis System, Contract W9132T-11-C-0033).

2.3.3 Counterterrorism Analytical Framework

The Counterterrorism Analytical Framework (JP 3-26, 2009) guides an analysis of the critical vulnerabilities of a terrorist group based on functional and resource categories. When used in analysis, the framework gives a systems perspective of a terrorist group. It is up to the analyst to identify and define the exact nature of the relationships between nodes in the system depending on the characteristics and processes of the terrorist group of interest.

2.3.4 Environmental and social impact assessment frameworks

Assessment requirements mandated domestically connected with implementing the National Environmental Policy Act of 1969 (NEPA) prompted the development of environmental and social impact assessment frameworks. Objectives included in NEPA Sec. 102 are to

(a) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment; (b) identify and develop methods and procedures in consultation with CEQ which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations; (c) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on

- the environmental impact of the proposed action,
- any adverse environmental effects which cannot be avoided should the proposal be implemented,
- alternatives to the proposed action,
- the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Basically, NEPA required all Federal agencies to examine the effect of legislation on the "human environment" and to use a systematic process.

Assessment of the environment in compliance with NEPA occurs in the form of an Environmental Assessment or an Environmental Impact Assessment. Impact Assessment is a framework used to help make decisions. An assessment is performed for proposed government policies, plans, programs, and projects (i.e., “the 4 Ps”).

A social impact assessment can be defined as a process of assessing or estimating in advance, the social consequences that are likely to follow from specific policy actions or project development, particularly in the context of appropriate national, state, or provincial environmental policy legislation (Burdge and Vanclay 1996). Social impacts include all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society. Considerations of social and economic impacts are required by NEPA. Social impact assessment is often carried out as part of, or in addition to, environmental impact assessment.

2.3.5 Institutional Analysis and Development (IAD) Framework

An example of a systematic, scholarly approach that is explicit about the relationships among framework, theories, and models is the work of the Nobel laureate Elinor Ostrom and the Bloomington School. This work, referred to as the Institutional Analysis and Development (IAD) framework, is the product of over three decades of effort of the Workshop in Political Theory and Policy Analysis at Indiana University in Bloomington, IN.

The empirical work of Elinor Ostrom (2010) demonstrates that people will under the proper circumstances work together for collective action. This differs significantly from Garret Hardin’s seminal work *The Tragedy of the Commons*, which took a Hobbesian approach to governance, presuming the necessity for top-down control of the social order (Ostrom 1999).

Ostrom and her colleagues chose to build a framework that would provide a shared language among disciplines and use theoretically grounded, empirically tested heuristic devices to advance the research findings toward a theory of human behavior. A body of literature was necessary for crafting such a framework. Similar to the Millennium Ecosystem Assessment Framework and the environmental and social impact assessment frameworks, Ostrom’s work is explicit about its scholarly foundations.

Ostrom and colleagues conceptualized human society as a structured social order (J. L. Flora 1998; C. B. Flora and J. L. Flora 2008) consistent with the approach of social science. Considerable effort has been made to link these social systems to the greater ecological order (W.R. Freudenburg 1986; William R. Freudenburg and Gramling 1989; William R. Freudenburg, Frickel, and Gramling 1995). The IAD framework is a holistic approach, which accounts for biophysical conditions, attributes of the community involved in the action situation, and rules that structure social interaction as exogenous variables to an action situation, which is the focus of the assessment (See Figure 1 in Ostrom 2010). The IAD framework acknowledges that there are multiple points of social power, including that exercised by government, that influence the outcomes of social interaction within a given action situation.

2.3.6 Discussion

All of the frameworks described above are abstractions of social reality. They take many different forms, which serve their function relative to the particular problem space that they are designed to address. Some mimic a system in which relationships among components are represented graphically, such as the Millennium Ecosystem Assessment Framework and the Institutional Analysis and Development Framework. Others resemble an outline, such as the Counterterrorism Analytical Framework and the environmental and social impact assessment frameworks. Among the examples of frameworks given above, the Millennium Ecosystem Assessment Framework, environmental and social impact assessment frameworks, and the Institutional Analysis and Development Framework are explicit about their grounding in scientific research. Although the others have familiar roots in social science tenets and experience, the authors of the frameworks do not cite the sources that inspired their development and link them to the components of the frameworks.

In order to be applied, these frameworks require guidance about assumptions made regarding the relationships among components and how aspects of the components can be observed and represented qualitatively or quantitatively for an assessment. A framework can be applied through the development of indicators, as in the case of the Millennium Ecosystem Assessment Framework (Carpenter et al. 2009); or through empirical studies using the Institutional Analysis and Development Framework (e.g., McGinnis 1999, Ostrom 1990); or via the research connected to the Millennium Ecosystem Assessment Framework, which evaluates the biophys-

ical or sociocultural aspects of various ecological services (Cowling et al. 2007); or using a methodology like the Conflict Assessment and Peacebuilding Planning Framework, which results in a series of products that support assessment.

Frameworks are useful for assessments because they focus the user on what is most important to understand about a situation given an organization's mission so more informed courses of action can be developed and considered. Frameworks serve different functions for organizations. For example, the Interagency Conflict Assessment Framework is tailored to the US Department of State's mission to reach a shared understanding with other US government agencies about the dynamics of a nation's conflict and possible entry points for conflict transformation and prevention. Social assessment with reference to the Millennium Ecosystem Assessment Framework focuses on providing knowledge about the needs, values, norms, and behaviors of individuals, institutions, and organizations in the context of how an area works in socioeconomic terms, and why. Application of the Counterterrorism Analytical Framework gives a systems perspective of the critical capabilities of a terrorist group to carry out its agenda.

The work of Ostrom and the Bloomington School demonstrates how frameworks conceived for different levels of abstraction can be used in a research process. Iteration between the framing of action situations and the overall Institutional Analysis and Development framework results in a fuller understanding of the theoretical implications of the dynamics of the action situations. Over the course of decades, as in the case of the Ostrom's "Workshops," analyses of action situations confirm the utility of the overall framework for generalizing about the nature of institutional analysis and organizing multiple theories associated with components of the framework.

Ostrom (2011:8) emphasizes the benefits for analysis of working from a framework:

- gives structure to a body of theory
- identifies the universal elements that any theory relevant to some kind of phenomenon needs to include
- provides a meta-theoretical language for comparison of theories
- identifies the elements and their relationships to consider for analysis

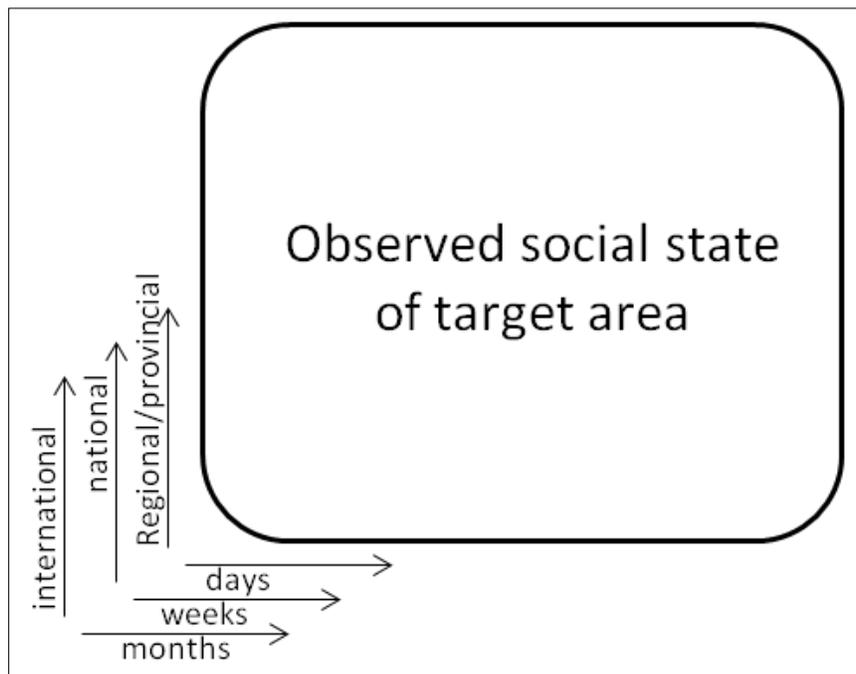
- organizes diagnostic and prescriptive inquiry
- helps analysts generate questions for their analysis based on the elements contained in the framework.

2.4 A framework for pre-intervention sensemaking

A useful framework for intelligence analysis would be transparently derived from a body of credible social science theory so it can be confidently applied to new situations and revised with precision as new understanding emerges. The PIAF, like Ostrom's IAD framework, is developed with reference to social science theory (see Appendix A). The strength of the IAD is that it has been tested and refined in reference to numerous case studies over the course of the career of its creator.

The MASC-CMO team developed the PIAF as an experiment in applying the IAD concept to a different problem area: the need to understand situations of instability encountered by civil-military operations. The PIAF builds upon the IAD approach (Ostrom 2011). As illustrated in Figure 1, use of the framework begins with an observed or anticipated instability, resulting in a decision to begin planning CMO.

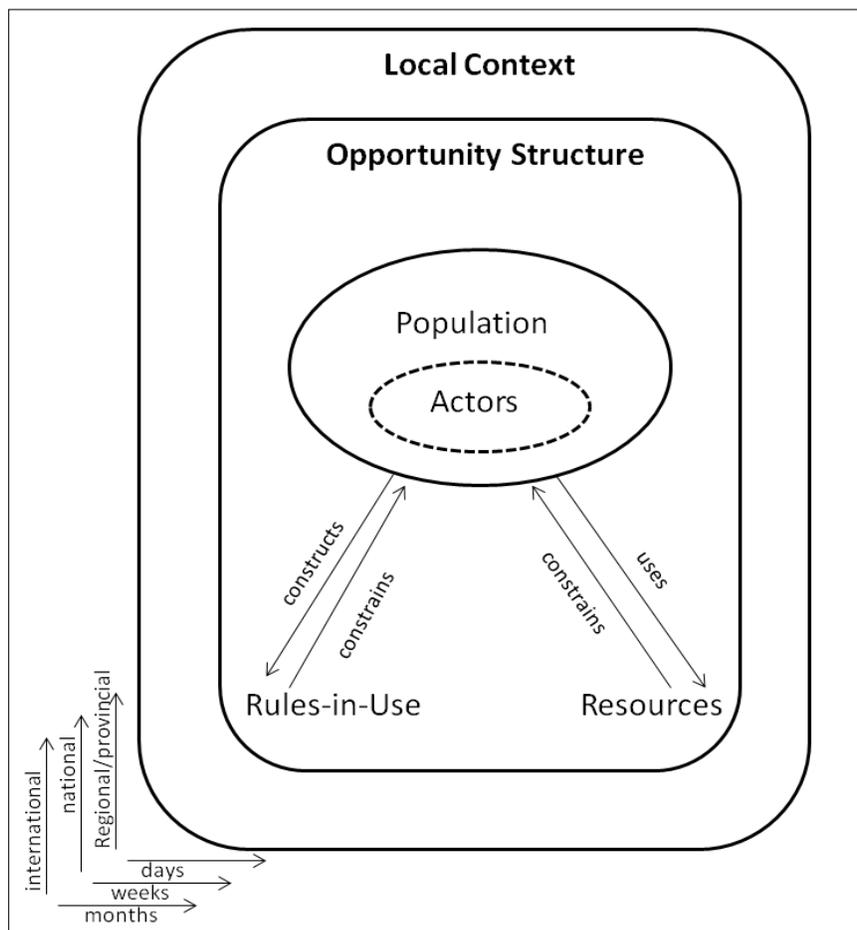
Figure 1. A two-dimensional view of the top level of the PIAF structure.



The second step requires an understanding of the contexts within which actors interact. This identifies the inputs of the actors, the rules-in-use,

and the resources as they interact within opportunity structures in particular contexts.

Figure 2. A two-dimensional view of the PIAF structure at the relational level.



Our concept of opportunity structure is based on Kitschelt's (1986:58) description of political opportunity structure, which consists of "specific configurations of resources, institutional arrangements and historical precedents for social mobilization, which facilitate the development of protest movements in some instances and constrain them in others." In addition, Kitschelt (1986:59) depicts political opportunity structures functioning "as 'filters' between the mobilization of the movements and its choice of strategies and its capacity to change the social environment." Thus, in our application, the concept of opportunity structure serves to include the interaction among actors, rules-in-use, and resources.

Actors (individuals or groups) both shape and are shaped by the rules active in their environment. Further, these actors may disagree about or

compete for the use of particular resources, whether physical or intangible. The framework guides the analysis of causation or interdependencies. Determination of feedbacks between human motives and structural factors helps to identify which specific sociocultural theories apply to a given situation.

3 Operationalizing a Theory-Based Framework

3.1 Linking theory to application

During its development, the PIAF was assessed with respect to organizing the inputs to an agent-based model. The theories that were represented in the model were selected by team members with expertise on insurgency. This method of theory selection is considered appropriate for experienced social scientists whose area of expertise is insurgency. However, when users lack expertise in the subject area covered by an analytical framework, they will rely on their own theories and concepts or frames when applying the framework. Outside of academia, practitioners who apply frameworks rarely have immediate access to the reasoning on which the framework is based or the theories associated with the framework that may help explain observed phenomena. If users are unaware of the social science theories associated with a framework, then they will not avail themselves of the knowledge accumulated by social science on these topics that may be of great interest to the DoD, such as explanations for insurgency or terrorism.

In order to make the relevant theory available to intelligence analysts, the MASC-CMO team set about developing a supporting framework to operationalize the PIAF for practical application. We refer to this framework as the Factor Map* since it is organized according to factors (i.e., themes), that are derived from a corpus of academic literature addressing the creation and maintenance of insurgency on the continent of Africa. The organization and documentation associated with the Factor Map helps an analyst gain access to frames expressed in the academic articles contained in this corpus. These frames, expressed in terms of arguments that contain theories and supporting evidence, can be used to build models that help explain the situation under analysis.

* The Factor Map developed here is not to be confused with a *factor tree*, which was introduced to the DoD analytical community by Paul Davis of RAND (Davis 2011). Factor trees are diagrams that represent factors contributing to the cause of a phenomenon for potential application to causal models.

3.2 Defining the topic

The MASC-CMO team needed a topic relevant to military operations for which there would be sufficient social science literature to demonstrate how a collection of frames, if made accessible for analysts, could introduce more accuracy and timeliness into the sensemaking process. Insurgency, as broadly defined in the academic literature, plays a role in many situations of instability and includes terrorism as a tactic. The continent of Africa was selected to set geographic boundaries on the sample of literature to be collected on the creation and maintenance of insurgency. In addition, the continent of Africa is likely to be the site of continuing US military operations, whether military-to-military engagement, humanitarian assistance/disaster relief, or Civil Affairs operations.

Given time constraints for developing the corpus, it is derived from literature published in English in academic journals and books that are accessible through Google Scholar (<http://scholar.google.com/>). A list of literature incorporated into the corpus is presented in Appendix B. However, considering the source, there is a high probability that this literature is biased toward western-style academic production even though some scholars from the continent of Africa who write in English are represented. To gain an understanding of what kind of information might be missed when assembling a social science corpus in this manner, a conventional literature search on the topic of insurgency was performed; the results of that study are presented in Appendix C.

There is considerable debate in the academic and military literature on defining insurgency, as distinct from terrorism (Rich and Duyvesteyn 2012; US Army Counterinsurgency Center, December 2011). The following features of insurgency were common to the academic literature reviewed by the MASC-CMO team:

- Insurgency is expressed by persistent conflict directed against a national government, i.e., a recognized administrative body of the state.
- It involves conflict between one or more national governments and non-state actors.
- Non-state actors that profess a global insurgency will direct their efforts against states, which embody all they ideologically oppose; and/or they will attempt to insinuate themselves into localized insurgencies.

3.3 User requirements

The prospective user of the PIAF is intelligence analysts who support Army and DoD operational planning. For operational planning to be successful for contemporary scenarios of instability, assessment of the situation on the ground should ideally begin before troop deployment. Flynn et al. (2012:13) argue that learning about a population and the threat of conflict should begin even before tensions turn violent, because “. . . the lesson of the last decade is that failing to understand the human dimension of conflict is too costly in lives, resources, and political will for the nation to bear.” They also point out that once violent conflict commences, information becomes scarce and expensive, policy costs rise, and options for conflict avoidance decrease.

When viewed holistically, situations of instability may appear complex and even chaotic, particularly if insurgent and/or violent extremist groups are implicated in raising the level of conflict. Analysis driven by social science knowledge can focus the analysis on factors that will lead to more a rapid understanding of the situation on the ground. The ideal is to recognize signs that conflict is imminent and determine ways to avoid it. However, the usual course of events is that an assessment is required when conflict has escalated to the point of threatening national or regional stability. The challenge for the analyst assigned to the situation is to identify the issues, sociocultural and otherwise, that are likely to affect accomplishment of the military mission. The military tends to enter a situation with the intent of changing it in order to meet the goals of the mission.

The goal of the MASC-CMO effort is to enhance analysts' capability to more accurately characterize the operational environment in terms of understanding the situation, identifying who is involved and their agendas, assessing the impact of the situation on the mission, and determining how courses of action for carrying out the mission may affect the situation. The key to understanding the situation is to take into account the relevant sociocultural dynamics and to make appropriate use of knowledge accrued as a result of social science research. Questions about instability situations encountered by military engagement that are topics of social science research include:

- What is the relationship of the government with the governed?
- Which identity groups support or resist a government and how has that perspective changed over time?

- Which identity groups have mobilized to resist a government through violent action and how has this resistance been expressed?
- How has the government responded to that resistance and what has been the response?
- Which identity groups benefit from government actions; which feel that they do not benefit?
- How is economic opportunity created and what is the involvement of the government in its creation?
- What contributes to people's sense of wellbeing, e.g., security, health, education, opportunity for upward mobility?
- How does sense of wellbeing relate to proclivity to support or resist the government?

The Factor Map orients the analyst to a holistic perspective from which to decompose the situation as a system into its interrelated components and explore the strength of the relationships among components. This decomposition and exploration process occurs when analysts are composing a conceptual or computational model of a situation. The Factor Map and its corpus, if enabled by tools that would facilitate exploration of this material, would support a systems analysis. That is, the Factor Map identifies and organizes theories and explanations relevant to the kinds of information that is suggested to be significant by the framework. The tools for interrogating the knowledge base represented by the Factor Map and corpus will enable analysts to not only search by topics but also to explore claims and counter-claims presented in the social science literature and evaluate their relevance for understanding the situation being assessed.

The tools developed in this work can be thought of as entry points for engaging the results of social science research in the analyst's sensemaking process. Analysts have a need to understand the sociocultural dynamics that are relevant for the types of situations encountered by civil-military operations. The fidelity of representation and timely understanding of the sociocultural dynamics on the ground on their own terms is essential for successful operational planning and execution.

The methods and tools developed in this project will inform understanding created during intelligence production at the geographic combatant command (COCOM) level. COCOMs are where regionally focused operational planning is conducted. COCOM areas of responsibility are divided into regions of the world, such as Africa (Africa Command), Asia Pacific (Pacific

Command) or Central and South America (Southern Command). They encompass multiple countries and are the regional headquarters of joint forces. The Army has a component stationed at a COCOM as does Civil Affairs, which is the Army's contribution to civil-military operations.

MASC-CMO team members have observed that a joint headquarters such as a COCOM is staffed with analysts who typically have one to three years of experience in the area of operations. Some of the analysts may be civilian contractors, while others are military reservists. A few of the staff members are career civil servants with considerable in-depth knowledge of and analytical experience in the COCOM's area of operations. MASC-CMO capabilities are designed for the analyst who is competent in the analytical process but lacks in depth and breadth of experience in the COCOM's area of operations.

The first prospective users for the methods and tools developed in this project are analysts engaged in the JIPOE process. This joint doctrine is analogous to the Army process called Intelligence Preparation of the Battlespace (IPB). However, the JIPOE process is more attuned to obtaining information on sociocultural context, even if the focus in the doctrine remains on the adversary. US Army Africa uses the JIPOE process and incorporates sociocultural considerations during the course of the analysis.

In practice, the implementation of a JIPOE analysis may vary due to mission, timeframe of deployment, staffing availability, expertise of available staff, and the extent to which the operational environment has been investigated previously. ERDC-sponsored research with the Institute for Defense Analysis (IDA 2012) has determined that there is a fundamental structure to the JIPOE process from an analyst's perspective, and that there are basic questions to be addressed about a mission that is intended to stabilize a situation and make an area inhospitable to the influence of an adversary. The fundamental structure of a JIPOE assessment is oriented toward identifying which human, sociocultural, and physical aspects of the situation on the ground have the potential to pose a threat to accomplishing the mission.

To be perceived as useful, these methods and tools have to complement the existing practice of CMO analysts and enhance their reasoning and knowledge building, i.e., their sensemaking capability, as they produce products such as a JIPOE assessment. These methods and tools should

help analysts meet the criteria for information laid out in CMO doctrine, i.e., to provide “timely, accurate, usable, complete, relevant, objective, and available” (Joint Publication 2-01, 2012) information about the operational environment.

Much emphasis has been placed on giving tools to analysts for searching, condensing, and synthesizing large amounts of raw data and for discerning and visualizing patterns and trends. This approach is similar in nature to that taken by exploratory statistical modeling in the social sciences or spatial analysis in human geography. The results of these analytical pursuits are description and correlation.

However, analysts like social scientists ultimately seek explanation of human behavior in the operational environment in order to foresee threats, understand why they emerge, and identify how they might be manifested in a particular situation. The ability to foresee threats is precluded by a detailed understanding of the situation in the operational environment. Achieving a detailed understanding is a challenge when analysts have little experience with the area and few assets on the ground.

Although individual experience, sociocultural dynamics, and sequence of events may be different for each situation, social scientists recognize patterns and structure to human behavior. For instance, when certain sociocultural dynamics coalesce in a relationship between the government and the governed, one recognizes a pattern of insurgency. Insurgencies have a structure in that insurgents form a group that is mobilized in opposition to a government, which recruits people, accrues and expends resources, and carries out goal-oriented activities. Thus, an experienced analyst, when encountering a new operational environment in which an insurgency is manifested, will be able to ask a familiar and effective set of questions to probe the particular dynamics of insurgency in that situation. These questions serve to focus the inquiry on what is known to be important for understanding such as situation. In a time-sensitive work environment, knowing the right questions to ask jump-starts the analytical process. Furthermore, an experienced analyst also knows the value of challenging the expected explanation and interrogating assumptions. The methods and tools produced in the current work are designed to be useful when an experienced analyst approaches a problem, such as making sense of a situation in an operational environment when conducting a JIPOE analysis.

3.4 Applying theory to sensemaking

As discovered by Ostrom and her colleagues, it is helpful for the user of their methodology to know how to move between framework and theory to model. The Factor Map operationalizes the theory-based PIAF framework for application to analysis by identifying, organizing, and synthesizing information in a way that is accessible to analysts who are formulating a model for a particular situation. The term *model* has several definitions that are relevant to sensemaking:

- “A physical, mathematical, or otherwise logical representation of a system, entity, phenomenon, or process” (DoD Modeling and Simulation Coordination Office, Glossary, 17 May 2012).
- “[A] physical, mathematical, or otherwise logical representation of a system, entity, phenomenon, or process” (Army Regulation 5-11).
- “Specifies the specific functional relationships among particular variables or indicators that are hypothesized to operate in some well-defined set of conditions” (McGinnis 2013:4).

A model can be expressed via graphics and narrative, e.g., in Upshur et al. (2011) or mathematically, e.g., in statistical models, discrete-event simulations, or agent-based simulation. For agent-based simulation, key features to be represented, i.e., actors (agents), resources, and rules in use, correspond to aspects of the analytical framework (Tolone 2012). Reasoning in a model can be based on any source of empirical or logical data or derivatives thereof. A goal of the current project is to make the claims of social scientists and the supporting data accessible to analysts as they develop their models of a particular situation.

In order for the Factor Map to be applicable to the development of analysts’ models, the constituent factors must be supported by explicit claims that can be tested against evidence to form an argument. The source of such claims is a corpus of academic literature. Software tools could facilitate the exposure of claims, but even without them the Factor Map can be used to pre-position knowledge necessary for creating models of a particular situation that are based on knowledge contained in the literature.

The Factor Map can be thought of as a transparent representation of an organized collection of frames. It serves as a tool for sensemaking because the frames that comprise it have been collected and organized to represent the specific problem space that must be analyzed. A definition of frames is

provided in section 2.1. The use of frames in sensemaking, which was embraced by the disciplines of cognitive psychology (e.g., Klein, Moon, and Hoffman 2006) and communication (e.g., Dervin 2003), focuses on how individuals or groups actively integrate their experiences into their understanding of the world. However, frames can be fragmentary and lacking the rigor of scientific argumentation (Sieck et al. 2007). In academic argumentation, frames are expressed in discipline-specific language and are open to critical scrutiny by one's peers.

Analysts need to be able to use frames that are based on social science research, and historically these have not been readily accessible to a military analyst at a COCOM or analytical cells involved with field operations. The present work organizes a collection of frames into the Factor Map, which makes them accessible for addressing a specific problem area, i.e., the creation and maintenance of insurgency.

The Factor Map and the supporting corpus were created to make insights from social science research available to analysts about the creation and maintenance of insurgency. Technically speaking, according to the definition by McGinnis (2013), previously cited, the Factor Map could be viewed as a framework. The PIAF framework is an abstract construct of theory and concepts about the nature of social movements in general. By contrast, the Factor Map is a construct of specific knowledge about frames obtained from social science literature on a particular topic, i.e., the creation and maintenance of insurgency. In other words, the Factor Map is a necessary device for making use of theory embodied in the PIAF: it creates the signposts (i.e., *factors*) to guide the analyst into the relevant literature. This need for specificity in a framework was encountered by Ostrom's group and represented in the addition of "social, economic, and political settings" shown in Figure 2 of McGinnis and Ostrom (2011). However, the factors in this Factor Map are represented with linkages to the creation and maintenance of insurgency instead of as a list.

Providing tools to interface with the analyst's sensemaking process, the Factor Map and exploration of the supporting corpus is expected to aid understanding of the complex nuances of sociocultural dynamics.

3.5 Creating the Factor Map

Given the topic, insurgency, the research team selected a sample of literature from social science with which to develop a corpus to be used as the

basis for the Factor Map. The Factor Map must consist of themes related to theories and explanations in the literature that argue for the linkage of a factor with the creation and maintenance of insurgency. The factors represent themes associated with the frames expressed by the authors of the articles in the corpus. The documentation associated with each of the direct factors in the Factor Map enables an analyst to trace the arguments back to original documents. The process of developing the Factor Map and an explanation of its content are explained in Appendix D.

The articles on which the Factor Map is based take a variety of scientific approaches, all of them suggestive of a linkage between a factor and the creation and maintenance of insurgency. The articles upon which the Factor Map is based represent various approaches to scientific explanation. Those themes that regularly appear in the explanations for the creation and maintenance of insurgency were incorporated as either direct or indirect factors. Thus, the Factor Map does not consist of independent and dependent variables in a causal chain, but a set of factors that play a part in the creation and maintenance of insurgency. From our perspective, considerations of causality would not become an issue until the analyst begins sorting out applicable factors for constructing a model of the situation.

Chapter 4 outlines a demonstration case study in which the Factor Map was applied to a hypothetical scenario in the Africa area of operations.

4 Applicability to Sensemaking

There are few reports in the open literature on how operationally focused analysts work through making sensing of an operational environment. Sieck et al. (2007) describe the sensemaking process of an intelligence analysis cell. Upshur et al. (2011) document the assessment process of an analytical cell for the 10th Mountain Division in Afghanistan. In addition, to understand the analytical process, the CREATE team has relied on observations made during one author's experience with US Pacific Command in 2009 and the experience of analysts at the Institute for Defense Analysis, at US Army Africa, and of a retired intelligence analyst and instructor with a 30 year career.

4.1 Understanding the scenario background

According to doctrine and discussions with stakeholders, analysts are expected to analyze and understand the operational environment from holistic, systems, and geospatial perspectives. They must also account for the military's experience that irregular warfare and stability operations "require an approach that places far greater emphasis on understanding the civil population..." and may "require JIPOE analysts to adopt a nontraditional, broad view of what constitutes an 'adversary'" (JP 2-01.3, IV-1-2). Development of holistic and systems perspectives is frequently very time-consuming, and "commanders and their staffs are often overwhelmed with details and can quickly reach information overload" (JP 2-01.3, IV-12).

Expectations about the results of the analytical process are changing. There is a growing need to understand the nature of evolving threats such as terrorist groups, transnational criminal organizations, cybercriminals, humanitarian crises, and pandemics. Flynn et al. (2012:14) argue that a new concept for analysis is needed "to explain how populations understand their reality, why they choose either to support or resist their governments, how they organize themselves socially and politically, and why and how their beliefs transform over time." Such analysis could be accomplished using the existing protocol for a Joint Intelligence Preparation of the Operational Environment (JIPOE), which is described in Joint Publication 2-01.3, and enhanced by employing the PIAF and Factor Map with relevant corpora designed to address complex, emerging threats.

Flynn et al. (2012:13) counsel that this new concept for analysis should be applied before tensions turn violent so that more options are available for obtaining information and for implementing lower-cost policy and engagement solutions. The Factor Map and associated tools are designed to be applied for characterizing a situation that merits monitoring in the manner envisioned by Flynn et al. (2012). They also could be employed by a pre-engagement planning group that has already selected an area of interest where an engagement appears more imminent.

Based on an experienced analyst's perspective and Joint Publication 2-01.3 (2009), the JIPOE process encompasses the following basic components:

1. Mission analysis:

- Review the mission to understand the commander's desired end state and determine the social outcomes associated with achieving the end state.
 - * What is the commander trying to achieve in this mission?
 - * What outcomes are anticipated?
 - * What does achieving this mission entail?

2. Consideration of the effect of the operational environment on the mission:

- Determine the threats to the mission, i.e., those characteristics of the operational environment — physical terrain, weather, people, sociocultural dynamics — that may affect the conduct of the mission and achievement of the desired end state.
 - * What are the known threats in the mission environment?
 - * What is the nature of each threat?
 - * What is the impact and likelihood of each threat?
 - ~ Impact — what magnitude of effect is an event or action going to have on the mission environment (including marginal effects)? For example, what is the affect on the country of ethnic related election violence on the coast in Kenya? Will it spread and affect the entire country?
 - ~ Likelihood — what is the likelihood of something occurring? For example, what are the odds of having ethnic related electoral violence in the next election in Kenya? Has it occurred in past elections?

- * Impact analysis asks:
 - ~ What is the change in the outcome of interest given a change in one or more of the variables under consideration?
 - ~ Is this factor going to affect the mission and if so how will it affect it? For example: what is the affect on the country of ethnic related election violence on the coast in Kenya? Will it spread and affect the entire country?
- * Analysis of an event's likelihood entails:
 - ~ Consideration of past events and current potential. For example: What is the likelihood of having ethnic-related electoral violence in the next election in Kenya? Has such electoral violence occurred in past elections?

It is critical to assess the affect of social threats to the mission (e.g., insurgent or violent extremist organizations) that have interests in the operational environment. Each assertion of a threat's effect on the mission must be justified and supported by evidence. At this point in the process, an analyst seeks explanation, whether from assumed knowledge or additional research. An analyst's questions about the nature, impact, and likelihood of the threat to the mission include:

- Which groups could impact the mission?
- For each group, is this group homogenous or composed of different factions?
- What are each group's aspirations and goals? How do they characterize their shared identity with the group?
- What is the guiding the activity of the group?
- What are the present and future capabilities of each group?
- What are the alliances and rivalries of the groups?
- Who is joining the group? Why are they joining the group? How strong is the group's hold on its members? Is the group relying on the local population, foreign recruits, or both for membership?
- Potentially how could each group disrupt the mission? (This is based on an assessment of past examples and projections into the future to consider a range of possible scenarios.) For example, on what issues has the insurgency claimed success vis-à-vis the government; on what issues has the government claimed success vis-à-vis the insurgency?
- How do the perspectives of the local population affect the success of the mission?

- Is local support of each group direct or indirect? What is each group's relationship with the local population?
- What is the nature of the relationship between the government and the governed?
- How do the governed perceive government legitimacy?
- What issues have moved some of the governed to insurgency?
- If there is not direct information for the mission environment, is there an area that is comparable?

A typical civil-military operational context (e.g., humanitarian assistance or small-scale civil projects in an area with some hostility) requires swift and deliberate involvement of host nation and international partners. Prior to deploying significant resources, a JIPOE assessment is prepared. As part of the JIPOE, an analyst receives a validated request for information (e.g., on the degree of influence a violent extremist organization has within the host nation and the capacity of the host-nation government to diminish that influence). First, the analyst deconstructs the request for information with reference to the particular situation in which operations will be conducted. For the present example, an analyst will want to know which violent extremist organizations are known to be operating in the area of interest and what is the broader context of their involvement.

How can social science research help to inform consideration of the threats in the operational environment? Social science research continues to produce knowledge, using methods that are of direct interest to analysts. Social sciences use systematic and critical methods to develop hypotheses; they are rigorous and explicit about what constitutes reliable and accurate data; and they apply established standards for validating hypotheses and developing theory. The topic of knowledge creation requires more examination for the purposes of this discussion.

4.2 Applying the framework

A framework that is well tested and understood by a community of practitioners gives analysts a tool for rapidly making sense of situations that share common structural variables. The PIAF focuses the analyst's attention on structural variables pertinent to deconstructing a social movement such as an insurgency, including social actors, rules in use, and resources within an opportunity structure.

The PIAF could work as a tool in a way that is similar to doctrine, such as the Counterinsurgency Field Manual (FM 3-24, 2006), if it were tested for a number of case studies. The PIAF guides the analyst to identify social actors, resources, and rules in use interacting within opportunity structures as a means of characterizing the situation. Social actors can be a violent extremist organization, host-nation government, any groups opposing the host-nation government, and any other groups that support or are neutral with respect to the host-nation government.

Oriented by the PIAF, an analyst can then begin to compose a conceptual model of the situation. Models are based on theories that purport to explain the relationships among phenomena. One example is the double-loop stability model presented in Upshur et al. (2011:93-94), which relates improvements in a population's confidence to improvements in local security, institutionalization of governance, and community resiliency in Afghanistan.

Theories are encompassed within the definition of frames discussed by Sieck et al. (2007). The corpus from which the Factor Map was derived contains numerous theories about the creation and maintenance of insurgency. A role of the Factor Map and supporting materials is to give analysts access to the frames offered by social science about the topic under study.

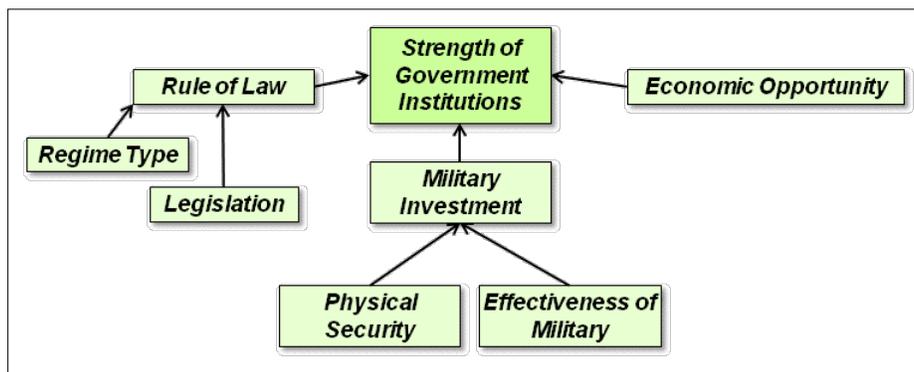
In the data/frame model derived from their study of the analytical process, Sieck et al. (2007) report that at the outset of an analytical project, when analysts are decomposing the situation and taking stock of what they know and the data available to support it, they naturally are working from their own frames. The analysts' toolset would be considerably improved if their own frames were supported and augmented with social science research.

The discussion by Sieck et al. (2007) of the interaction between data and frames in an analytical context conforms well with by Upshur et al. (2011) where they describe how an understanding of the logic of the OE was developed by an assessment cell of the 10th Mountain Division in Afghanistan. Part of the analytical process is to formulate a theory for what is happening and why, and then consider how the situation may be affected by different courses of action. The theory could be informed by other field analyses, such as that of the World Bank, as Upshur et al. (2011) discuss. The theory could also be informed by relevant frames from social science

research, such as those represented by the corpus from which the Factor Map was developed.

For example, if an opposition group can be defined as an insurgency, the Factor Map can provide a basis for richer analysis by identifying factors that help to explain the creation and maintenance of insurgency. Figure 3 presents an example of a small component of the larger Factor Map (i.e., a *factor diagram*). The component presented in Figure 3 is strength of government institutions, which is influenced by the sub-factors rule of law, military investment, and economic opportunity. Analysis of the literature assembled to develop the Factor Map reveals how social science research relates each factor to the creation and maintenance of insurgency. For example, the strength of government institutions is related to the perception of their legitimacy by the citizenry (Manwaring et al. 1992). A government can gain wider support from the citizenry by controlling extralegal violence (i.e., military investment in Figure 3) and minimizing public corruption (i.e., rule of law in Figure 3). For a specific situation that involves a violent extremist organization and an insurgency, an analyst would investigate how the perception of government legitimacy either increases or decreases support for the agendas of the insurgents.

Figure 3. Example draft factor diagram.



An analyst would review whether the data available for the particular OE confirms or challenges the explanations derived using the Factor Map and corpus. The material organized in the Factor Map provides frames for characterization and analysis of the operational environment. Accessing intelligence and open-source information, the analyst prepares documents, relates them to a situated explanatory model, and transmits the resulting products.

The Factor Map and its corpus will be accessible in various ways with properly designed software depending on the needs of the analyst. The Factor Map and its corpus, being based on social science research pertaining to the creation and maintenance of insurgency in Africa, provide the foundations for developing a sensemaking tool in the second phase of the work documented here. It is intended that the sensemaking tool will facilitate use of the Factor Map and corpus by analysts, providing visual, transparent, and traceable access to critical academic literature that examines the sociocultural factors that contribute to the emergence of insurgency and violent extremist organizations.

Characterizing a specific situation in an OE is the primary function of the Factor Map and its corpus. The PIAF and its associated tools are designed to provide analysts complementary ways—although at different levels of abstraction—for decomposing a situation in an OE. The Factor Map can guide analysts to the information that is important to consider when characterizing the situation of interest. If applied appropriately, both the PIAF and the Factor Map can help analysts to develop the deep, qualitative understanding that Flynn et al. (2012:17-20) find essential for integrating sociocultural analysis into the intelligence process.

The PIAF and the Factor Map and supporting materials can be used to inform a JIPOE analysis, particularly with regard to characterization of the operational environment and consideration of courses of action. Both aspects of a JIPOE analysis require an accurate understanding of the sociocultural dynamics in the operational environment. Characterization of the operational environment enables assessment of threats to the mission, which in turn informs the consideration of courses of action.

The JIPOE doctrine assumes that a mission has already been received. However, a JIPOE-type analysis could also be applied to assess and monitor an ongoing situation of interest and consider how potential courses of action might affect that situation. For this kind of analysis, as Flynn et al. (2012) suggest, the nature of the mission could be more broadly conceived to allow for more options to shape the situation.

4.3 Functional requirements for the sensemaking tool

It could be argued that a literature review can make social science research findings available to intelligence analysts. The Factor Map and its direct linkage to a pertinent digital corpus go significantly further to make this

information accessible to the analyst than the standard product of a literature review. The Factor Map and relevant corpus both identify relevant factors and provide direct linkage to a specific OE and situation of interest to analysts. In the present case, they directly link to literature about the factors relevant to the creation and maintenance of insurgency, summaries of the major arguments that support or challenge the relationship between each factor and insurgency, and a searchable digital corpus containing the original references and abstracts upon which the Factor Map was based. However, the Factor Map and associated documentation lack the features of a tool that would make the information contained in the corpus easily consumable by analysts as they prepare JIPOE products or conduct related activities.

The intent of this work is to augment the expertise of analysts with pertinent social science knowledge contained in the corpus. To be rapidly usable, this knowledge needs to be tailored to the specific needs of a JIPOE analyst. The sensemaking tool must provide analysts access to corpus in a way that allows them to gain the most benefit with the least amount of manual effort. The sensemaking tool should also be capable of exposing the analyst the concurrence and dissonance among the arguments that associate these factors with the creation and maintenance of insurgency. According to Sieck et al. (2007), challenging established arguments and considering new evidence are critical aspects of an analyst's sensemaking process.

The primary functional requirements of the proposed sensemaking tool will be to

- identify and document the claims, counterclaims, and linkages among the claims included in the corpus
- maintain transparency and traceability of claims so that they can be sourced back to the original article with the supporting data
- navigate and search the knowledge base to find the most relevant information
- enable decomposition of the operational environment so that analysts are aware of all the factors that may be important to consider, not just the factors with which they are familiar
- track their assessments of relevant claims, counterclaims, arguments, and factors as related to their mission, operational environment, and analytic questions/concerns.

5 Summary

5.1 Conclusions

This report has described how frameworks can function to pre-position social science knowledge for use by intelligence analysts. The PIAF and its associated tools—the Factor Map and the corpus of relevant social science literature—can be used to focus inquiry on characterization of an operational environment for a situation of interest at a similar level of conceptualization as presented in doctrine.

The PIAF, like doctrine, provides the logical structure for a complex topic. It orients the analyst to what is important to know about an operational environment in a situation of instability. Analytical frameworks are an established tool in the field of social science inquiry, having been used for organizing and orienting analysis around a problem space, such as the sociocultural dynamics of instability within nation-states; or a field of study, such as the institutional dynamics of addressing the common good as embodied in Ostrum's IAD Framework (see section 2.3.5).

The authors believe that analysts can benefit from access to social science research as they develop their models of a specific situation. For this benefit to be realized, theories must be considered within a framework and methods are needed to explore the relationship among theories with reference to a particular situation and problem. The Factor Map and corpus provide the basis for the development of a sensemaking tool that can facilitate exploration of the relationship of theories to a framework and the relationship of theories to each other.

The Factor Map developed in this work presents a synthesis of themes (i.e., factors) associated with the creation and maintenance of insurgency on the continent of Africa based on the research team's analysis of social science literature. Insurgency is just one cause of instability within a nation-state. The Factor Map and corpus developed for this project enables an analyst to refer to the narratives pertaining to each factor to discover what the literature says about any factor in relation to the creation and maintenance of insurgency.

Although the Factor Map provides access to relevant literature in a form that is more functional than a traditional textual summary of literature review results, the current Factor Map and corpus currently lack the enhanced level of functionality discussed in section 4.3. The key to improved accessibility of this reference material will be the ability to compare and contrast claims and counterclaims regarding the relationship of the factors to the creation and maintenance of insurgency.

An approach is explained for developing a factor map and corpus applicable to other complex topics involving sociocultural dynamics. The authors believe the approach to be flexible enough to adapt for application to related topics such as violent extremism, civil war, or transnational crime.

The Factor Map presented here distills a corpus of multidisciplinary literature sorted according to themes (i.e., factors) that play a part in the creation and maintenance of insurgency in Africa. Narratives with citations from the corpus explain the rationale for the dominant factors in the Factor Map. The theories that support the inclusion of particular themes in the Factor Map are documented in the narratives about the dominant factors, and the articles cited can be located in the corpus and examined. Thus, the academic literature on the creation and maintenance of insurgency in Africa is more accessible to analysts than it would be as the product of a traditional literature review.

The pre-positioning of knowledge in the PIAF and Factor Map supports the kind of preparatory qualitative analysis discussed by Upshur et al. (2011) and Flynn et al. (2012) that contributes to sensemaking. The goal of such qualitative analysis is to establish the grounds for understanding social, political, and economic systems on their own terms; that is, in terms of the population's cultural reality. If achieved, this understanding would enable DoD analysts to explain why a system works as it does and to account for the roles of the various actors, e.g., governments, civilians, insurgents, and other non-state actors, in the system. With such understanding, intelligence analysts will be well positioned to more accurately characterize operational environments, recognize emerging and imminent threats to the military mission, and determine courses of action that can feasibly achieve the desired outcomes.

5.2 Future work

As noted, it is intended that the Factor Map, and corpus developed in this work be incorporated into a computer-assisted sensemaking tool that improves the usability of the technical knowledge contained in the corpus. The objectives of the scheduled second phase of the MASC-CMO project are to

- demonstrate how to create a knowledge base organized around the factors based on a process of annotating articles to characterize claims and counter-claims
- create sufficient metadata to enable analysts to search and navigate through the knowledge base to find relevant information
- enable analysts to create visualizations featuring different perspectives on the relationships among claims and counter-claims represented in the articles.

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Appendix A: Development of the Pre-Intervention Analytical Framework (PIAF)

by Wenshuo Zhang, Neil Vander-Most, Keith Taylor, Isabel Scarborough, and Duu Renn

Building a framework

A framework is defined as an analytical tool that “identifies, categorizes and organizes those factors deemed most relevant to understanding some phenomena” (McGinnis 2011: 4) and provides an information structure to aid diagnostic, descriptive and prescriptive inquiry (5). Our task was to design a Pre-Intervention Analytical Framework (PIAF) which will be used to guide civil-military analysts in standardizing and making more efficient the identification and analysis of the working parts and relationships among pertinent elements in the mission environment. The goal is to generate a sorting and analytical mechanism based on current social science research instead of subjective experience or normative expectations.

In building the PIAF, we took inspiration from the Institutional Analysis and Development (IAD) framework, developed at Indiana University’s Workshop in Political Theory and Policy Analysis (Ostrom et al. 2010). Ostrom and her colleagues developed the IAD as a holistic tool to aid in the analysis of complex social situations of interaction between actors, social power, and ecosystems. In particular, the IAD recognizes that governance is not a top-down and hierarchical procedure, but is created from a set of interactions among multiple centers of power in what the IAD dubs “polycentricity.”

We incorporate this understanding into the development of our framework vocabulary to account for the interaction of people, institutional rules, and resources within multiple overlapping social networks. As with the IAD, we develop a standardized framework vocabulary to “enable productive comparisons to be drawn across disparate geographic areas and temporal domains” as well as maintain sufficient neutrality such that “competing hypotheses from alternative theoretical perspectives could be evaluated on a common basis” (McGinnis and Ostrom 2011: 3). While we

account for situational influences within each situation, contextual factors are codified as to be comparable across analytical cases.

The PIAF diverges from the IAD in that it more narrowly focuses on understanding the causes of instability, or situations in which a complex socio-economic system moves out of equilibrium and begins to disintegrate - and may eventually dissolve -- due to the continued interactions among actors within a particular environment. In the IAD, organization and analysis center around the action-situation, “in which individuals (acting on their own or as agents of organizations) observe information, select actions, engage in patterns of interaction, and realize outcomes from their interaction” (McGinnis 2013: 11). This focus enables researchers to look forward in time to predict how different policy inputs may yield future socioeconomic outputs based on observed actor interactions.

In contrast, the PIAF is actor-centered, looking backwards in time to identify the social, political, economic and environmental dynamics that have played key roles in shaping the present situation. While the CMO is primarily focused on understanding the sequence of events which led to, or could lead to, instability, the functionality of the PIAF is greater in being applicable to classifying and understanding dynamics in any social state. By understanding how actors and their respective rules-in-use emerge, and identifying how key contextual factors have influenced their development, analysts can better identify where actors may be susceptible to influence, specifically those areas that may provoke conflict among them and/or invite exploitation by outside actors.

Toward a new framework

Features

- The PIAF is a descriptive framework designed to transform data into organized information structures. It provides generalized criteria with which one can identify, categorize and prioritize pertinent details about key entities, relationships and processes that operate in a target area. These criteria are theoretically grounded and not arbitrarily determined based on normative or experiential expectations.
- Unlike previous analytical efforts, the PIAF goes beyond identification to the organization of information. In other words, the PIAF uses the information that it gathers to model the social situation of interest.

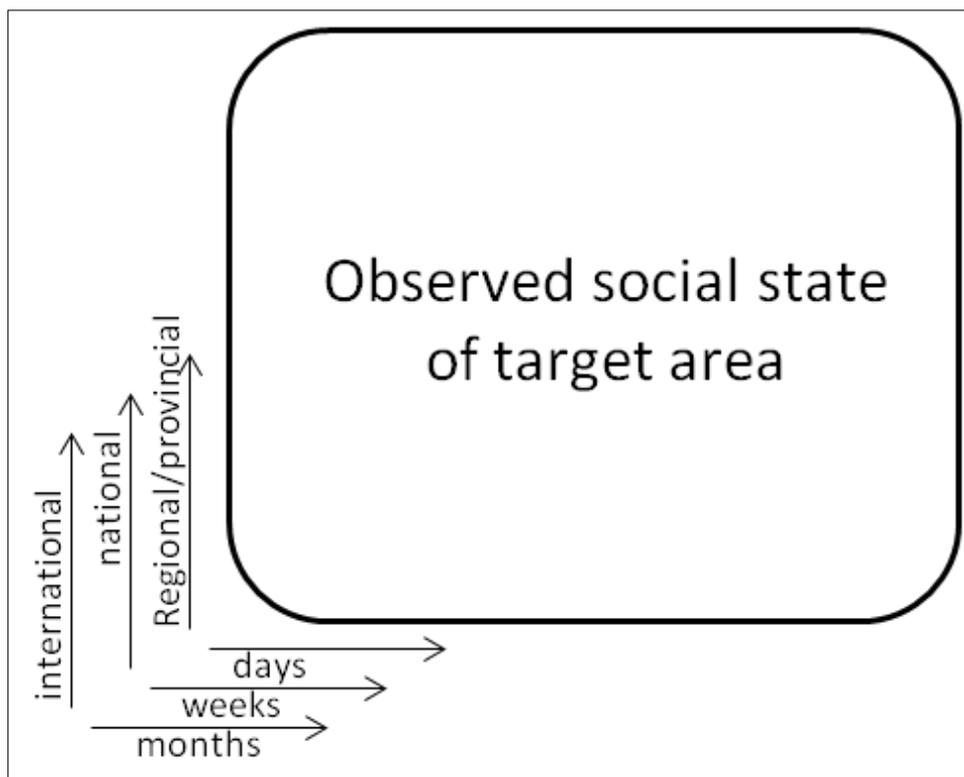
- While social dynamics do not necessarily share similar structural or institutional features, the PIAF ensures maximum comparability across cases by providing a vocabulary with which the identification and analysis of actors and processes can be standardized. The use of a standardized vocabulary also helps make the framework generalizable.
- Borrowing from the Millennium Ecosystem Assessment Framework (MA), the PIAF requires that the analyst accounts for social processes that interact across multiple spatial and temporal levels.
- In many cases, having large amount of data does not necessarily mean possessing the correct pieces of information with which an analysis can be completed. In the event that there exists incomplete information with regard to a target location, PIAF criteria can guide data collection by formally identifying the *types* of information needed to complete the analysis. Where information is not available and cannot be collected, the framework can, based on available contextual information, guide the operator in inferring information that is likely to be missing and needed.

Dynamics

The PIAF is a multilevel framework aimed at breaking down an observed social phenomenon such as open conflict, political instability, or even peacetime into its constituent components. The framework identifies and standardizes the definitions of these constituent components, first to prioritize the relevance of various components within the framework, and second to ensure comparability across cases. By describing the changing relationships among components over time and geographic scope, the analyst builds a more complete understanding of the social dynamics that constitute the social phenomenon under observation.

Analysis begins when an analyst is asked to examine some locality for the potential deployment of a civil-military operation (see Figure A1). At the aggregate level, any society exhibits a series of symptoms, defined as patterns of behavior, that must translated into a diagnosis of its current social state. For example, continued violence may be translated into a diagnosis of ethnic conflict, or sporadic episodes of fighting along with increasing segregation of population groups may indicate a state of instability, etc. The analyst can zoom in geospatially to demarcate the approximate boundaries within which this social state occurs, as well as look backwards in time to observe whether the observed state has intensified, lessened in intensity or remained steady over some predefined time frame.

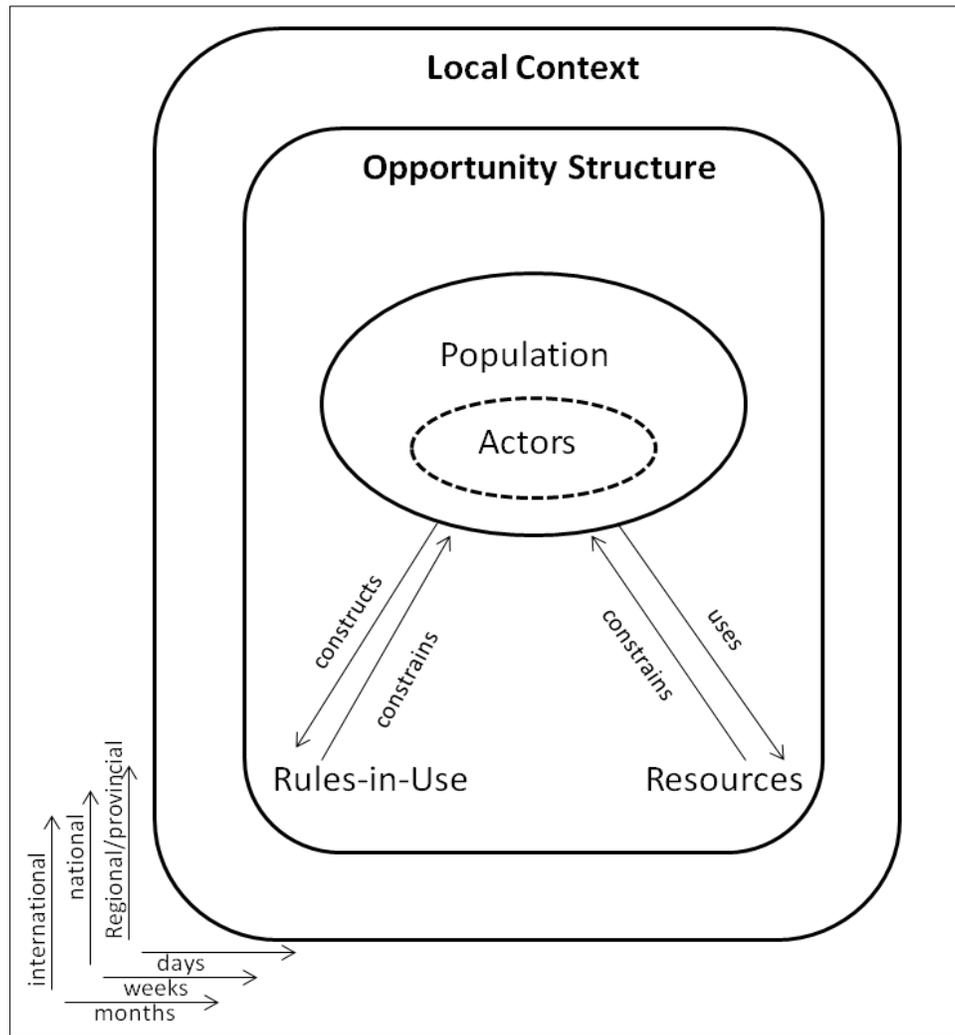
Figure A1. A two-dimensional view of the top level of the PIAF structure.



Deriving a diagnosis is insufficient. The analyst must delve deeper to understand how various aspects of the target society interact in creating those observable symptoms. In other words, the analyst must first translate the fever, muscle aches and nasal congestion into a diagnosis of influenza, and then he must be able to describe how the rhinovirus enters a person and interacts with the biological systems to wreak create those symptoms. For a social system, the analyst must identify the principle actors and be able to describe their interactions.

Figure A2 is a simplified representation of how the PIAF may be deployed to organize data about a target location into a coherent information structure. Similar to the “5Ws and 1H” in journalism, the PIAF aims to answer *who* are the chief actors, *what* they are doing, *when* they interact, *how* they interact with each other, *why* they interact with each other and *why* they do so in a particular manner. *Where*, in this case, has already been constrained by the analyst’s mission parameters, though the focus may sometimes be broader or narrower than what has been defined in order to provide additional information to the analysis.

Figure A2. A two-dimensional view of the PIAF structure at the relational level.

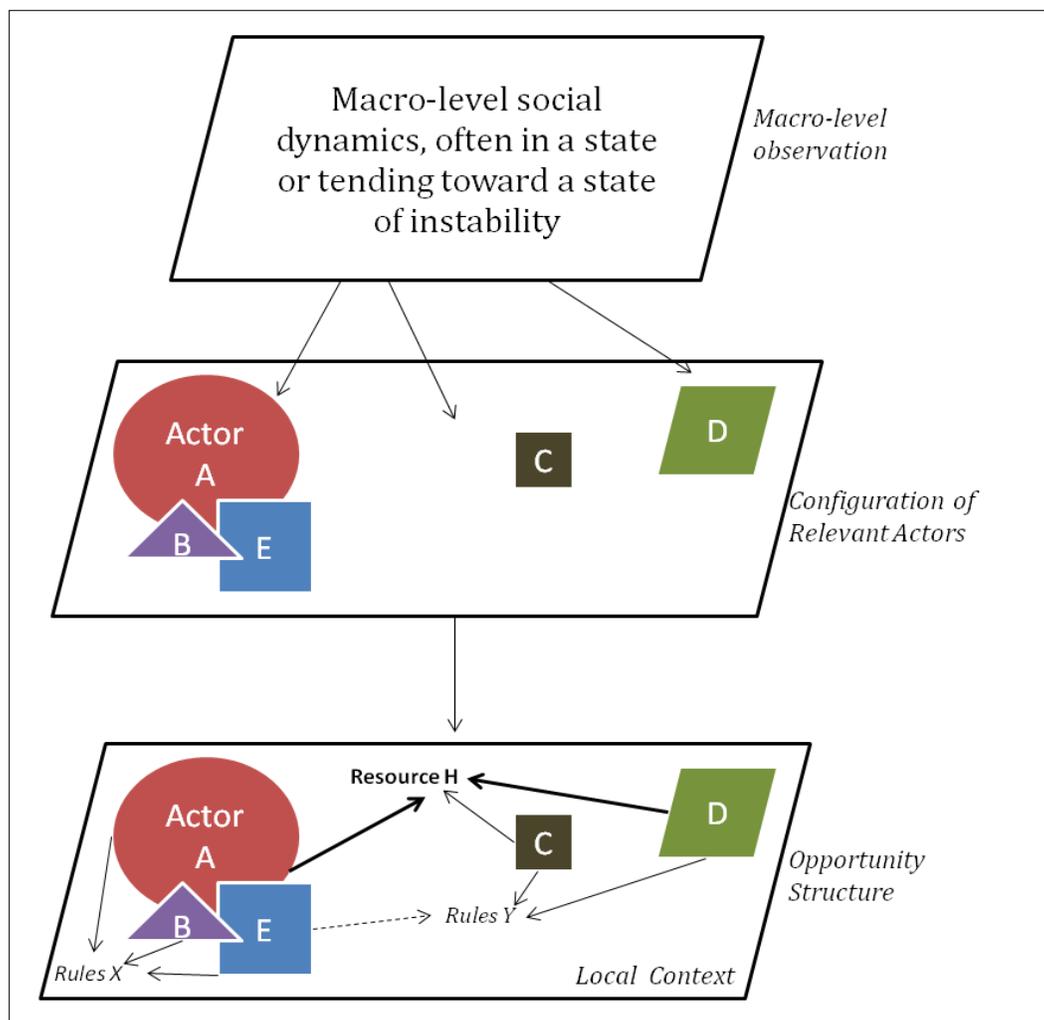


The analyst must first identify actors, or those persons or groups acting collectively to achieve some stated or observable purpose within the population. Not all citizens in a population are actors. However, those who are not currently participating have the potential to be mobilized as actors or members of an actor. Here, both the geospatial as well as temporal scale matters. Some actors may only exist in the target location, while others may have local presences that are directed by or affiliated with a main group elsewhere. It is important to go back in time to identify whether the main actors have *changed* over time: the current social state may have been started by a group of actors different from those currently perpetuating, lessening or intensifying the state.

The analyst must then describe the rules-in-use that each actor use to govern and justify their behavior. In other words, the rules-in-use establish

Figure A4 shows an approximate representation of the analytic timeline. The process is not necessarily linear: the analyst may be able to identify and place some actors into their correct social niches, but be missing sufficient information to do the same for other actors in the same structure.

Figure A4. Building the PIAF hierarchically.



When the analyst examines the configuration of the opportunity structure in context of the larger geospatial region, he can put the local dynamics in context with larger sociopolitical developments. Examining the opportunity structure in time will enable him to identify the entry and exit of various actors, how actors' rules-in use have changed, trends in resource consumption, etc. For the civil-military analyst, deploying these two concurrent analyses will build a better understanding of factors that cause and/or perpetuate instability, and point to candidate trends that may make actors

(and thereby the target area) more susceptible to exploitation and thereby further instability.

Theoretical applications

The PIAF is a descriptive vehicle. Its primary function is to extract and organize the information most relevant to understanding the social dynamics of a target area. Properly executed, the PIAF structures the collected data such that analysts can develop temporal and spatial sequences to describe how social patterns have developed over time, what the society looks like currently, and also its importance within the larger geospatial context.

Description is often not enough for explanation. While the analyst may understand *what* has happened, it may be insufficient for understanding *why* and *how*. A layperson may know that electricity makes a light bulb give off light, and that flipping a power switch will make the light bulb turn on, but his flipping a switch on and off will not make the lights come on if the problem is a burned-out circuit in the wiring. The same goes for a social system: while the analyst may be able to identify the primary actors and what they are doing, the actors' motivations and goals are often less clear. This is an obstacle to the civil-military operation, which is then missing vital information about what the actors want and how to best influence them in order to achieve some desired end state.

The use of theories becomes relevant at this stage, which is outside of the descriptive scope of the PIAF. Theories attempt to predict specific phenomenon and attempt to link components in a strong causal relationship; the use of theories provides testable predictions based on theorized relationships. Multiple theories may be compatible with each other.

At this point, the analyst may examine the informational structure that has been generated through use of the PIAF for descriptive components that have theoretical counterparts. The bulk of theories that may not have corresponding empirical details may then be deprioritized and filtered out for lack of relevance. Analysts can then examine the successively smaller pool of applicable theories, examine them for assumptions and conditions that correspond best to local circumstances, and then formulate and issue action recommendations based on the best-fitting theories.

For example, an analyst was asked to create an information structure for a spate of recent conflict between two tribes in Sub-Saharan Africa. He then looks to a map or a list of theories for their possible applicability to this region. As the tribes are not near any valuable natural resources, those theories can be discounted; theories with overly specific tribal, ethnic or area assumptions can be eliminated; he does not discount ethnic conflict literature, but observes that they are branches of the same ethnicity and reprioritizes that branch of literature to be less important. Looking through the timeline, the analyst notices that there had been a regional election in the recent past, and traces the rise of conflicts to shortly before the election. He observes the results of this regional election (at a spatial level higher than the zoomed-in local level of conflict) and realizes that the politician had campaigned extensively in the area, and since his election, has provided benefits to his tribe (tribe A) but not tribe B, the neighboring tribe. Based on these details, the analyst narrows in on theories with regard to patrimonial political networks, election buying as well as political entrepreneurship as being key explanations for the conflict.

Framework vocabulary

Core components

Within our proposed framework, the local context includes the system of rules-in-use, the actors, and the resources available at that locality. The constituent components are taken from McGinnis and Ostrom's "first tier SES variables" (2011), which constitute the inputs of the instability. These components are in turn filtered through an interpretive lens comprised of the historical and cultural factors specific to that locality at the moment of the observed instability.

Actors

The actors within our framework are persons or groups of persons who can act collectively for a common purpose (McGinnis and Ostrom 2011: 21). They are defined according to both their individual attributes and those that are derived by their patterns of interactions with each other. Further, power relations between actors and rules-in-use provide actors with agency. Because of this freedom of choice, there are two categories of actors: those who are presently mobilized and those who can, or have the potential to be, mobilized into distinct corporate bodies.

Rules in use

For purposes of this framework, we define rules in use as the rules that guide the individual behavior of actors and the interactions among actors. In other words, understanding the rules in use will establish “who can do what to whom, and on whose authority.” Rules in Use does not constitute a single set of rules but often multiple and competing sets of rules that exist in the same location. This definition is based on the ongoing negotiations for power within a society among formal state organizations (e.g. government administrative apparatus), civil society groups and also disenfranchised or discriminated constituencies.

Resources

Resources, whether environmental, economic, geographic, social, or political, are those sources of support that carry some strategic value as perceived by the actors. These resources may be those assets that enable an actor to compete to achieve some goal, or may be the contested goal itself.

Culture as interpretive lens

Within the proposed framework, the specific historical and cultural background of a target operation location will contextualize the importance of the actions of the person or group of persons with a common purpose, within the constraints of the local rules in use, and utilizing the strategic resources best suited for their purpose. In other words, we view the local cultural and historical specificity of a population as an interpretive lens, which we then use to identify the most pertinent components to our analytical framework.

On-the-ground populations create their own relationships with political, ethnic, economic, moral and/or environmental systems in order to construct their own identities in a constant process of negotiation and definition of their group *vis. á vis* these systems (Tsing 2003). In a hypothetical example, we could observe the process through which the members of a nomadic tribe in Africa’s Kalahari Desert are being forced into living in settlements because the government of Angola wishes to better control the movements of its population due to increased political unrest. The tribe as a group could at the same time identify with a grassroots identity politics movement against the government because of common religious beliefs—a cultural factor—while refusing help from an international NGO due to a

series of incidents denounced in the local press on government corruption in their dealings with these types of agencies—a historical factor.

This example shows how the local culture and history affect the local context. Further, it also teaches that there are some local contextual variables that are more relevant than others for the assessment of this particular situation. In this instance, the cultural and historical factors affecting the instability indicate that when determining which actors are important, religious organizations and international cooperation agencies should be examined closely, while a number of other actors such as local food cooperatives, state health programs or the federal civil registry should be passed over in the analysis as irrelevant to the problem at hand. The same thought process is also applied to the other components of the local context where strategic resources such as forage and water in the Kalahari are particularly relevant to whether the nomadic tribe will obey the state's relocation orders and where a closer look at the rules of distinct ethnic groups is required. Other issues that can be affected by local culture and history and that contribute to situations of political instability include but are not limited to belief systems, ethnic/race identities and fractures, communal and kin networks, indigenous legal and justice systems, indigenous health care practices, local market dynamics, and environmental worldviews (Greenhouse et al. 2002).

From the example shown in this section we can understand anthropology's definition of a population's culture as ever-changing and processual. However, for purposes of our proposed framework it is important to note that we treat culture as a static component because we are examining a temporal and spatial "snapshot" at the moment when the civil-military operation (CMO) is requested due to an observed instability.

Opportunity structure

Deriving this definition from Kitschelt (1986:58), who defines political opportunity structure as "comprised of specific configurations of resources, institutional arrangements and historical precedents for social mobilization, which facilitate the development of protest movements in some instances and constrain them in others," the PIAF defines opportunity structure as the specific configuration of actors and their relationships to resources and the existing rules-in-use (among all actors) as shaped by the local context. The configuration of actors is often determined by similari-

ties in their respective identities, goals and strategies, and present (or past configurations) constrain each facet's continued development.

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Appendix B: Contents of PIAF Social Science Corpus

This appendix lists the contents of a corpus of social science literature on the creation and maintenance of insurgency in Africa that was compiled for use in this project. Salient themes, or factors, were identified in the corpus to help the intelligence analyst gain access to established social science theory relevant to their sensemaking task. This theory, and supporting evidence, can be used to build models that help to explain the situation under analysis. This corpus was derived from English-language literature published in academic journals and books that are accessible through Google Scholar (<http://scholar.google.com/>).

CONCEPT	KEYWORDS	RELEVANT REFERENCES
public approval	Africa, insurgency, public approval, public opinion	<p>Davis, P. & Cragin, N. (Eds). (2009). <i>Social Science fo Counterterrorism: Putting the Pieces Together</i>. Santa Monica, CA: Rand Corporation. (*exposure to information*)</p> <p>Paul, C. (2010). As a Fish Swims in the Sea: Relationships Between Factors Contributing to Support for Terrorist or Insurgent Groups <i>Studies in Conflict & Terrorism</i>, 33 (6), 488-510.</p> <p>Hewitt, C. (1990). Terrorism and Public Opinion: A Five Country Comparison <i>Terrorism and Political Violence</i>, 2 (2), 145-170. (*exposure to information*)</p> <p>Ford, C. (2005). Speak No Evil: Targeting a Population's Neutrality to Defeat an Insurgency <i>Parameters</i>, summer, 51-66. (*exposure to information*)</p> <p>Duyvesteyn, I. (2007). <i>Non-State Actors and the Resort ot Violence: Terrorism and Insurgency Strategies Compared</i>. Harvard University.</p> <p>Hutchison, M. & Johnson, K. (2011). Capacity ot Trust? Institutional Capacity, Conflict, and Political Trust in Africa <i>Journal of Peace Research</i>, 48 (6), 737-752.</p> <p>Nathan, J. & Tien, C. (2010). Causalities and Threats: Conditions of Support for War <i>Defense & Security Analysis</i>, 26 (3), 289-304.</p> <p>Oberschall, A. (2004). Explaining Terrorism: The Contribution of Collective Action Theory <i>Sociological Theory</i>, 22 (1), 26-37. (*exposure to information*)</p> <p>Kibris, A. (2011). Funerals and Elections: The Effects of Terrorism on Voting Behavior in Turkey <i>Journal of Conflict Resolution</i>, 55 (2), 220-247.</p> <p>Snglim, S. (2007). Orde Wingate and the Special Night Squads: A Feasible Policy for Counter-terrorism? <i>Contemporary Security Policy</i>, 28 (1), 28-41.</p> <p>Jackson, P. (2004). Legacy of Bitterness: Insurgency in North West Rwanda. <i>Small Wars & Insurgencies</i>, 15 (1), 19-37. (*communication*, *exposure to information*, *privilege*, *grievances*)</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
freedom of choice and action	Africa, Insurgency, Personal freedom	MacCulloch, R. & Pezzini, S. (May 2010). The Role of Freedom, Growth and Religion in the taste for Revolution <i>Journal of Law and Economics</i> , 53 (2), 329-358.
consent of governed	Consent of governed, Africa, Insurgency, Public consent, Mass consent	<p>Bratton, M. & Chang, E. (2006). State Building and Democratization in Sub-Saharan Africa <i>Comparative Political Studies</i>, 39 (9), 1059-1083.</p> <p>Pham, P. (2011). State Collapse, Insurgency, and Famine in the Horn of Africa: Legitimacy and the Ongoing Somali Crisis <i>Journal of the Middle East and Africa</i>, 2 (2), 153-187. (*natural disaster*)</p> <p>Biddle, S., Christia, F., & Shier, J. (2010). Defining Success in Afghanistan: What can the United States Accept? <i>Foreign Affairs</i>.</p> <p>Bobbitt, P. (2008). <i>Terror and Consent: The Wars for the Twenty-first Century</i>. Knopf.</p> <p>Mazrui, A. (1995). The Blood of Experience: The Failed State and Political Collapse in Africa <i>World Policy Journal</i>, 12 (1), 28-34.</p> <p>Weinstein, J. (2005). <i>Autonomous Recovery and International Intervention in Comparative Perspective</i>. Social Science Research Network.</p> <p>Hutchison, M. & Johnson, K. (2011). Capacity to Trust? Institutional Capacity, Conflict, and Political Trust in Africa <i>Journal of Peace Research</i>, 48 (6), 737-752.</p>
individual in charge	Africa, Insurgency, Civil war, Armed conflict, Riots, Protests, Leadership, Personalist regime, Charismatic, Patrimonial	<p>le Vine, V. (1980). African Patrimonial regimes in Comparative Perspective <i>Journal of Modern African Studies</i>, 18 (4), 657-673.</p> <p>Dyson, S. (2006). Individual Characteristics of Political Leaders and the Use of Analogy in Foreign Policy Decision Making <i>Political Psychology</i>, 27 (2), 265-288.</p> <p>Goemans, H. (2009). Introducing Archigos: A Dataset of Political Leaders <i>Journal of Peace Research</i>, 46 (2), 269-283.</p> <p>Lindberg, S. (2003). It's our Time to Chop: Do Elections in Africa Feed Neo-Patrimonialism rather than Counter-Act it? <i>Journal of Democratization</i>, 10 (2), 121-140.</p> <p>Ikpe, U. (2000). Patrimonialism and Military Regimes in Africa <i>African Journal of Political Science</i>, 5 (1), 146-162.</p> <p>Heidenheimer, A. & Johnston, M. (2002). <i>Political Corruption: Concepts & Contexts</i>. Transaction Publishers.</p>
elite approval	Elite approval, Africa, Insurgency	<p>Beall, J. (2009). Indigenous Institutions, Traditional Leaders, and Elite Coalitions for Development: The Case of Greater Durban, South Africa <i>Crisis States Working Papers Series No. 2, 2</i>. London School of Economics Crisis States Research Centre.</p> <p>Lindemann, S. (2008). Do Inclusive Elite Bargains Matter? A Research Framework for Understanding the Causes of Civil War in Sub-Saharan Africa <i>Crisis States Discussion Papers, 1</i>. London School of Economics Crisis States Research Centre.</p> <p>Branch, D. (2009). Democratization, Sequencing, and State Failure in Africa: Lessons from Kenya <i>Journal of African Affairs</i>, 108 (430), 1-26.</p> <p>Fanthorpe, R. (2001). Neither Citizen nor Subject? 'Lumpen' Agency and the Legacy of Native Administration in Sierra Leone <i>Journal of African Affairs</i>, 100 (400), 363-386.</p> <p>Lindemann, S. (2011). Just Another Change of Guard? Broad-based Politics and Civil War in Museveni's Uganda <i>Journal of African Affairs</i>, 110 (440), 387-416.</p> <p>Taylor, I. (2002). South Africa's Transition to Democracy and the 'Change Industry': A Case Study of IDASA <i>Politikon</i>, 29 (1), 31-48.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
elite approval	Elite approval, Africa, Insurgency	Wood, E. (2001). An Insurgent Path to Democracy <i>Comparative Political Studies</i> , 34 (8), 862-888.
communication	Communications, Insurgency, Africa, Information, Propaganda, Media	<p>Eikmeier. (2005). How to Beat the Global Islamist Insurgency <i>Middle East Quarterly</i>, 12 (1), 35-44. (*exposure to information*)</p> <p>Jackson, P. (2004). Legacy of Bitterness: Insurgency in North West Rwanda <i>Small Wars & Insurgencies</i>, 15 (1), 19-37. (*public approval*, *exposure to information*, *privilege*, *grievances*)</p> <p>Tomaselli, K. & Louw, P. (1991). Disinformation and the South African Defence Force's Theory of War <i>Social Justice</i>, 18 (1/2), 124-140. (*exposure to information*)</p> <p>Rao, A., Bollig, M., & Böck, M. (Eds.). (2007). <i>The Practice of War: Production, Reproduction, and Communication of Armed Violence</i>. Berghahn Books. (*exposure to information*)</p> <p>Innes, M. (2004). <i>Political Communication in Wartime Liberia: Themes and Concepts</i>. CEPES Working Paper No. 26. (*exposure to information*)</p> <p>Manheim, J. & Albritton, R. (1987). Insurgent Violence Versus Image Management: The Struggle for National Images in Southern Africa <i>British Journal of Political Science</i>, 17 (2), 201-218.</p> <p>Byman, D. (2001). <i>Trends in Outside Support for Insurgent Movements</i>. Rand Corporation (*exposure to information*)</p> <p>Rogan, H. (2007). Abu Reuter and the E-Jihad: Virtual Battlefields from Iraq to the Horn of Africa <i>Georgetown Journal of International Affairs</i>, 89.</p>
population	Africa, Insurgency, Population size	<p>Raleigh, C., & Havard, H. (2009). Population Size, Concentration, and Civil War: A Geographically Disaggregated Analysis <i>Political Geography</i>, 28 (4), 224-238.</p> <p>Bruckner, M. (2010). Population Size and Civil Conflict Risk: Is There a Causal Link? <i>The Economic Journal</i>, 120 (544), 535-550.</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i>, 97, 75-90. (*civil liberties*, *ethnicity*, *religion*, *grievances*, *access to weapons*)</p> <p>Raleigh, C. (2007). <i>Political Geography of Civil War: Insurgency Patterns in African States</i>. Trinity College Dublin. (*physical spaces*, *grievances*)</p> <p>Bruckner, M. (2011). <i>Population Size, Per Capita Income, and the Risk of Civil War: Regional Heterogeneity in the Structural Relationship Matters</i>. Working Paper No. 2011/18.</p> <p>Foldstone, J. (2002). Population and Security: How Demographic Change Can Lead to Violent Conflict <i>Journal of International Affairs</i>, 56.</p> <p>Krause, V. & Suzuki, S. (2005). Causes of Civil War in Asia and Sub-Saharan Africa: A Comparison <i>Social Science Quarterly</i>, 86 (1), 160-177.</p> <p>Englebert, P. & Hummel, R. (2005). Let's Stick Together: Understanding Africa's Secessionist Deficit <i>African Affairs</i>, 104 (4116), 399-427.</p> <p>Arriola, L. (2009). Patronage and Political Stability in Africa <i>Comparative Political Studies</i>, 42 (10), 1339-1362.</p> <p>Collier, P., Hoeffler, A., & Rohner, D. (2009). Beyond Greed and Grievance: Feasibility and Civil War <i>Oxford Economic Papers</i>, 61 (1), 1-27.</p>
civil liberties	Insurgency, Civil rights	Fearon, J.D & Laitin, D.D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i> , 97, 75-90. (*population*, *ethnicity*, *religion*, *grievances*, *access to weapons*)

CONCEPT	KEYWORDS	RELEVANT REFERENCES
civil liberties	Insurgency, Civil rights	<p>Krueger, A. & Maleckova, J. (2003). Education, Poverty and Terrorism: Is There a Causal Connection? <i>Journal of Economic Perspectives</i>, 17 (4), 141.</p> <p>Fearon, J.D. (2003). <i>Catastrophic Terrorism and Civil Liberties in the Short and Long Run</i>. Stanford University.</p> <p>Krueger, A. & Laitin, D. "KtoKogo?: A Cross-Country Study of the Origins and Targets of Terrorism." 4 January 2012. Retrieved from <http://www.nber.org/public_html/confer/2004/si2004/pens/krueger.pdf>.</p>
transportation	Transportation, Africa, Insurgency, Transport, Conflict, Violence	<p>Kennedy, T. (2010). <i>Transport in Southern Africa</i>. South African Institute of International Affairs Working Paper.</p> <p>Wood, G. & Dibben, P. (2005). Ports and Shipping in Mozambique: Current Concerns and Policy Options <i>Journal of Maritime Policy & Management</i>, 32 (2), 139-157.</p> <p>Iheduru, O. (1996). Post-Apartheid South Africa and Its Neighbours: A Maritime Transport Perspective <i>Journal of Modern African Studies</i>, 34 (1), 1-26.</p> <p>Dibben, P. (2006). <i>Transport for Trade in Mozambique: The Golden Highway to Development?</i>. University of Sheffield/Royal Geographical Society Working Papers.</p> <p>Pirie, G. (1993). Transport, Food Insecurity and Food Aid in Sub-Saharan Africa <i>Journal of Transport Geography</i>, 1 (1), 12-19.</p> <p>Khosa, M. (1995). Transport and Popular Struggles in South Africa <i>Antipode</i>, 27 (2), 167-188.</p> <p>Mechlinski, T. (2010). Making Movements Possible: Transportation Workers and Mobility in West Africa <i>International Migration</i>.</p>
transportation (revised)	Transportation, Africa, Insurgency, Ground mobility, Mobility, Efficiency	<p>Merari, A. (1993). Terrorism as a Strategy of Insurgency <i>Terrorism and Political Violence</i>, 5 (4), 2113-251.</p> <p>Metz, S. (1994). Insurgency After the Cold War <i>Small Wars & Insurgencies</i>, 5 (1), 63-82.</p> <p>Anderson, S. (2005). US Counterinsurgency vs Iranian Sponsored-Terrorism. In Robert J. Bunker (Eds.), <i>Networks, Terrorism and Global Insurgency</i>. Routledge.</p> <p>Young, E. (1996). The Victors and the Vanquished: The Role of Military Factors in the Outcome of Modern African Insurgencies <i>Small Wars & Insurgencies</i>, 7 (2), 178-195.</p>
sanitation	Sanitation, Insurgency, Africa	<p>Coovadia, H., Jewkes, R., Barron, P., Sanders, D., & McIntyre, D. (2009). The Health and Health System of South Africa: Historical Roots of Current Public Health Challenges <i>Science Direct</i>, 374 (9692), 817-834.</p>
sanitation	Sanitation, Insurgency, Africa	<p>Obeng-Odoom, F. (2010). The State of African Cities 2008: A Framework for Addressing Urban Challenges in Africa <i>Journal of African Affairs</i>, 109 (435), 340-341.</p>
water	Water, Africa, Insurgency	<p>Isaacman, A. & Sneddon, C. (2000). Toward a Social and Environmental History of the Building of Cahora Bassa Dam <i>Journal of Southern African Studies</i>, 26 (4), 597-632.</p> <p>Deetat, H. & Cottle, E. (2002). <i>Cost Recovery and Prepaid Water Meters and the Cholera Outbreak in Kwa-Zulu Natal</i>. New York: Zed Books.</p> <p>Bond, P., McDonald, D., & Ruiters, G. (2003). Water Privatisation in Southern Africa: The State of the Debate <i>Journal of Economic and Social Rights in South Africa</i>, 4 (4), 10-13.</p> <p>Swatuk, L. (2002). The New Water Architecture in Southern Africa: Reflections on Current Trends in the Light of 'Rio+10.' <i>Journal of International Affairs</i>, 78 (3), 507-530.</p>

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water	Water, Africa, Insurgency	<p>Reynaud, D. (2006). Implementation of the Right of Access to Sufficient Water Through Privatization in South Africa <i>Journal of Penn State Environmental Legal Review</i>, 15 (61).</p> <p>Rose, F. (2005). <i>Water Justice in South Africa: Natural Resources Policy at the Intersection of Human Rights, Economics, and Political Power</i>. Berkeley Electronic Press Legal Services.</p> <p>von Schnitzler, A. (2008). Citizenship Prepaid: Water, Calculability, and Techno-Politics in South Africa <i>Journal of Southern African Studies</i>, 34 (4), 899-917.</p> <p>Hendrix, C. & Salehyan, I. (2010). <i>After the Rain: Rainfall Variability, Hydro-meteorological Disasters, and Social Conflict in Africa</i>. Social Science Research Network Working Paper.</p> <p>Turton, A. (2003). <i>The Political Aspects of Institutional Developments in the Water Sector: South Africa and its International River Basins</i>. University of Pretoria.</p> <p>Heyns, P., Patrick, M., & Turton, A. (2008). Transboundary Water Resource Management in Southern Africa: Meeting the Challenge of Joint Planning and Management in the Orange River Basin <i>International Journal of Water Resources Development</i>, 24 (3), 371-383.</p>
water (revised)	Water, Africa, Insurgency, Ecology	<p>Turton, A. & Ashton, P. (2008). Basin Closure and Issues of Scale: The Southern African Hydropolitical Complex <i>International Journal of Water Resources Development</i>, 24 (2), 305-318.</p> <p>Turner, M. (2004). Political Ecology and the Moral Dimensions of Resource Conflicts: The Case of Farmer-Herder Conflicts in the Sahel <i>Political Geography</i>, 23 (7), 862-889.</p> <p>Kennedy, W., Hailegiorgis, A., Rouleau, M., Bassett, J., Coletti, M., Balan, G., & Gulden, T. (2010). <i>An Agent-Based Model of Conflict in East Africa and the Effect of Watering Holes</i>. Proceedings of the 19th Conference on Behavior Representation in Modeling and Simulation.</p> <p>Hendrix, C. & Salehyan, I. (2012). Climate Change, Rainfall, and Social Conflict in Africa <i>Journal of Peace Research</i>, 49 (1), 35-50.</p> <p>Goldsmith, P., Abura, L., & Switzer, J. (2002). Oil and Water in Sudan. In Jeremy Lind & Kathryn Sturman (Eds.) <i>Scarcity and Surfeit: The Ecology of Africa's Conflicts</i>. Pretoria: Institute for Security Studies.</p> <p>Turton, A., Varis, O., Biswas, A., & Tortajada, C. (2008). The Southern African Hydropolitical Complex. In Olli Varis & Cecilia Tortajada (Eds.) <i>Management of Transboundary Rivers and Lakes: Water Resources Development and Management</i>. Germany: Springer.</p> <p>Salehyan, I & Hendrix, C. (2011). <i>Climate Shocks & Political Violence: Is Africa Unique?</i>. Social Science Research Network Working Paper Series.</p> <p>Bakker, K. (2007). The 'Commons' Versus the 'Commodity': alter-globalization, Anti-privatization, and the Human Rights to water in the Global South <i>Antipode</i>, 39 (3), 430-455.</p> <p>Ashok, S. (2008). Mission Not Yet Accomplished: Managing Water Resources in the Nile River Basin <i>Journal of International Affairs</i>, 61 (2), 201-214.</p>
technology	Africa, Insurgency, Technology	<p>Marsh, N. "The Tools of Insurgency: A Review of the Role of Small Arms and Light Weapons in Warfare." 24 January 2012. Retrieved from <http://www.prio.no/projects/a25cost/COST0308_Brussels/Mars_h_The%20Tools%20of%20Insurgency%20a%20Review%20of%20the%20Role%20of%20Small%20.pdf>. (*access to weapons*)</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
technology	Africa, Insurgency, Technology	<p>Venter, D. (1978). South Africa and the International Controversy Surrounding its Nuclear Capability <i>Politikon</i>, 5 (1), 18-29.</p> <p>Zemni, S. (2008). From Local Insurgency to Al-Qaida Franchise <i>ISIM Review</i>, 21 (1).</p> <p>de Waal, A. (1996). Contemporary Warfare in Africa: Changing Context, Changing Strategies <i>Institute of Development Studies</i>, 27 (3), 6-16.</p> <p>Kilcullen, D. (2005). Countering Global Insurgency <i>Journal of Strategic Studies</i>, 28 (4), 597-617.</p> <p>Okum, W. (2007). Security Alerts and their Impacts on Africa <i>African Security Review</i>, 16 (3).</p>
physical spaces	Africa, Insurgency, Civil war, Armed conflict, Riots, Protests, Geography, Terrain, Territory	<p>Raleigh, C. (2007). Political Geography of Civil War: Insurgency Patterns in African States. Trinity College Dublin. (*population*, *grievances*)</p> <p>Buhaug, H. & Rod, J. (2005). <i>Using Disaggregated Grid Cells for a Study on the Onset of African Civil Wars</i>. Oslo, Norway: International Peace Research Institute.</p> <p>Korf, B. (2011). Resources, Violence, and the Telluric Geographies of Small Wars <i>Progress in Human Geography</i>, 35 (6), 733-756.</p> <p>Lohman, A. & Flint, C. (2010). The Geography of Insurgency <i>Geography Compass</i>, 4 (8), 1154-1166.</p> <p>Buhaug, H. (2002). The Geography of Civil War <i>Journal of Peace Research</i>, 39 (4), 417-433.</p> <p>Buhaug, H & Rod, J. (2006). Local Determinants of African Civil Wars, 1970-2001 <i>Political Geography</i>, 25 (3), 315-335. (*infrastructure*, *built environment*, *extraction*, *natural resources*)</p> <p>Hendrix, C. (2011). Head for the Hills? Rough Terrain, State Capacity, and Civil War Onset <i>Civil Wars</i>, 13 (4), 345-370.</p>
public health	Public health, Insurgency, Africa, Health, Healthcare	<p>Berrang, L.F. (2007). Civil Conflict and Sleeping Sickness in Africa in General and Uganda in Particular <i>Journal of Conflict and Health</i>, 1.</p> <p>Klare, M., Levy, B., & Sidel, V. (2011). The Public Health Implications of Resource Wars <i>American Journal of Public Health</i>, 101 (9).</p> <p>Griffin, N. & Khoshnood, K. (2010). Opium Trade, Insurgency, and HIV/AIDS in Afghanistan: Relationships and Regional Consequences <i>Asia-Pacific Journal of Public Health</i>, 22 (3), 159S-167S.</p> <p>Iqbal, Z. & Zorn, C. (2010). Violent Conflict and the Spread of HIV/AIDS in Africa <i>Journal of Politics</i>, 72 (1), 149-162.</p> <p>Prins, B. & Karakaya, S. (2011). <i>The Phoenix Factor Applied to Civil Wars: The Long-term Public Health Effects of Civil War</i>. APSA Annual Meeting Paper.</p> <p>Ba, O., O'Regan, C., Nachega, J., Cooper, C., Anema, A., Rachlis, B., & Mills, E. (2008). HIV/AIDS in African Militaries: An Ecological Analysis <i>Journal of Medicine, Conflict, and Survival</i>, 24 (2).</p> <p>Kiros, G.E. & Hogan, D. (2001). War, Famine, and Excess Child Mortality in Africa: The Role of Parental Education <i>International Journal of Epidemiology</i>, 30 (3), 447-455.</p> <p>Mock, N., Duale, S., Brown, L., Mathys, E., O'Maonaigh, H., Abul-Husn, N., & Elliott, S. (2004). Conflict and HIV: A Framework for Risk Assessment to Prevent HIV in Conflict-Affected Settings in Africa <i>Journal of Emerging Themes in Epidemiology</i>, 1 (1).</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
public health	Public health, Insurgency, Africa, Health, Healthcare	Isike, C., Uzodike, U., & Gilbert, L. (2008). The United States Africa Command: Enhancing American Security or Fostering African Development? <i>African Security Review</i> , 17 (1).
service delivery	Service delivery, Insurgency, Africa, Social services, Consent of the governed, healthcare	<p>Sacks, A. (2011). <i>Donor and Non-State Actor Service Provision and Legitimizing Beliefs in Sub-Saharan Africa</i>. Social Science Research Network.</p> <p>Kevlihan, R. (2009). <i>States of Insurgency: Conflict Transformation in Civil Wars through Social Services</i>. Social Science Research Network.</p> <p>Flanigan, S. (2008). Nonprofit Service Provision by Insurgent Organizations: The Cases of Hizballah and the Tamil Tigers <i>Studies in Conflict & Terrorism</i>, 31 (6), 499-519.</p> <p>Mirafab, F. (2004). Neoliberalism and Casualization of Public Sector Services: The Case of Waste Collection Services in Cape Town, South Africa <i>International Journal of Urban and Regional Research</i>, 28 (4), 874-892.</p> <p>Bratton, M. & Chang, E. (2006). State Building and Democratization in Sub-Saharan Africa <i>Comparative Political Studies</i>, 39 (9), 1059-1083.</p> <p>Grynkewich, A. (2008). Welfare as Warfare: How Violent Non-State Groups Use Social Services to Attack the State <i>Studies in Conflict & Terrorism</i>, 31 (4), 350-370.</p> <p>Englebert, P. & Tull, D. (2008). Postconflict Reconstruction in Africa: Flawed Ideas about Failed States <i>Journal of International Security</i>, 32 (4), 106-139.</p>
public services	Public services, Africa, Insurgency	(none)
infrastructure	Infrastructure, Insurgency, Africa	<p>Buhaug, H. & Rod, J.K. (2006). Local Determinants of African Civil Wars, 1970-2001 <i>Journal of Political Geography</i>, 25 (3), 315-335. (*physical spaces*, *built environment*, *extraction*, *natural resources*)</p> <p>de Waal, A. (1996). Contemporary Warfare in Africa: Changing Context, Changing Strategies <i>Institute of Development Studies</i>, 27 (3), 6-16.</p> <p>Johnston, P. (2008). The Geography of Insurgent Organization and its Consequences for Civil Wars: Evidence from Liberia and Sierra Leone <i>Journal of Security Studies</i>, 17 (1), 107-137.</p> <p>Bratton, M. & Chang, E. (2006). State Building and Democratization in Sub-Saharan Africa <i>Comparative Political Studies</i>, 39 (9), 1059-1083.</p>
education	Africa, Insurgency, Civil war, Armed conflict, Riots, Protests, Crime, Education, Schooling	<p>Thyne, C. (2009). ABC's, 123's, and the Golden Rule: The Pacifying Effect of Education on Civil War, 1980-1999 <i>International Studies Quarterly</i>, 50 (4), 733-754.</p> <p>Collier, P.(2003). <i>Breaking the Conflict Trap: Civil War and Development Policy</i>. World Bank.</p> <p>Stasavage, D. (2005). Democracy and Education Spending in Africa <i>American Journal of Political Science</i>, 49 (2).</p> <p>Breidlid, A. (2006). Education in the Sudan: The Privileging of an Islamic Discourse <i>Journal of Comparative and International Education</i>, 35.</p> <p>Sommers, M. (2005). <i>Islands of Education: Schooling, Civil War, and the Southern Sudanese (1983-2004)</i>. International Institute for Educational Planning.</p> <p>Kupermintz, H. & Salomon, G. (2009). Lessons to be Learned from Research on Peace Education in the Context of Intractable Conflict <i>Theory Into Practice</i>, 44 (4).</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
education	Africa, Insurgency, Civil war, Armed conflict, Riots, Protests, Crime, Education, Schooling	Keen, D. (2005). Liberalization and Conflict <i>International Political Science Review</i> , 26 (1). Adeola, F. (1996). Military Expenditures, Health, and Education: Bedfellows or Antagonists in Third World Development? <i>Armed Forces & Society</i> , 22 (3).
public goods	Public goods, Insurgency, Africa	Getmansky, A. (2010). <i>The Role of Regime Type in Counterinsurgency Outbreaks and Outcomes</i> . APSA Annual Meeting Paper.
size of military	Africa, Insurgency, Civil war, Armed conflict, Riots, Protests, Arms race, Military expenditures, Military budget, militarization	Howe, H. (2001). <i>Ambiguous Order: Military Forces in African States</i> . Lynne Rienner Publishers. Collier, P. & Hoeffler, A. (2007). Unintended Consequences: Does Aid Promote Arms Races? <i>Oxford Bulletin of Economics and Statistics</i> , 69 (1), 1-27. Blanton, S. (2005). Instruments of Security or Tools of Repression? Arms Imports and Human Rights Conditions in Developing Countries <i>Journal of Peace Research</i> , 36. Shaw, T. (2003). Regional Dimensions of Conflict and Peace-building in Contemporary Africa <i>Journal of International Development</i> , 15 (4). Welch, C. (1975). Continuity and Discontinuity in African Military Organization <i>Journal of Modern African Studies</i> , 13 (2), 229-248. Herbst, J. (2004). African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness <i>Journal of Peace Research</i> , 41 (3). Fjelde, H. & de Soysa, I. (2007). Coercion, Co-optation, or Cooperation? <i>Conflict Management and Peace Science</i> , 26. Kandeh, J. (2011). What does the Militariat do when it Rules? Military Regimes: The Gambia, Sierra Leone and Liberia <i>Review of African Political Economy</i> , 23 (69). Bienen, H. (2003). Populist Military Regimes in West Africa <i>Armed Forces & Society</i> , 11 (3), 357-377. Howe, H. (1998). Private Security Forces and African Stability: The Case of Executive Outcomes <i>Journal of Modern African Studies</i> , 36. Small, M. (2006). Privatisation of Security and Military Functions and the Demise of the Modern Nation-state in Africa <i>ACCORD Occasional Paper Series</i> , 1 (2).
built environment	Africa, Insurgency, Infrastructure	Buhaug, H & Rod, J. (2006). Local Determinants of African Civil Wars, 1970-2001 <i>Political Geography</i> , 25 (3), 315-335. (*infrastructure*, *built environment*, *extraction*, *natural resources*)
built environment (revised)	Built environment, Insurgency, Africa	Simon, R., Malmgren, R., & Small, G. (2008) <i>Indigenous Peoples and Real Estate Valuation</i> . Springer.
economic class	Africa, insurgency, economic class, economy.	Burns, D. (1994). Insurgency as a struggle for Legitimation: The case of Southern Africa. <i>Small Wars & Insurgencies</i> , 5(1), 29-62. (*ethnicity*) Fearnely, L. & Chiwandamir, L. (2006). Understanding armed conflict and peace-building in Africa. <i>IDASA Working Paper</i> . Retrieved from http://www.idasa.org/media/uploads/outputs/files/governancene w.pdf . Ingelaere, B. (2010). Peasants, power and ethnicity: A bottom-up perspective on Rwanda's political transition. <i>African Affairs</i> , 109(435), 109-435.

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economic class	Africa, insurgency, economic class, economy.	<p>Miraftab, F. (2004). Making neo-liberal governance: the disempowering work of empowerment. <i>International Planning Studies</i>, 9(4), 239–259.</p> <p>Stewart, F. (2011). Inequalities, Conflict and Economic Recovery. <i>UNDP Background Paper</i>. Retrieved from http://sdbgq.ybdo.irc.cor.cibtebt.ecibinuc_recovery/Background_6.pdf.</p>
access to capital	Africa, insurgency, access to capital, social capital.	<p>Allen, C. (1999). Warfare, endemic violence & state collapse in Africa. <i>Review of African Political Economy</i>, 26(81), 367–384.</p> <p>Azam, J. (2001). The Redistributive State and Conflicts in Africa. <i>Journal of Peace Research</i>, 38(4), 429–444. (*ethnicity*)</p> <p>Cilliers, J. (2001). Resource wars—a new type of insurgency. <i>Institute for Security Studies, Africa</i>. Retrieved from http://www.iss.co/za/Pubs/BOOKS/Angola/2Cilliers.pdf. (*extraction*)</p> <p>Deng, L. (2010). Social capital and civil war: The Dinka communities in Sudan's civil war. <i>African Affairs</i>, 109(435), 231–250.</p> <p>Johnston, P. (2007). International Norms, Commerce, and the Political Economy of Insecurity in Sierra Leone. <i>Canadian Journal of African Studies</i>, 41(1), 66–94.</p> <p>Kaimowitz, D. (2003). Not by Bread Alone... Forests and Rural Livelihoods in Sub-Saharan Africa. <i>European Forest Institutes Proceedings</i>, vol. 47.</p> <p>Maconachie, R., Dixon, A. & Wood, A. (2009). Decentralization and local institutional arrangements for wetland management in Ethiopia and Sierra Leone. <i>Applied Geography</i>, 29(2), 269–279.</p> <p>Malaquias, A. (2001). Making war & lots of money: the political economy of protracted conflict in Angola. <i>Review of African Political Economy</i>, 28(90), 521–536. (*privilege*)</p> <p>Meagher, K. (2006). Social capital, social liabilities, and political capital: Social networks and informal manufacturing in Nigeria. <i>African Affairs</i>, 105(421), 553–582.</p>
ethnicity	Africa, insurgency, ethnic, ethnicity.	<p>Akinola, A. (2011). Niger Delta Crisis: The Nexus between Militants' Insurgency and Security in West Africa. <i>African Security</i>, 4(1), 65–80. (*extraction*)</p> <p>Azam, J. (2001). The Redistributive State and Conflicts in Africa. <i>Journal of Peace Research</i>, 38(4), 429–444. (*access to capital*)</p> <p>Byman, D. (1998). The logic of ethnic terrorism. <i>Studies in Conflict & Terrorism</i>, 21(2), 149–169.</p> <p>Burns, D. (1994). Insurgency as a struggle for Legitimation: The case of Southern Africa. <i>Small Wars & Insurgencies</i>, 5(1), 29–62. (*economic class*)</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War. <i>American Political Science Review</i>, 97, 75–90. (*population*, *civil liberties*, *religion*, *grievances*, *access to weapons*)</p> <p>Henderson, E. (2000). When States Implode: The Correlates of Africa's civil wars, 1950–92. <i>Studies in Comparative International Development (SCID)</i>, 35(2), 28–47.</p> <p>Herbst, J. (2000). Economic incentives, natural resources and conflict in Africa. <i>Journal of African Economies</i>, 9(3), 270–294.</p> <p>Keita, K. (1998). Conflict and conflict resolution in the Sahel: The Tuareg Insurgency in Mali. <i>Small Wars & Insurgencies</i>, 9(3), 102–128. (*grievances*)</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
ethnicity	Africa, insurgency, ethnic, ethnicity.	<p>Maninger, S. (1997). Ethnic Confrontation - Security Implications of Policies towards Ethnic Minorities. <i>African Security Review</i>, 6(4), 16-24.</p> <p>Reno, W. (2002). The Politics of Insurgency in Collapsing States. <i>Development and Change</i>, 33(5), 837-858. (*social class*)</p> <p>Rothchild, D. (1995). Ethnic bargaining and state breakdown in Africa. <i>Nationalism and Ethnic Politics</i>, 1(1), 54-72.</p> <p>Young, C. (2006). The Heart of the African Conflict Zone: Democratization, Ethnicity, Civil Conflict, and the Great Lakes Crisis. <i>Annual Review of Political Science</i>, 9, 301-328.</p>
history	Africa, insurgency, civil war, armed conflict, riots, protests, history, colonialism, state borders.	<p>Blanton, R., Mason, D. & Athow, B. (2001). Colonial Style and Post-Colonial Ethnic Conflict in Africa. <i>Journal of Peace Research</i>, 38(4), 473-491.</p> <p>Carton, B. (2000). <i>Blood from your children: the colonial origin of generational conflict in Africa</i>. Richmond: University of Virginia Press.</p> <p>Clapham, C. (2002). <i>Africa and the International System: The politics of state survival</i>. Oxford: Cambridge University Press.</p> <p>Mkandawire, T. (2002). The Terrible Toll of Post-Colonial in Africa: Towards an Explanation of the Violence Against the Peasantry. <i>The Journal of Modern African Studies</i>, 40(2), 181-205. (*culture*)</p> <p>Starr, H. (1983). Contagion and Border Effects on Contemporary African Conflict. <i>Comparative Political Studies</i>, 16(1), 92-117.</p> <p>Young, C. (1997). <i>The African Colonial State in Comparative Perspective</i>. Cambridge: Yale University Press.</p>
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social class	Africa, insurgency, social class, class.	<p>Bienen, H. & Herbst, J. (1996). The Relationship between Political and Economic Reform in Africa. <i>Comparative Politics</i>, 29(1), 23-42.</p> <p>Brown, C. (1988). The Dialectics of Colonial Labour Control: Struggles in the Nigerian Coal Industry, 1914-1949. <i>Journal of Asian and African Studies</i>, 23(1-2), 32-59.</p> <p>Isaacman, A. (1990). Peasants and Rural Social Protest in Africa. <i>African Studies Review</i>, 33(2), 1-120.</p> <p>Marsh, K. (2001). Compromise in South Africa: class relations, political opportunities, and the contextualized "ripe moment" for resolution. <i>Research in Social Movements</i>, 23, 37-68.</p> <p>Mazur, R. (1991). Social Class Differential in the Impact of Repression and Guerrilla War on Rural Population and Development In Zimbabwe. <i>The Journal of Developing Areas</i>, 25, 509-528.</p> <p>Moodie, D. (2010). Comprehending Class Compromise in the History of Class Struggle on the South African Gold Mines: Variations and Vicissitudes of Class Power. <i>South African Review of Sociology</i>, 41(3), 99-116.</p> <p>Murphy, W. (2003). Military Patrimonialism and Child Soldier Clientalism in the Liberian and Sierra Leonean Civil Wars. <i>African Studies Review</i>, 46(2), 61-87. (*intergroup relations*)</p> <p>Reno, W. (2002). The Politics of Insurgency in Collapsing States. <i>Development and Change</i>, 33(5), 837-858. (*ethnicity*)</p> <p>Segal, A. (1996). Can Democratic Transitions Tame Political Successions? <i>Africa Today</i>, 43(4), 369-384.</p>
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privilege	Africa, insurgency, privilege.	<p>Jackson, P. (2004). Legacy of Bitterness: Insurgency in North West Rwanda. <i>Small Wars & Insurgencies</i>, 15(1), 19–37 (*public approval*, *communication*, *exposure to information*, *grievances*)</p> <p>Malaquias, A. (2001). Making war & lots of money: the political economy of protracted conflict in Angola. <i>Review of African Political Economy</i>, 28(90), 521–536. (*access to capital*)</p> <p>Reno, W. (1997). African Weak States and Commercial Alliances. <i>African Affairs</i>, 96(383), 165–186.</p> <p>Tomlison, C. (2008). Unintended consequences: how Somalia's business community, in search of stability, and the USA, in search of terrorists, nearly created a radical Islamic state in the horn of Africa. <i>Global Business and Economic Review</i>, 10(2), 229–238.</p>
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ideology	Africa, insurgency, ideology.	<p>Chitiyo, K. (2008). The Struggles for Zimbabwe, South Africa and SADC: Liberation War "Theology" and Post-Nationalism. <i>The RUSI Journal</i>, 153(3), 80–86.</p> <p>Evans, M. (2007). The Wretched of the Empire: Politics, Ideology and Counterinsurgency in Rhodesia, 1965–80. <i>Small Wars & Insurgencies</i>, 18(2), 175–195.</p> <p>Githens-Mazer, J. (2008). Variations on a Theme: Radical Violent Islamism and European North African Radicalization. <i>Political Science & Politics</i>, 41(1), 19–24.</p> <p>Gray, D. & Stockham, E. (2008). Al-Qaeda in the Islamic Maghreb: the evolution from Algerian Islamism to transnational terror. <i>African Journal of Political Science and International Relations</i>, 2(4), 91–97.</p> <p>Hough, M. (2008). Violent Protests at local government level in South Africa: Revolutionary potential? <i>Scientia Militaria: South African Journal of Military Studies</i>, 36(1), 1–14.</p>

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social ties, interactions	Africa, insurgency, social ties, social interaction.	<p>Mamdani, M. (2001). Beyond Settler and Native as Political Identities: Overcoming the Political Legacy of Colonialism. <i>Comparative Studies in Society and History</i>, 43(4), 651-664.</p> <p>Obarrio, M. (2010). Remains to be Seen: Third Encounter between State and "Customary" in Northern Mozambique. <i>Cultural Anthropology</i>, 25(2), 263-300.</p> <p>Reno, W. (2002). The politics of insurgency in collapsing states. <i>Development and Change</i>, 33(5), 837-858.</p> <p>Reno, W. (2009). Explaining Patterns of Violence in Collapsed States. <i>Contemporary Security Policy</i>, 30(2), 356-374. (*economic opportunity*)</p> <p>Singer, M. (2011). Toward a Critical Biosocial Model of Ecohealth in Southern Africa: The HIV/AIDS and Nutrition Insecurity Syndemic. <i>Annals of Anthropological Practice</i>, 35(1), 8-27.</p> <p>Taylor, I. & Williams, P. (2008). Political culture, state elites and regional security in West Africa. <i>Journal of Contemporary African Studies</i>, 26(2), 137-149.</p> <p>Weinstein, J. (2005). Resources and the Information Problem in Rebel Recruitment. <i>Journal of Conflict Resolution</i>, 49(4), 589-624.</p> <p>Wood, E. (2008). The Social Processes of Civil War: The Wartime Transformation of Social Networks. <i>Annual Review of Political Science</i>, 11, 539-561. (*inter-group relations*)</p>

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economic opportunity	Africa, insurgency, economic opportunity.	<p>Aning, K. & McIntyre, A. (2005). From Youth Rebellion to Child Abduction: The Anatomy of Recruitment in Sierra Leone. In A. McIntyre, <i>Invisible Stakeholders : Children and War in Africa</i>. Pretoria: Institute for Security Studies.</p> <p>Azlan, A. (2008). <i>Hot Money, Hot Spots? Is Capital Flight an Indicator of Political Instability?</i> (Master's Thesis in Public Policy, Georgetown University). Retrieved from http://aldinrc.wrlc.org/bitstream/1961/4424/1/etd_aha25.pdf.</p> <p>Reno, W. (2009). Explaining Patterns of Violence in Collapsed States. <i>Contemporary Security Policy</i>, 30(2), 356–374. (*social ties interactions*)</p> <p>Sambanis, N. (2001). Do Ethnic and Nonethnic Civil Wars Have the Same Causes? <i>Journal of Conflict Resolution</i>, 45(3), 259–282.</p> <p>Weinstein, J. (2003). Resources and the Information Problem in Rebel Recruitment. <i>The Center for Global Development, Stanford University</i>. Retrieved from http://www-personal.umich.edu/~satran/PoliSci%2006/Wk%206-2%20Terrorism%20background%20insurgency%20Weinstein.pdf.</p> <p>Ylonen, A. (2005). Grievances and the Roots of Insurgencies: Southern Sudan and Darfur. <i>Peace, Conflict and Development: An Interdisciplinary Journal</i>, 7, 99–134.</p>
religion	Africa, insurgency, religion.	<p>Backman, C. (2007). <i>The Role of Religion in the Insurgency in the South of Thailand</i>. (Master's Thesis in Political Science, Malmö University, Sweden). Retrieved from http://dspace.mah.se:8080/dspace/bitstream/handle/2043/4273/D-Uppsats.doc?sequence=1.</p> <p>Basedau, M., Strüver, G. & Vüller, J. (2011). Cutting Bread or Cutting Throats? –Findings from a New Database on Religion, Violence and Peace in Sub-Saharan Africa, 1990 to 2008. <i>German Institute of Global and Area Studies Paper No. 159</i>. Retrieved from http://ssm.com/abstract=1780205.</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War. <i>American Political Science Review</i>, 97, 75–90. (*population*, *civil liberties*, *ethnicity*, *grievances*, *access to weapons*)</p>

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culture	Africa, insurgency, culture, cultural.	<p>Abdullah, I. (2002). Youth culture and rebellion: Understanding Sierra Leone's wasted decade. <i>Critical Arts</i>, 16(2), 19–37.</p> <p>Anders, G. (2012). Culture under Cross-Examination: International justice and the Special Court for Sierra Leone. <i>African Affairs</i>, 111(442), 157–159.</p> <p>Besteman, C. (1996). Violent Politics and the Politics of Violence: The Dissolution of the Somali Nation-State. <i>American Ethnologist</i>, 23(3), 579–596.</p> <p>Henderson, E. (1998). The Impact of Culture on African Coups d'Etat, 1960–1997. <i>World Affairs</i>, 161, 10–21.</p>

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industry	Africa, insurgency, industry.	<p>Metz, S. (1993). The Future of Insurgency. <i>Strategic Studies Institute, US Army</i>. Retrieved from http://www.strategicstudiesinstitute.army.mil/Pubs/download.cfm?q=344. (*grievances*)</p>
extraction	Africa, insurgency, extraction.	<p>Akinola, A. (2011). Niger Delta Crisis: The Nexus between Militants' Insurgency and Security in West Africa. <i>African Security</i>, 4(1), 65–80. (*ethnicity*)</p> <p>Buhaug, H. & Rod, J. (2006). Local determinants of African civil wars, 1970–2001. <i>Political Geography</i>, 25(3), 315–335. (*physical spaces*, *infrastructure*, *built environment*, *natural resources*)</p> <p>Cilliers, J. (2001). Resource wars—a new type of insurgency. Institute for Security Studies, Africa. Retrieved from http://www.iss.co/za/Pubs/BOOKS/Angola/2Cilliers.pdf. (*access to capital*)</p> <p>Malaquias, A. (2001). Diamonds are a guerrilla's best friend: The impact of illicit wealth on insurgency strategy. <i>Third World Quarterly</i>, 22(3), 311–325. (*natural resources*)</p> <p>Obi, C. (2010). Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria's Oil-Rich Niger Delta. <i>Canadian Journal of Development Studies</i>, 30(1-2), 219–236.</p> <p>Smith, B. (2004). Oil Wealth and Regime Survival in the Developing World, 1960–1999. <i>American Journal of Political Science</i>, 48(2), 232–246.</p>
economic development	Africa, insurgency, economic development	<p>Boswell, T. & Dixon, W. (1993). Marx's Theory of Rebellion: A Cross-National Analysis of Class Exploitation, Economic Development, and Violent Revolt. <i>American Sociological Review</i>, 58(5), 681–702.</p> <p>Francis, D. (2006). Linking Peace, Security and Developmental Regionalism: Regional Economic and Security Integration in Africa. <i>Journal of Peacebuilding and Development</i>, 2(3), 7–20.</p> <p>Hills, A. (1996). Towards a Critique of Policing and National Development in Africa. <i>The Journal of Modern African Studies</i>, 34(2), 271–291.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
economic development	Africa, insurgency, economic development	<p>Krause, V. & Suzuki, S. (2005). Causes of Civil War in Asia and Sub-Saharan Africa: A Comparison. <i>Social Science Quarterly</i>, 86(1), 160–177.</p> <p>Kwasi Fosu, A. & Mwabu, G. (2010). Human Development in Africa. <i>United Nations Development Programme Human Development Reports</i>. Retrieved from http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP_2010_08.pdf.</p> <p>Mazzitelli, A. (2007). Transnational organized crime in West Africa: the additional challenge. <i>International Affairs</i>, 83(6), 1071–1090.</p> <p>Piazza, J. (2006). Rooted in Poverty? Terrorism, Poor Economic Development, and Social Cleavages. <i>Terrorism and Political Violence</i>, 18(1), 159–177.</p> <p>Wayne, N. & Auvinen, J. (2002). Economic Development, Inequality, War, and State Violence. <i>World Development</i>, 30(2), 153–163. (*distribution of resources*)</p>
exposure to information	Africa, insurgency, public approval, communication	<p>Byman, D. (2001). Trends in Outside Support for Insurgent Movements. Rand Corporation. (*communication*)</p> <p>Davis, P. & Cragin, N. (Eds.). (2009). <i>Social Science fo Counterterrorism: Putting the Pieces Together</i>. Santa Monica, CA: Rand Corporation. (*public approval*)</p> <p>Eikmeier. (2005). How to Beat the Global Islamist Insurgency <i>Middle East Quarterly</i>, 12 (1), 35-44. (*communication*)</p> <p>Ford, C. (2005). Speak No Evil: Targeting a Population's Neutrality to Defeat an Insurgency. <i>Parameters, summer</i>, 51-66. (*public approval*)</p> <p>Hewitt, C. (1990). Terrorism and Public Opinion: A Five Country Comparison <i>Terrorism and Political Violence</i>, 2 (2), 145-170. (*public approval*)</p> <p>Innes, M. (2004). Political Communication in Wartime Liberia: Themes and Concepts. CEPES Working Paper No. 26. (*communication*)</p> <p>Jackson, P. (2004). Legacy of Bitterness: Insurgency in North West Rwanda. <i>Small Wars & Insurgencies</i>, 15(1), 19–37. (*public approval*, *communication*, *privilege*, *grievances*)</p> <p>Oberschall, A. (2004). Explaining Terrorism: The Contribution of Collective Action Theory <i>Sociological Theory</i>, 22 (1), 26-37. (*public approval*)</p> <p>Rao, A., Bollig, M. & Böck, M. (Eds.). (2007). <i>The Practice of War: Production, Reproduction and communication of Armed Violence</i>. Berghahn Books. (*communication*)</p> <p>Tomaselli, K. & Louw, P. (1991). Disinformation and the South African Defence Force's Theory of War. <i>Social Justice</i>, 18 (1/2), 124-140. (*communication*)</p>
natural disaster	Africa, insurgency, civil war, armed conflict, riots, protests, natural disasters, drought, flood, famine	<p>Blaikie, P. (1994). <i>At risk: natural hazards, people's vulnerability, and disasters</i>. Psychology Press.</p> <p>Bell, C. & Keys, P. (2011). Drought-driven conflict: climate change, political unrest, and effective adaptive policy in sub-Saharan Africa. <i>International Studies Quarterly</i>, 55(3), 625–646.</p> <p>Couttenier, M. & Soubeyran, R. (2010). Drought and Civil War in Sub-Saharan Africa. <i>FEEM Working Paper 150.2010</i>. Retrieved from http://dx.doi.org/10.2139/ssrn.1734704.</p> <p>Hendrix, C., & Glaser, S. (2007). Trends and triggers: Climate, climate change and civil conflict in Sub-Saharan Africa. <i>Political Geography</i>, 26(6), 695–715.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
natural disaster	Africa, insurgency, civil war, armed conflict, riots, protests, natural disasters, drought, flood, famine	<p>Onda, C. (2009). The Effect of Spatial Resolution of Conflict Data on the Analysis of Drought as a Local Determinant of Civil War Onset, 1980–2001. <i>Consilience – The Journal of Sustainable Development</i>. Retrieved from http://journals.cdrs.columbia.edu/consilience/index.php/consilience/article/viewArticle/7.</p> <p>Pham, P. (2011). State Collapse, Insurgency, and Famine in the Horn of Africa: Legitimacy and the Ongoing Somali Crisis <i>Journal of the Middle East and Africa</i>, 2 (2), 153-187. (*consent of governed*)</p> <p>Purkitt, H. (2009). <i>African environmental and human security in the 21st century</i>. New York: Cambria Press.</p> <p>Webersik, C. (2008). <i>Drought and Political Violence in Sub-Saharan Africa</i>. N.p., Retrieved from http://www.allacademic.com/meta/p254279_index.html.</p>
distribution of resources	Africa, insurgency, distribution of resources	<p>Azam, J. (2001). The Redistributive State and Conflicts in Africa. <i>Journal of Peace Research</i>, 38(4), 429–444.</p> <p>Berman, B. (2010). Ethnicity and Democracy in Africa. <i>JICA Research Institute Working Paper No. 22</i>. Retrieved from http://jica-ri.go.jp/publication/assets/JICA-RI_WP_No.22_2010.pdf.</p> <p>Fjelde, H. & Ostby, G. (2010). Economic Inequality and Non-State Conflicts in Africa. <i>APSA Annual Meeting Paper</i>. Retrieved from http://ssrn.com/abstract=1641731.</p> <p>Gradstein, M. & Schiff, M. (2006). The political economy of social exclusion, with implications for immigration policy. <i>Journal of Population Economics</i>, 19(2), 327–344.</p> <p>Lake, D. & Rothchild, D. (1996). Containing Fear: The Origins and Management of Ethnic Conflict. <i>International Security</i>, 21(2), 41–75.</p> <p>Lichbach, M. (1989). An Evaluation of "Does Economic Inequality Breed Political Conflict?" Studies. <i>World Politics</i>, 41(4), 431–470.</p> <p>Magnus Theisen, O. (2008). Blood and Soil? Resource Scarcity and Internal Armed Conflict Revisited. <i>Journal of Peace Research</i>, 45(6), 801–818. (*climate change*)</p> <p>Muller, E. & Seligson, M. (1987). Inequality and Insurgency. <i>The American Political Science Review</i>, 81(2), 425–451.</p> <p>Wayne, N. & Auvinen, J. (2002). Economic Development, Inequality, War, and State Violence. <i>World Development</i>, 30(2), 153–163. (*economic development*)</p>
natural resources	Africa, insurgency, Civil War, armed conflict, riots, protests, crime, natural resources, diamonds, oil, commodities, drugs	<p>Brunnschweiler, C. & Bulte, E. (2009). Natural resources and violent conflict: resource abundance, dependence, and the onset of civil wars. <i>Oxford Economic Papers</i>, 61(4), 651–674.</p> <p>Buhaug, H. & Rod, J. (2006). Local determinants of African civil wars, 1970–2001. <i>Political Geography</i>, 25(3), 315–335. (*physical spaces*, *infrastructure*, *built environment*, *extraction*)</p> <p>Collier, P. & Venables, A. (2009). Natural Resources and State Fragility. <i>Oxcarre Working Paper</i>. Retrieved from http://cadmus.eui.eu/handle/1814/13860.</p> <p>Cornell, S. (2005). The Interaction of Narcotics and Conflict. <i>Journal of Peace Research</i>, 42(6), 751–760.</p> <p>Le Billon, P. (2001). The political ecology of war: natural resources and armed conflicts. <i>Political Geography</i>, 20(5), 561–584.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
natural resources	Africa, insurgency, Civil War, armed conflict, riots, protests, crime, natural resources, diamonds, oil, commodities, drugs	<p>Lujala, P. (2009). Deadly Combat over Natural Resources. <i>Journal of Conflict Resolution</i>, 53(1), 50–71.</p> <p>Lujala, P. (2010). The spoils of nature: Armed civil conflict and rebel access to natural resources. <i>Journal of Peace Research</i>, 47(10), 15–28.</p> <p>Malaquias, A. (2001). Diamonds are a guerrilla's best friend: The impact of illicit wealth on insurgency strategy. <i>Third World Quarterly</i>, 22(3), 311–325. (*extraction*)</p> <p>Ross, M. (2004). What do we know about natural resources and civil war? <i>Journal of Peace Research</i>, 41(3), 337–356.</p> <p>Englebert, P. & Ron, J. (2004). Primary Commodities and War: Congo-Brazzaville's Ambivalent Resource Curse. <i>Comparative Politics (Program in Political Sciences of the City University of New York)</i>, 37(1), 61–81.</p> <p>Humphreys, M. (2005). Natural Resources, Conflict, and Conflict Resolution. <i>Journal of Conflict Resolution</i>, 49(4), 508–537.</p> <p>Watts, M. (2007). Petro-Insurgency or Criminal Syndicate? Conflict & Violence in the Niger Delta. <i>Review of African Political Economy</i>, 34(114), 637–660.</p>
grievances	Africa, insurgency, grievances	<p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i>, 97, 75-90. (*population*, *civil liberties*, *ethnicity*, *religion*, *access to weapons*)</p> <p>Jackson, P. (2004). Legacy of Bitterness: Insurgency in North West Rwanda. <i>Small Wars & Insurgencies</i>, 15 (1), 19-37. (*public approval*, *communication*, *exposure to information*, *privilege*)</p> <p>Keita, K. (1998). Conflict and conflict resolution in the Sahel: The Tuareg Insurgency in Mali. <i>Small Wars & Insurgencies</i>, 9(3), 102–128. (*ethnicity*)</p> <p>Metz, S. (1993). The Future of Insurgency. Strategic Studies Institute, US Army. Retrieved from http://www.strategicstudiesinstitute.army.mil/Pubs/download.cfm?q=344. (*industry*)</p> <p>Mokuwa, E., Voors, M., Bulte, E. & Richards, P. (2011). Peasant Grievance and Insurgency in Sierra Leone: Judicial serfdom as a driver of conflict. <i>African Affairs</i>, 110(440), 339–366.</p> <p>Raleigh, C. (2007). Political Geography of Civil War: Insurgency Patterns in African States. Trinity College Dublin. (*population*, *physical spaces*)</p>
access to weapons	Africa, insurgency, civil war, armed conflict, riots, protests, crime, weapons, arms, light arms, guns, firearms, weapons training, arms trade	<p>Boutwell, J. & Klare, M. (1999). <i>Light Weapons and Civil Conflict: Controlling the Tools of Violence</i>. Rowman & Littlefield Publishers Inc.</p> <p>Brobeck, B. (2010). <i>Protection, Risk and Communication: Battling the Effects of Improvised Explosive Devices in Contemporary Operations</i>. Joint Military Operations Department Report No. A822525. Newport, Rhode Island: Naval War College.</p> <p>Craft, C. & Smaldone, J. (2002). The Arms Trade and the Incidence of Political Violence in Sub-Saharan Africa, 1967–97. <i>Journal of Peace Research</i>, 39(6), 693–710.</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i>, 97, 75-90. (*population*, *civil liberties*, *ethnicity*, *religion*, *grievances*)</p> <p>Hartzell, X., Hoddie, M. & Rothchild, D. (2001). Stabilizing the Peace after Civil War: An Investigation of Some Key Variables. <i>International Organization</i>, 55(1), 183–208.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
access to weapons	Africa, insurgency, civil war, armed conflict, riots, protests, crime, weapons, arms, light arms, guns, firearms, weapons training, arms trade	<p>Louise, C. (1995). <i>The social impacts of light weapons availability and proliferation</i>. Geneva and London: UNRISD.</p> <p>Marsh, N. (2007). Conflict specific capital: the role of weapons acquisition in civil war. <i>International Studies Perspectives</i>, 8(1), 54–72.</p> <p>Marsh, N. "The Tools of Insurgency: A Review of the Role of Small Arms and Light Weapons in Warfare." 24 January 2012. Retrieved from <http://www.prio.no/projects/a25cost/COST0308_Brussels/Marsh_The%20Tools%20of%20Insurgency%20a%20Review%20of%20the%20Role%20of%20Small%20.pdf. (*technology*)</p>
climate change	Africa, insurgency, Civil War, armed conflict, riots, protests, crime, climate change, global warming, desertification	<p>Barnett, J. & Adger, N. (2007). Climate change, human security and violent conflict. <i>Political Geography</i>, 26(6), 639–655.</p> <p>Benjaminsen, T. (2008). Does Supply-Induced Scarcity Drive Violent Conflicts in the African Sahel? The Case of Tuareg Rebellion in Northern Mali. <i>Journal of Peace Research</i>, 45(6), 819–836.</p> <p>Buhaug, H. (2010). Climate not to blame for African civil wars. <i>Proceedings of the National Academy of Sciences</i>, 107(38), 16477–16482.</p> <p>Burke, M., Miguel, E., Satyanath, S., Dykema, J. & Lobell, D. (2010). Climate robustly linked to African civil war. <i>Proceedings of the National Academy of Sciences</i>, 107(51), E185.</p> <p>Hendrix, C. & Glaser, S. (2007). Trends and triggers: Climate, climate change and civil conflict in Sub-Saharan Africa. <i>Political Geography</i>, 26(6), 695–715.</p> <p>Homer-Dixon, T. (1994). Environmental Scarcities and Violent Conflict: Evidence from Cases. <i>International Security</i>, 19(1), 5–40.</p> <p>Magnus Theisen, O. (2008). Blood and Soil? Resource Scarcity and Internal Armed Conflict Revisited. <i>Journal of Peace Research</i>, 45(6), 801–818. (*distribution of resources*)</p> <p>Mearns, R. & Norton, A. (2010). <i>Social dimensions of climate change: equity and vulnerability in a warming world</i>. New York: World Bank Publications.</p> <p>Miguel, E., Satyanath, S., Dykema, J. & Lobell, D. (2009). Warming increases the risk of civil war in Africa. <i>Proceedings of the National Academy of Sciences</i>, 106(49), 20670–20674. (*agriculture*)</p> <p>Niasse, M. (2005). Climate-induced water conflict risks in West Africa: recognizing and coping with increasing climate impacts on shared watercourses. <i>Paper presented at the Human Security and Climate Change International Workshop, Oslo, June 2005</i>. Retrieved from http://www.gechs.org.</p> <p>Nordas, R. & Geleditsch, N. (2007). Climate change and conflict. <i>Political Geography</i>, 26(6), 627–638.</p> <p>Raleigh, C., Jordan, L. & Salehyan, I. (2008). Assessing the impact of climate change on migration and conflict. <i>Social Development Department Paper, The World Bank Group</i>. Retrieved from http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/SDCCWorkingPaper_MigrationandConflict.pdf.</p> <p>Raleigh, C. (2010). Political Marginalization, Climate Change, and Conflict in African Sahel States. <i>International Studies Review</i>, 12(1), 69–86.</p> <p>Reuveny, R. (2007). Climate change-induced migration and violent conflict. <i>Political Geography</i>, 26(6), 656–673.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
climate change	Africa, insurgency, Civil War, armed conflict, riots, protests, crime, climate change, global warming, desertification	Salehyan, I. (2008). From Climate Change to Conflict? No Consensus Yet. <i>Journal of Peace Research</i> , 45(3), 315–326.
disparities	Africa, insurgency, disparities	<p>Banks, C. & Sokolowski, J. (2010). Modeling the Niger Delta Insurgency. <i>The Social Science Journal</i>, 47(2), 271–293.</p> <p>Bakke, K. & Wibbles, E. (2006). Diversity, Disparity, and Civil Conflict in Federal States. <i>World Politics</i>, 59(1), 1–50.</p> <p>Becker, J., Christian, T. & Nafziger, W. (2006). Development, Inequality and War in Africa. <i>Economics of Peace and Security Journal</i>, 1(1), 13–19.</p> <p>Becker, J., Christian, T. & Kulkarni, R. (2008). HIV/AIDS, conflict and security in Africa: rethinking relationships. <i>Journal of the International AIDS Society</i>, 11(1), 1–7.</p> <p>Blaydes, L. & De Maio, J. (2010). Spoiling the Peace? Peace Process Exclusivity and Political Violence in North-Central Africa. <i>Civil Wars</i>, 12(1-2), 3–28.</p> <p>Fukuda-Parr, S., Ashwill, M., Chiappa, E. & Messineo, C. (2008). The Conflict-Development Nexus: A Survey of Armed Conflicts in Sub-Saharan Africa 1980–2005. <i>Journal of Peacebuilding and Development</i>, 4(1), 1–16.</p> <p>Higgins, K. (2009). Regional Inequality and the Niger Delta. <i>Overseas Development Institute Briefs</i>. Retrieved from http://www.odi.org.uk/resources/details.asp?id=2507&title=regional-inequality-niger-delta.</p> <p>Miraftab, F. & Wills, S. (2005). Insurgency and Spaces of Active Citizenship. <i>Journal of Planning Education and Research</i>, 25(2), 200–217.</p>
natural environment	Africa, insurgency, natural environment	<p>Cioffi-Revilla, C. & Rouleau, M. (2010). MASON ReveLand: An Agent-Based Model of Politics, Environment and Insurgency. <i>International Studies Review</i>, 12(1), 31–52.</p> <p>Cioffi-Revilla, C. & Rouleau, M. (2010). MASON AfriLand: a regional multi-country agent-based model with cultural and environmental dynamics. <i>Proceedings of the Human Behavior-Computational Modeling and Interoperability Conference, 2009</i>. Retrieved from http://www.psu.edu.</p> <p>Hill, T. (2008). Reducing and Insurgency's Foothold: Using Army Sustainability Concepts as a Tool of Security. <i>Army War College Carlisle Barracks, Pennsylvania Research Paper</i>. Retrieved from http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA493738.</p> <p>Kennedy, N., Hailejorgis, A., Rouleau, M., Basset, J., Coletti, M., Balan, G. & Gulden, T. (2010). An agent-based model of conflict in East Africa and the effect of watering holes. <i>Proceedings of the 19th Conference on Behavior Representation in Modeling and Simulation, 2010</i>. Retrieved from http://brimsconference.org/archives/2010/papers/10-BRIMS-151%20Kennedy.pdf.</p>
food system	Africa, insurgency, food system	<p>Abrahams, C. (2010). Transforming the region: Supermarkets and the local food economy. <i>African Affairs</i>, 109(434), 115–134.</p> <p>Deng, L. (2008). Are non-poor households always less vulnerable? The case of households exposed to protracted civil war in Southern Sudan. <i>Disasters</i>, 32(3), 377–398.</p> <p>Macrae, J. & Zwi, A. (1992). Food as an Instrument of War in Contemporary African Famines: A Review of the Evidence. <i>Disasters</i>, 16(4), 229–321.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
food system	Africa, insurgency, food system	<p>Potgier, J. (2000). Taking aid from the devil himself! UNITA's support structures. In J. Cilliers & C. Dietrich, (Eds.), <i>Angola's War Economy: the role of oil and diamonds</i>. Pretoria: Institute of Strategic Studies.</p> <p>Verhoeven, H. (2011). Climate Change, Conflict and Development In Sudan: Global Neo-Malthusian Narratives and Local Power Struggles. <i>Development and Change</i>, 42(3), 679–707.</p> <p>Wall, A. (1993). War and Famine in Africa. <i>IDS Bulletin</i>, 24(4), 33–40.</p>
agriculture	Africa, insurgency, agriculture	<p>Chauveau, J. & Richards, P. (2008). West African Insurgencies in Agrarian Perspective: Côte d'Ivoire and Sierra Leone Compared. <i>Journal of Agrarian Change</i>, 8(4), 515–552.</p> <p>Clapham, C. (1990). The political economy of conflict in the horn of Africa. <i>Survival</i>, 32(5), 403–419.</p> <p>Cramer, C. & Richards, P. (2011). Violence and War in Agrarian Perspective. <i>Journal of Agrarian Change</i>, 11(3), 277–297.</p> <p>Kasara, K. (2007). Tax me if you can: Ethnic Geography, Democracy, and the Taxation of Agriculture in Africa. <i>American Political Science Review</i>, 101(1), 159–172.</p> <p>Miguel, E., Satyanath, S., Dykema, J. & Lobell, D. (2009). Warming increases the risk of civil war in Africa. <i>Proceedings of the National Academy of Sciences</i>, 106(49), 20670–20674. (*climate change*)</p> <p>Mlambo, A. (2005). 'Land Grab' or 'Taking Back Stolen Land': The Fast Track Land Reform Process in Zimbabwe in Historical Perspective. <i>History Compass</i>, 3(1).</p> <p>Moradi, A. (2004). Have gun give food: Agriculture, nutrition, and civil wars in Sub-Saharan Africa. <i>University of Tuebingen, Germany, Working Paper</i>. Retrieved from http://uni-tuebingen.de/uni/wwl/Have20Gun20Give20Food.pdf.</p> <p>Peters, K. & Richards, P. (2011). Rebellion and Agrarian Tensions in Sierra Leone. <i>Journal of Agrarian Change</i>, 11(3), 377–395.</p> <p>Richards, P. & Chauveau, J. (2007). Land, Agricultural Change and Conflict in West Africa: Regional Issues from Sierra Leone, Liberia and Côte d'Ivoire. <i>Sahel and West Africa Club, Rural Transformation and Sustainable Development in West Africa Series, Working Paper</i>. Retrieved from http://www.oecd.org/dataoecd/44/53/39495967.pdf.</p>
diaspora	Africa, insurgency, diaspora	<p>Ayodele, B. (2008). Interrogating the Sifting Theoretical Paradigms of Conflicts in Africa: The Ethnic and Resource Remittance Theory of Conflicts. <i>African Review Working Paper</i>. Retrieved from http://africanreview.org/events/paxafrica2008/bayodele.pdf.</p>
diaspora	Africa, insurgency, diaspora	<p>Jenkins, J., Meyer, K., Costello, M. & Aly, H. (2011). International Rentierism in the Middle East and North Africa, 1971–2008. <i>International Area Studies Review</i>, 14(3).</p>
diaspora	Africa, insurgency, diaspora	<p>Menkhous, K. (2009). African Diasporas, Diasporas in Africa and Terrorist Threats. In A. Wnger & V. Mauer (Eds.). <i>The Radicalization of Diasporas and Terrorism</i>. Zurich: Center for Security Studies.</p>
diaspora	Africa, insurgency, diaspora	<p>Omeje, K. (2007). The Diaspora and Domestic Insurgencies in Africa. <i>African Sociological Review</i>, 11(2), 94–107.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
internal actors	internal actors, insurgency, Africa	<p>Mampilly, Zachariah C. 2011. <i>Rebel rulers: insurgent governance and civilian life during war</i>. Cornell University Press.</p> <p>Batchelor, Peter; Kingma, Kees; Lamb, Guy. 2004. <i>Demilitarisation and peace-building in Southern Africa: The role of the military in state formation and nation-building</i>. Ashgate Publishing Ltd.</p> <p>Emmanuel, Nikolas , Rothchild, Donald (2007). <i>Economic Aid and Peace Implementation: The African Experience</i>, Journal of Intervention and Statebuilding, V1 (2).</p>
VEOs		(none)
external actors	Africa, External Actors, Insurgency	<p>Lossi, Marcel. (2011). <i>The Failure System: The role of external actors in the Somali state collapse</i>. GRIN Verlag.</p> <p>Cunningham, David E. (2010). <i>Blocking resolution: How External States can Prolong Civil Wars</i> Journal of Peace Research</p> <p>De Coning, Cedric, (2011) <i>Moving beyond the technical: facing up to peacebuilding's inherent contradictions</i>, African Security Review, V 20 (1) 116-121</p>
physical security/personal safety	Africa, Insurgency, Physical Security, Personal Security	<p>Allen, Chris. (1999). <i>Warfare, Endemic Violence & State Collapse in Africa</i>, review of African Political Economy, v26(81) 367-384.</p> <p>Superview, Virginie and Blower, Sally. (2005) <i>Making the Invisible War Crime Visible: Post-Conflict Justice for Sierra Leone's Rape Victims</i> Harvard Human Rights Journal. V24(18), 2841-2847.</p> <p>Herbst, Jeffrey. (2004) <i>State African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness</i>, Journal of Peace Research, v41(3), 357-369.</p>
influence	Influence Insurgency Africa	Griffiths, Robert (1991) <i>The South African Military: the Dilemmas of Expanded Influence in Decision-Making</i> Journal of Asian and African Studies V26 IS 1-2 p. 76-95;
terrorism		(none)
TCOs	Africa, Insurgency, Civil War, Armed Conflict, Riots, Protests, Crime, crime, international crime, drug/narcotics, slavery, prostitution	<p>Miodownik, Dan and Bhavnani Ravi. (2011) <i>Ethnic Minority Rule and Civil War Onset How Identity Salience, Fiscal Policy, and Natural Resource Profiles Moderate Outcomes</i>. Conflict Management and Peace Science, v28(5), 438-458.</p> <p>Buhaug, Halvard and Gates, Scott (2009). <i>Geography, Rebel Capability, and the Duration of Civil Conflict</i>. Journal of Conflict Resolution. V53(4), 544-569</p> <p>Azam, Jean-Paul (2002). <i>Looting and Conflict between Ethnoregional Groups</i>, Journal of Conflict Resolution. V46(1), 131-153</p> <p>Sorens, Jason. (2011). <i>Mineral production, territory, and ethnic rebellion: The Role of Rebel Constituencies</i>. Journal of Peace Research. V48(5), 571-585</p> <p>Shaw, Mark. (2001). <i>The political economy of crime and conflict in sub Saharan Africa</i>. South African Journal of International Affairs, v8(2), 57-69.</p>
corruption	Corruption, Africa, Insurgency	<p>Rotberg, Robert. (2003) <i>State Failure and State Weakness in a Time of Terror</i></p> <p>Steven Metz (1994): <i>Insurgency after the cold war</i>, <i>Small Wars & Insurgencies</i>, 5:1. 63-8</p> <p>Beckett, Lan. (2005) <i>The Future of Insurgency</i>, <i>Small Wars and insurgencies</i>, 16 (1) 22-36</p> <p>Bratton, Michael and Chang, Eric C. C. (2006) <i>State Building and Democratization in Sub-Saharan Africa</i>, <i>Comparative Political Studies</i>, V39 (9), 1059-1083</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
corruption	Corruption, Africa, Insurgency	<p>Malaquias, Assis . (2001).Diamonds are a guerrilla's best friend: The impact of illicit wealth on insurgency strategy. <i>Third World Quarterly</i>, V22 (3) 311-325.</p> <p>Reno, William. (2011). Patronage Politics and the Behavior of Armed Groups, <i>Civil Wars</i>, v 9 (4), 324-342</p> <p>Reno, William (2002) The Politics of Insurgency in Collapsing States, <i>Development and Change</i>, v33 (5), 837-858</p> <p>Arezki, Rabah; Gylfason, Thorvaldur. 2011. "Resource Rents, Democracy and Corruption: Evidence from sub-Saharan Africa". CESifo Working Paper No 3575.</p> <p>Fjelde, Hanne (2009) Buying Peace? Oil Wealth, Corruption and Civil War , <i>Journal of Peace Research</i> v46 (2) 199-218</p> <p>Howard, Tiffiany (2010) Failed States and the Spread of Terrorism in Sub-Saharan Africa, <i>Studies in Conflict & Terrorism</i>, v33 (11), 960-988</p> <p>Reno, William (2009) Explaining Patterns of Violence in Collapsed States <i>Contemporary Security Policy</i>, v30 (2), 356-374</p>
gov't transparency	Government transparency, Insurgency, Africa	<p>Fox, Jonathan, (2007). The uncertain relationship between transparency and accountability, <i>Development in Practice</i>, v 17(4-5), 663-671.</p>
policy	Public Health Insurgency and Africa	<p>OKUONZI, SAM AGATRE and MACRAE, JOANNA (1995) Whose policy is it anyway? International and national influences on health policy development in Uganda ? <i>Journal of Health Policy and Planning</i> V10 (2) ; Coovadia, Hoosen, Jewkes, Rachel, and Sanders, David (2009) The Health and Health system of South Africa: historical roots of current public health challenges V 374 (9692) 817-834</p>
strength of gov't institutions	Africa, Insurgency, Government Legitimacy	<p>Manwaring, Max & Fishel, John. Insurgency and counter-insurgency: Toward a new analytical approach (1992), <i>Small Wars & Insurgencies</i>, v3(3), 272-310</p> <p>Goldstone, Jack A., Bates, Robert H., Epsein, David, et al. (2010) A Global Model for Forecasting Political Instability, <i>American Journal of Political Science</i> V 54 (1), 190–208.</p> <p>Hutchison, Marc and Johnson Kristin v48(6) 737-752 (2011) Capacity to trust? Institutional capacity, conflict, and political trust in Africa, 2000–2005</p> <p>Etannibi Alemika, (2004) LEGITIMACY, RULE OF LAW AND VIOLENT CONFLICTS IN AFRICA Center for Social Science Research, Working Paper No. 70</p> <p>Cline, Lawrence E., (1998). Egyptian and Algerian insurgencies: A comparison. <i>Small Wars & Insurgencies</i>, v9(2), 114-133.</p>
political boundaries	Africa, Insurgency, National borders	<p>Fearon, James D. and Laitin, David D. (2003). Ethnicity, Insurgency, and Civil War, <i>American Political Science Review</i>, v97, 75-90</p> <p>Cyril I Obi, Terrorism in West Africa: Real, Emerging or Imagined threats?, <i>African Security Review</i>.</p> <p>Abbink, J. Briefing: The Eritrean-Ethiopian Border Dispute. <i>African Affairs</i> (1998), 97, 551-565</p>
gov't partnerships	Government Partnerships, Africa, Insurgency	<p>Clement Eme Adibe, (2011) Accountability in Africa and the International Community, Special Issue : From Impunity to Accountability: Africa's Development in the 21st Century, V 77 (4)</p> <p>Brinkerhoff, Derick. (1999). Exploring State—Civil Society Collaboration: Policy Partnerships in Developing Countries <i>Nonprofit and Voluntary Sector Quarterly</i> , v. 28(1), 59-8</p> <p>Reno, William (1997). African Weak States and Commercial Alliances, <i>African Affairs</i>, v. 96 (383), 165-186.</p>

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gov't accountability	Accountability, Insurgency, Africa; Government accountability	<p>Keefer, Philip (2008) Insurgency and Credible Commitment in Autocracies and Democracies, <i>The World Bank Economic Review</i> v 22 (1)</p> <p>Mehler, Andreas (2010) Reshaping Political Space? The Impact of the Armed Insurgency in the Central African Republic on Political Parties and Representation,</p> <p>Lamin, Abdul Rahman (2003) Building Peace Through Accountability in Sierra Leone: The Truth and Reconciliation Commission and the Special Court, <i>Journal of Asian and African Studies</i> v. 38 (2-3), 295-320</p>
gov't capacity/incapacity	Africa, Insurgency, Government Legitimacy	<p>Goldstone, Jack A., Bates, Robert H., Epstein, David, et al. (2010) A Global Model for Forecasting Political Instability, <i>American Journal of Political Science</i> V 54 (1), 190-208</p> <p>Hutchison, Marc and Johnson Kristin v48(6) 737-752 (2011) Capacity to trust? Institutional capacity, conflict, and political trust in Africa, 2000-2005</p> <p>Etannibi, Alemika. (2004) Legitimacy, Rule of Law and Violent Conflicts in Africa, Center for Social Science Research, Working Paper No. 70</p> <p>Cline, Lawrence E., (1998). Egyptian and Algerian insurgencies: A comparison. <i>Small Wars & Insurgencies</i>, v9(2), 114-133.</p>
regime type	Africa, Insurgency, Regime type	<p>Stockemer Daniel. Regime type and civil war – a re-evaluation of the inverted U-relationship (2010) <i>Global Change, Peace & Security</i> V 22 (3) 261-274.</p> <p>Carey, Sabine C. (2007) Rebellion in Africa: Disaggregating the Effect of Political Regimes <i>Journal of Peace Research</i> v 44 (1) 47-64</p> <p>Goldsmith, Arthur A. (2010) Mixed regimes and political violence in Africa, <i>The Journal of Modern African Studies</i> The Journal of Modern African Studies, 48, 413-433</p> <p>Azam, Jean-Paul. (2006) The Paradox of Power Reconsidered: A Theory of Political Regimes in Africa <i>Journal of African Economies</i> 15 (1):26-58.</p> <p>Seung-Whan Choi, (2010). Fighting Terrorism through the Rule of Law, <i>Journal of Conflict Resolution</i>, 54(6) 940-966</p>
rule of law	Africa, Insurgency, Rule of Law	<p>Rotberg, Robert, (2004). <i>When States Fail: Causes and Consequences.</i>, Princeton University Press, Princeton</p> <p>Mokuwa, Esther and Voors Maarteen, et al. (2011), Peasant grievance and insurgency in Sierra Leone: Judicial serfdom as a driver of conflict. <i>African Affairs</i> V 10 (440), 339-366.</p>
effectiveness of military	Effectiveness military, Africa, Insurgency	<p>Timothy M Shaw (2003). Regional dimensions of conflict and peace-building in contemporary Africa, <i>Journal of International Development</i>, V 15 (4) 1099 -1328</p> <p>Herbst Jeffery, African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness, <i>Journal of Peace Research</i>, v41 (3), 357-369.</p> <p>Hanne Fjelde and Indra De Soysa (2009). Coercion, Co-optation, or Cooperation?, <i>Conflict Management and Peace Science</i>, v 26 (1) 5-20</p> <p>Luckham, Robin. (1994) The Military, Militarization and Democratization in Africa: A Survey of Literature and Issues, <i>African Studies Review</i>, v37 (2) 13-75</p> <p>Cilliers, Jakkie and Cornwell, Richard (1999) Mercenaries and the Privatisations of Security in Africa <i>African Security Review</i>, V8(2), 31-42</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
effectiveness of military	Effectiveness military, Africa, Insurgency	<p>Howe, Herbert. (1998). Private Security Forces and African Security: The Case of Executive Outcomes., <i>The Journal of Modern African Studies</i> v36(2) 307-331.</p> <p>Tull, Denis M. and Mehler, Andreas. (2005) The hidden costs of power-sharing: Reproducing insurgent violence in Africa, <i>African Affairs</i>, V104 (416), 375-398</p> <p>Young, Eric (1996). The Victors and the Vanquished: The role of Military Factors in the Outcome of Modern African Insurgencies. <i>Small Wars & Insurgencies</i>, v7(2)178-195.</p>
military investment	Military Investment, Africa, Insurgency	<p>Herbst Jeffery, African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness, <i>Journal of Peace Research</i>, v41 (3), 357-369.</p> <p>Hanne Fjelde and Indra De Soysa (2009). Coercion, Co-optation, or Cooperation?, <i>Conflict Management and Peace Science</i>, v 26 (1) 5-20</p> <p>Luckham, Robin. (1994) The Military, Militarization and Democratization in Africa: A Survey of Literature and Issues, <i>African Studies Review</i>, v37 (2) 13-75</p> <p>Cilliers, Jakkie and Cornwell, Richard (1999) Mercenaries and the Privatisations of Security in Africa <i>African Security Review</i>, V8(2), 31-42</p> <p>Howe, Herbert. (1998). Private Security Forces and African Security: The Case of Executive Outcomes., <i>The Journal of Modern African Studies</i> v36(2) 307-331.</p>
energy	Africa, insurgency, energy, electricity, power grid	(none)
healthcare system	Africa, insurgency, public health, healthcare, fragile states, conflict, civil war	<p>Miles, S. (2003). HIV in insurgency forces in sub-Saharan Africa: a personal view of policies. <i>International Journal of STD & AIDS</i>, 14(3), 174-178.</p> <p>Kevlihan, R. (2009). States of Insurgency: Conflict Transformation in Civil Wars through Social Services. Retrieved from http://ssrn.com/abstract=1559639 or doi:10.2139/ssrn.1559639.</p> <p>Zoellick, R. (2008). Fragile States: Securing Development. <i>Survival: Global Politics and Strategy</i>, 50(6),67-84.</p> <p>Bornemisza, O., Ranson, M., Poletti, T. & Sondorp, E. (1982). Promoting health equity in conflict-affected fragile states. <i>Social Science & Medicine</i>, 70(1), 80-88.</p>
opposing forces	Africa, Insurgency, Civil War, Armed Conflict, Riots, Protests, Rebel Strength, Tactics, Training, Resources, Goals, Objectives	<p>Howe, H. M. (2001). <i>Ambiguous order: Military forces in African states</i>. Boulder, CO: Lynne Rienner Publishers.</p> <p>Walter, B. (2009). Bargaining Failures and Civil War. <i>Annual Review of Political Science</i>, 12(1), 243-261.</p> <p>Fearon, J. (2003). Ethnicity, Insurgency, and Civil War. <i>American Political Science Review</i>, 97(1), 75-90.</p> <p>Malaquias, A. (2001). Making war & lots of money: the political economy of protracted conflict in Angola. <i>Review of African Political Economy</i>, 28(90), 521-536.</p> <p>Buhaug, H. (2006). Relative Capability and Rebel Objective in Civil War. <i>Journal of Peace Research</i>, 43(6), 691 -708.</p>
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perception of equity	Africa, insurgency, equity, perception of equity	<p>Abbink, J. (2005). Being Young in Africa: The Politics of Despair and Renewal. <i>Open Source, Leiden University Publications</i>, 1 - 18.</p> <p>Courson, E. (2011). MEND: Political Marginalization, Repression, and Petro-Insurgency in the Niger Delta. <i>African Security</i>, 4(1), 20-43.</p> <p>Hagg, G. & Kagwanja, P. (2007). Identity and Peace: Reconfiguring Conflict Resolution in Africa. <i>African Journal of Conflict Resolution</i>, 7(2), 9-36.</p> <p>Ogundiya, I. (2010). Domestic Rebellion in Africa: Between intelligence failures and the failures of governance. <i>International Journal of Peace and Development Studies</i>, 1(2), 25-31.</p> <p>Jones, H. (2010). Equity in development: Why it is important and how to achieve it. <i>Overseas Development Institute Working Paper No. 31</i>, 1-57.</p> <p>Kandeh, J. (2008). Rogue incumbents, donor assistance and Sierra Leone's second post-conflict elections of 2007. <i>The Journal of Modern African Studies</i>, 46(4), 603-635.</p> <p>van Sittert, L., Branch, G., Hauck, M., & Sowman, M. (2006). Benchmarking the first decade of post-apartheid fisheries reform in South Africa: Fisheries Reform in South Africa 1994-2004. <i>Marine Policy</i>, 30(1), 96-110.</p> <p>Seligson, M. & Muller, E. (1987). Inequality and Insurgency. <i>The American Political Science Review</i>, 81(2), 425-451.</p>
social services	Africa, insurgency, social services, healthcare, consent of the governed	<p>Bratton, M. & Chang, E. (2006). State Building and Democratization in Sub-Saharan Africa. <i>Comparative Political Studies</i>, 39(9), 1059-1083.</p> <p>Kevlihan, R. (2009). States of Insurgency: Conflict Transformation in Civil Wars through Social Services. Retrieved from http://ssrn.com/abstract=1559639 or doi:10.2139/ssrn.1559639.</p> <p>Grynkewich, A. (2008). Welfare as Warfare: How Violent Non-State Groups Use Social Services to Attack the State. <i>Studies in Conflict & Terrorism</i>, 31(4), 350-370.</p> <p>Englebert, P. & Tull, D. (2008). Postconflict Reconstruction in Africa: Flawed Ideas about Failed States. <i>International Security</i>, 32(4), 106-139.</p>
Charismatic Leader		<p>Johnson, T & Mason, M. (2006). Understanding the Taliban and Insurgency in Afghanistan. Foreign Policy Research Institute</p> <p>Jermier, J.M. "Introduction: Charismatic Leadership: Neo-Weberian Perspectives." <i>Leadership Quarterly</i>. Vol. 4. 1993</p> <p>Ehrhart, M. "Predicting Followers' Preferences for Charismatic Leadership: The Influence of Follower Values and Personality" <i>Leadership Quarterly</i> vol 12 2001</p>

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Charismatic Leader		Dekmejian, R. and Wyszomirski, M. "Charismatic Leadership in Islam: The Mahdi of the Sudan." <i>Comparative Studies in Society and History</i> . Vol 14 No. 2 1972.
Access to Weapons		Marsh, N. (2007). Conflict specific capital: the role of weapons acquisition in civil war. <i>International Studies Perspectives</i> , 8(1), 54-72. Braithwaite, J.(2006) "Methods of Power Development: Weapons of the Weak, Weapons of the Strong." <i>Michigan Journal of International Law</i> . Vol. 26 2004-2005.
Education	Africa, insurgency, education, ideology	Marshal, L.S., Corbett, K., Lartey, N., Opio, D., & Bikaitwoha, M.E. (2007). Developing Locally based Research Capacity in Uganda. <i>International Nursing Review</i> 54(3), 227-233. Nekhwevha, F. (1999). No Matter How Long the Night, the Day is Sure to Come: Culture and Educational Transformation in Post-Colonial Namibia and Post-Apartheid South Africa. <i>International Review of Education</i> , 45(5), 491-506. Harber, C. (1993). Lessons in Black and White: A Hundred Years of Political Education in Namibia. <i>History of Education</i> , 22(4), 415-424. Panzer, M.G. (2009). The Pedagogy of Revolution: Youth, Generational Conflict, and Education in the Development of Mozambican Nationalism and the State, 1962-1970. <i>Journal of Southern African Studies</i> , 35(4), 803-820. Maraftab, F. & Wills, S. (2005). Insurgency and Spaces of Active Citizenship. <i>Journal of Planning Education and Research</i> , 25(2), 200-217. Breidlid, A. (2005). Education in the Sudan: The Privileging of an Islamic Discourse. <i>Compare: A Journal of Comparative and International Education</i> , 35(3), 247-263. Sommers, M. (2005). <i>Island of Education: Schooling, Civil War and the Southern Sudanese 1983-2004</i> . Paris: International Institute for Education Planning, UNESCO. Beg, S. (2010). The Ideological Battle: Insight form Pakistan. <i>Perspectives on Terrorism</i> , 2(10). Bush, K.D. & Saltarelli, D. (2000). The Two Faces of Education in Ethnic Conflict: Towards a Peacebulding Education for Children. <i>Innocenti Insight</i> , UNICEF Innocenti Research Centre.
Recruitment	Africa, Insurgency, Recruitment Africa, Insurgency, Recruitment Africa, Insurgency, Recruitment Africa, Insurgency, Recruitment	Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War. <i>American Political Science Review</i> 97(01), 75-90. Humphreys, M. & Weinstein, J. (2008). Who Fights? The Determinants of Participation in Civil War. <i>American Journal of Political Science</i> 52(2), 1540-5907. Weinstein, J. (2005). Resources and the Information Problem in Rebel Recruitment. <i>Journal of Conflict Resolution</i> . 49(4), 598-624. Hirsch, E. (1990). Sacrifice for the Cause: Group Processes, Recruitment, and Commitment in a Student Social Movement. <i>American Journal of Political Science</i> , 34(2), 243-254.

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Recruitment	Insurgency, Recruitment	<p>Crouch, C. (2009). <i>Managing terrorism and Insurgency: Regeneration, Recruitment and Attrition</i>. Routledge.</p> <p>Lawoti, Mahendra, and Anup Kumar Pahari. 2010. <i>Evolution and growth of the Maoist insurgency in Nepal</i>. Ed. Mahendra Lawoti and Anup Kumar Pahari. <i>The Maoist Insurgency in Nepal revolution in the twentyfirst century</i>. Routledge.</p> <p>Hegghammer, Thomas. 2007. "Saudi militants in Iraq: Backgrounds and recruitment patterns". Norwegian Defence Research Establishment (FFI). http://www.ffi.no/no/Rapporter/06-03875.pdf</p>
Ungoverned Space	Africa, Insurgency, Ungoverned Space, Failed States	<p>Berschinski, R. (2007). <i>Africom's Dilemma: The 'Global War on Terrorism,' 'Capacity Building,' Humanitarianism, and the Future of U.S. Security Policy in Africa</i>. Carlisle, PA: U.S. Army War College, Strategic Studies Institute.</p> <p>Clapham, C. (1996). <i>Africa and the International System: the politics of state survival</i>. Cambridge: University Press; Cambridge Studies in International Relations, no. 50.</p> <p>Clapham, C. (1998). <i>African Guerrillas</i>. Indiana University Press.</p> <p>Clunan, A.& Trinkunas, H. (eds). (2010) <i>Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty</i>. Stanford, CA: Stanford University Press.</p> <p>Forest, J. (2010). <i>Ungoverned Territories: Engaging local nongovernmental entities in U.S. security strategy</i>. (http://www.atlcom.nl/ap_archive/pdf/AP%202011%20nr.%206/Forest.pdf) An earlier version of this paper was published as 'Zones of Competing Governance' in the <i>Journal of Threat Convergence</i>, Vol. 1, Issue 1 (Fall 2010), p. 10-21.</p> <p>Harpviken, K. (2010). <i>Troubled regions and failing states: Introduction</i>, in Harpviken, K. (ed.) <i>Troubled Regions and Failing States: The Clustering and Contagion of Armed Conflicts (Comparative Social Research, Volume 27)</i>, Emerald Group Publishing Limited, pp.1-23.</p> <p>Hastings, J. (2009). <i>Geographies of State Failure and Sophistication in Maritime Piracy Hijackings</i>, <i>Political Geography</i> 28(4), 213-223.</p> <p>Innes, M. (ed). (2007). <i>Denial of Sanctuary: Understanding Terrorist Safe Havens</i>. Westport, CT: Praiger Security International (Greenwood Publishing Group, Inc.).</p> <p>Kilcullen, D. (2006). <i>Counter-Insurgency redux</i>, <i>Survival: Global Politics and Strategy</i>, 48(4), 111-130.</p> <p>Menkhaus, K. (2007). <i>Terrorist Activities in Ungoverned Spaces: Evidence and Observations from the Horn of Africa</i>, Paper prepared for the "Southern Africa and International Terrorism" workshop, 25-27 January, South Africa.</p> <p>Menkhaus, K. (2010). <i>State Failure and Ungoverned Space</i>, in <i>Ending Wars, Consolidating Peace: Economic Perspectives</i>, Adelphi Series, 50:412-413, 171-188.</p> <p>Peltier, J. (2009). <i>Interstitial Space: A New, More Realistic Lens</i>, <i>American Foreign Policy Interests: The Journal of the National Committee on American Foreign Policy</i> 31(4), 261-270.</p> <p>Rabasa, A., Boraz, S., et.al. (2007). <i>Ungoverned Territories: Understanding and Reducing Terrorism Risks</i>, Santa Monica, CA: RAND Corporation.</p> <p>Rotberg, R. (2003). <i>Failed States, Collapsed States, Weak States: Causes and Indicators</i>, in Rotberg, R. (ed). <i>State Failure and State Weakness in a Time of Terror</i>. Brookings Institution Press.</p> <p>Rotberg, R. (2005). <i>Battling Terrorism in the Horn of Africa</i>. Baltimore, MD: Brookings Institution Press.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
Ungoverned Space	Africa, Insurgency, Ungoverned Space, Failed States	<p>Watts, C., Shapiro, J., & Brown, V. (2007). <i>Al-Qa'ida's (Mis)Adventures in the Horn of Africa</i>. West Point, NY: Combating Terrorism Center Harmony Project.</p> <p>Williams, P. (2007). State Failure In Africa: Causes, Consequences and Responses, <i>Europaworld</i>, 1-8.</p>
Failed States/ Strength of Government Institutions	Africa, Insurgency, Failed States	<p>Forest, J. (2010). Ungoverned Territories: Engaging local nongovernmental entities in U.S. security strategy. (http://www.atlcom.nl/ap_archive/pdf/AP%202011%20nr.%206/Forest.pdf) An earlier version of this paper was published as 'Zones of Competing Governance' in the Journal of Threat Convergence, Vol. 1, Issue 1 (Fall 2010), p. 10-21.</p> <p>Kilcullen, D. (2006). Counter-Insurgency redux, <i>Survival: Global Politics and Strategy</i>, 48(4), 111-130.</p> <p>Mills, G. (2007). Africa's New Strategic Significance in Davis, J. (ed) <i>Africa and the War on Terrorism</i>. England: Ashgate Publishing Limited.</p> <p>Peltier, J. (2009). Interstitial Space: A New, More Realistic Lens, <i>American Foreign Policy Interests: The Journal of the National Committee on American Foreign Policy</i> 31(4), 261-270.</p> <p>Pham, P. (2011). State Collapse, Insurgency, and Famine in the Horn of Africa: Legitimacy and the Ongoing Somali Crisis <i>Journal of the Middle East and Africa</i>, 2 (2), 153-187.</p> <p>Piazza, J. (2008). Incubators of Terror: Do Failed and Failing States Promote Transnational Terrorism? <i>International Studies Quarterly</i> 52(3) 469-488.</p> <p>Rotberg, R. (2003). Failed States, Collapsed States, Weak States: Causes and Indicators, in Robert Rotberg, ed. <i>State Failure and State Weakness in a Time of Terror</i>. Brookings Institution Press.</p> <p>Rotberg, R. (2005). <i>Battling Terrorism in the Horn of Africa</i>. Baltimore, MD: Brookings Institution Press.</p> <p>Williams, P. (2007). State Failure In Africa: Causes, Consequences and Responses. <i>Europaworld</i>, 1-8.</p>
Uneven Development	Africa, Insurgency, Uneven Development, Agriculture, Production Space, Modernization, Contested Terrain, Land Ownership, Resource Extraction, Climate Change	<p>Adams, M. (2001). Tenure Security, Livelihoods and Sustainable Land Use in Southern Africa, Paper presented at the SARPN Conference on Land Reform and Poverty Alleviation in Southern Africa.</p> <p>Banks, C. & Sokolowski, J. (2010). Modeling the Niger Delta Insurgency. <i>The Social Science Journal</i>, 47(2), 271-293.</p> <p>Clapham, C. (1990). The political economy of conflict in the horn of Africa. <i>Survival</i>, 32(5), 403-419.</p> <p>Englebert, P. & Tull, D. (2008). Postconflict Reconstruction in Africa: Flawed Ideas about Failed States <i>Journal of International Security</i>, 32 (4), 106-139.</p> <p>Fukuda-Parr, S., Ashwill, M., Chiappa, E. & Messineo, C. (2008). The Conflict-Development Nexus: A Survey of Armed Conflicts in Sub-Saharan Africa 1980-2005. <i>Journal of Peacebuilding and Development</i>, 4(1), 1-16.</p> <p>Harbeson, J. (1971). Land Reforms and Politics in Kenya, 1954-70. <i>The Journal of Modern African Studies</i> 9(2), 231-251.</p> <p>Isaacman, A. (1982). The Mozambique Cotton Cooperative: The Creation of a Grassroots Alternative to Forced Commodity Production. <i>African Studies Review</i> 25(No. 2/3), 5-25.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
Uneven Development	Africa, Insurgency, Uneven Development, Agriculture, Production Space, Modernization, Contested Terrain, Land Ownership, Resource Extraction, Climate Change	<p>Kiamba, M. (1989). The Introduction and Evolution of Private Landed Property in Kenya. <i>Development and Change</i> 20(1), 121-147.</p> <p>Klugman, J., Neyapti, B. & Stewart, F. (1999). <i>Conflict and Growth in Africa, Vol. 2: Kenya, Tanzania and Uganda</i>. Paris, France: Organization for Economic Co-operation and Development Publications Service.</p> <p>Le Billon, P. (2001). The political ecology of war: natural resources and armed conflicts. <i>Political Geography</i>, 20(5), 561-584.</p> <p>Metz, S. (1993). The Future of Insurgency. <i>Strategic Studies Institute, US Army</i>. Retrieved from http://www.strategicstudiesinstitute.army.mil/Pubs/download.cfm?q=344.</p> <p>Moore, D. (1998). Subaltern Struggles and the Politics of Place: Remapping Resistance in Zimbabwe's Eastern Highlands. <i>Cultural Anthropology</i> 13(3) 344-381.</p> <p>Muller, E. & Seligson, M. (1987). Inequality and Insurgency. <i>The American Political Science Review</i>, 81(2), 425-452.</p> <p>Paes, W. (2004). Oil Production and National Security in Sub-Saharan Africa, in Traub-Merz, R. & Yates, D. (eds.). <i>Oil Policy in the Gulf of Guinea: Security & Conflict, Economic Growth, Social Development</i>. Friedrich-Ebert-Stiftung, publishers, Ch. 7.</p> <p>Rotberg, R. (2003). Failed States, Collapsed States, Weak States: Causes and Indicators, in Robert Rotberg, ed. <i>State Failure and State Weakness in a Time of Terror</i>. Brookings Institution Press.</p> <p>de Waal, A. (1996). Contemporary Warfare in Africa: Changing Context, Changing Strategies <i>Institute of Development Studies</i>, 27 (3), 6-16.</p> <p>Watts, M. (2008). Imperial Oil: The Anatomy of a Nigerian Oil Insurgency. Working Paper No. 17, Niger Delta Economies of Violence Working Papers.</p> <p>Weiner, D. (1991). Socialist transition in the capitalist periphery: A case study of agriculture in Zimbabwe. <i>Political Geography Quarterly</i> 10(1) 54-75.</p>
Political Boundaries	Africa, Insurgency, Ungoverned Space, Failed States, Spatial Control	<p>Flint, C. (2011). Introduction: Geographic Perspectives on Civil Wars. <i>International Interactions</i> 37, 466-489.</p> <p>Harpviken, K. (2010). Troubled regions and failing states: Introduction, in Harpviken, K. (ed.) <i>Troubled Regions and Failing States: The Clustering and Contagion of Armed Conflicts (Comparative Social Research, Volume 27)</i>, Emerald Group Publishing Limited, pp.1-23.</p> <p>Innes, M. (ed). (2007). <i>Denial of Sanctuary: Understanding Terrorist Safe Havens</i>. Westport, CT: Praiger Security International (Greenwood Publishing Group, Inc.).</p> <p>Lai, B. (2007). "Draining the Swamp": An Empirical Examination of the Production of International Terrorism, 1968-1998. <i>Conflict Management and Peace Science</i> 24(4), 297-310.</p> <p>Le Billon, P. (2001). The political ecology of war: natural resources and armed conflicts. <i>Political Geography</i>, 20(5), 561-584.</p> <p>Lohman, A. & Flint, C. (2010). The Geography of Insurgency <i>Geography Compass</i>, 4 (8), 1154-1166.</p> <p>Rotberg, R. (2003). Failed States, Collapsed States, Weak States: Causes and Indicators, in Robert Rotberg, ed. <i>State Failure and State Weakness in a Time of Terror</i>. Brookings Institution Press.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
Political Boundaries	Africa, Insurgency, Ungoverned Space, Failed States, Spatial Control	Swart, G. (2009). Pirates of Africa's Somali Coast: On Terrorism's Brink? <i>Scientia Militaria: South African Journal of Military Sciences</i> 37(2).
Population Density/Distance from Capital	Africa, Insurgency, Uneven Development, Spatial Control, Physical Terrain, Contested Terrain	<p>Buhaug, H., Cederman, L. & Rod, J. (2008). Disaggregating Ethno-Nationalist Civil Wars: A Dyadic Test of Exclusion theory. <i>International Organization</i> 62(3), 531-551.</p> <p>Buhaug, H. (2002). The Geography of Civil War <i>Journal of Peace Research</i>, 39 (4), 417-433.</p> <p>Buhaug, H & Rod, J. (2006). Local Determinants of African Civil Wars, 1970-2001. <i>Political Geography</i>, 25 (3), 315-335.</p> <p>Clapham, C. (1996). <i>Africa and the International System: the politics of state survival</i>. Cambridge: University Press; Cambridge Studies in International Relations, no. 50.</p> <p>Fearon, J. (2004). Why Do Some Civil Wars Last So Much Longer Than Others? <i>Journal of Peace Research</i> 41(3), 275-301.</p> <p>Fearon, J. & Laitin, D. (1999). Weak States, Rough Terrain, and Large-Scale Ethnic Violence Since 1945. Paper prepared for 1999 Annual Meetings of the American Political Science Association, Atlanta, Georgia.</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i>, 97, 75-90.</p> <p>Pasquale, B. & Travagianti, M. (2009). Guns, Growth & Geography: The Subnational Origins of Insurgency. New York University, paper.</p> <p>Pinstrup-Andersen, P. & Shimokawa, S. (2008). Do poverty and poor health and nutrition increase the risk of armed conflict onset? <i>Food Policy</i> 33(6) 513-520.</p> <p>Raleigh, C. (2007). Political Geography of Civil War: Insurgency Patterns in African States. Paper for PRIO/CSCW.</p> <p>Raleigh, C. (2007). <i>Political Geography of Civil War: Insurgency Patterns in African States</i>. Trinity College Dublin.</p> <p>Raleigh, C. (2010). Seeing the Forest for the Trees: Does Physical Geography Affect a State's Conflict Risk? <i>International Interactions: Empirical and Theoretical Research in International relations</i> 36(4) 384-410.</p> <p>Raleigh, C., & Havard, H. (2009). Population Size, Concentration, and Civil War: A Geographically Disaggregated Analysis <i>Political Geography</i>, 28 (4), 224-238.</p> <p>Raleigh, C. & Urdal, H. (2007). Climate Change, environmental degradation and armed conflict. <i>Political Geography</i> 26(6) 674-694.</p> <p>Sidaway, J. (1991). Contested Terrain: Transformation and Continuity of the Territorial Organisation in Post-Independence Mozambique. <i>Tijdschrift voor Economische En Sociale Geografie</i> 82(5)367-376.</p>
Physical Geography/Terrain	Africa, Insurgency, Spatial Control, Terrain, Rough Terrain, Spatial Access, Enclave, Natural Resources, Climate Change, Resource Extraction	<p>Buhaug, H., Cederman, L. & Rod, J. (2008). Disaggregating Ethno-Nationalist Civil Wars: A Dyadic Test of Exclusion theory. <i>International Organization</i> 62(3), 531-551.</p> <p>Buhaug, H. (2002). The Geography of Civil War <i>Journal of Peace Research</i>, 39 (4), 417-433.</p> <p>Buhaug, H. & Lujala, P. (2005). Accounting for scale: Measuring geography in quantitative studies of civil war. <i>Political Geography</i> 24, 399-418.</p> <p>Buhaug, H & Rod, J. (2006). Local Determinants of African Civil Wars, 1970-2001. <i>Political Geography</i>, 25 (3), 315-335.</p>

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Physical Geography/Terrain	Africa, Insurgency, Spatial Control, Terrain, Rough Terrain, Spatial Access, Enclave, Natural Resources, Climate Change, Resource Extraction	<p>Fearon, J. (2004). Why Do Some Civil Wars Last So Much Longer Than Others? <i>Journal of Peace Research</i> 41(3), 275-301.</p> <p>Fearon, J. & Laitin, D. (1999). Weak States, Rough Terrain, and Large-Scale Ethnic Violence Since 1945. Paper prepared for 1999 Annual Meetings of the American Political Science Association, Atlanta, Georgia.</p> <p>Fearon, J. & Laitin, D. (2003). Ethnicity, Insurgency, and Civil War <i>American Political Science Review</i>, 97, 75-90.</p> <p>Hendrix, C. (2011). Head for the Hills? Rough Terrain, State Capacity, and Civil War Onset <i>Civil Wars</i>, 13 (4), 345-370.</p> <p>Hendrix, C., & Glaser, S. (2007). Trends and triggers: Climate, climate change and civil conflict in Sub-Saharan Africa. <i>Political Geography</i>, 26(6), 695-715.</p> <p>Meier, P., Bon, D. & Bond, J. (2007). Environmental influences on pastoral conflict in the Horn of Africa. <i>Political Geography</i> 26(6), 716-735.</p> <p>Raleigh, C. (2007). <i>Political Geography of Civil War: Insurgency Patterns in African States</i>. Trinity College Dublin.</p> <p>Raleigh, C. (2010). Seeing the Forest for the Trees: Does Physical Geography Affect a State's Conflict Risk? <i>International Interactions: Empirical and Theoretical Research in International relations</i> 36(4) 384-410.</p> <p>Richards, P. (2001). Are "Forest" Wars in Africa Resource Conflicts? The Case of Sierra Leone., In Peluso, N. & Watts, M. (eds). <i>Violent Environments</i>. Ithica: Cornell University Press.</p> <p>Rustad, C., Rod, J., Larsen, W. & Gleditsch, N. (2008). Foliage and fighting: Forest resources and the onset, duration, and location of civil war. <i>Political Geography</i> 27(7) 761-782.</p>
Built Environment/Physical Infrastructure	Africa, Insurgency, Contested Terrain	<p>Clapham, C. (1996). <i>Africa and the International System: the politics of state survival</i>. Cambridge: University Press; Cambridge Studies in International Relations, no. 50.</p> <p>Douglas, C. (2008). Barricades and Boulevards: Material Transformations of Paris, 1795-1871. <i>Interstices. Journal of Architecture and Related Arts</i> 8:31-42.</p> <p>Fair, C. & Ganguly, S. (eds). (2008). <i>Treading on Hallowed Ground: Counterinsurgency Operations in Sacred Spaces</i>. Oxford: Oxford University Press.</p> <p>Harrison, M. (1988). Symbolism, 'ritualism' and the location of crowds. In Cosgrove, D. & Daniels, S. (eds). <i>The Iconography of Landscape: Essays on the symbolic representation, design and use of past environments</i>. Cambridge: Cambridge University Press.</p> <p>Menkhaus, K. (2007). Terrorist Activities in Ungoverned Spaces: Evidence and Observations from the Horn of Africa, Paper prepared for the "Southern Africa and International Terrorism" workshop, 25-27 January, South Africa.</p> <p>Traugott, M. (2010). <i>The Insurgent Barricade</i>. Berkeley: University of California Press.</p> <p>Zhukov, Y. (2012). Roads and the diffusion of insurgent violence: The logistics of conflict in Russia's North Caucasus. <i>Political Geography</i> 31(3) 144-156.</p>

CONCEPT	KEYWORDS	RELEVANT REFERENCES
Africa, Insurgency, Contested Terrain		Maphosa, Sylvester B. (2012). Natural Resources Conflict: Unlocking the Economic Dimension of Peace-Building in Africa. Africa Institute of South Africa Policy Briefing no. 74.
	wealth and income	Bueno de Mesquita, Ethan. "Conciliation, Counterterrorism, and Patterns of Terrorist Violence." <i>International Organization</i> 59, no. 1 (Winter 2005): 145-176.
	grievances	Cederman, Lars-Erik, Andreas Wimmer, and Brian Min. "Why Do Ethnic Groups Rebel? New Data and Analysis." <i>World Politics</i> 62, no. 1 (2010): 87-119.
	natural resources, wealth and income	Collier, Paul, and Anke Hoeffler. "Greed and Grievance in Civil War." <i>Oxford Economic Papers</i> 56, no. 4 (October 2004): 563-595.
	state weakness and ungoverned spaces, wealth and income	Fearon, James D., and David D. Laitin. "Ethnicity, Insurgency, and Civil War." <i>The American Political Science Review</i> 97, no. 1 (February 2003): 75-90.
	grievances	Gurr, Ted Robert. <i>Why Men Rebel</i> . Princeton, N.J: Princeton University Press, 1970.
	state weakness and ungoverned spaces	Hendrix, Cullen S. "Measuring state capacity: Theoretical and empirical implications for the study of civil conflict." <i>Journal of Peace Research</i> 47, no. 3 (May 1, 2010): 273 -285.
	networks and insurgent organizations	Horowitz, Michael. "Non-State Actors and the Diffusion of Innovations: The Case of Suicide Terrorism". <i>International Organization</i> 64:1 (Winter 2010), pp. 33-64.
	natural resources	Humphreys, Macartan. "Natural Resources, Conflict, and Conflict Resolution: Uncovering the Mechanisms." <i>The Journal of Conflict Resolution</i> 49, no. 4 (August 2005): 508-537.
	repression	Kalyvas, Stathis. <i>The Logic of Violence in Civil War</i> . Cambridge: Cambridge University Press, 2006.
	repression	Kocher, Matthew, Thomas Pepinsky, and Stathis Kalyvas. "Aerial Bombing and Counterinsurgency in the Vietnam War." <i>American Journal of Political Science</i> 55 (2011): 201-218.
	wealth and income	Krueger, Alan. <i>What Makes a Terrorist</i> . Princeton: Princeton University Press, 2007.
	collective action	Lichbach, Mark Irving. <i>The Rebel's Dilemma</i> . University of Michigan Press, 1998.
	repression	Lyall, Jason. "Does Indiscriminate Violence Incite Insurgent Attacks? Evidence from Chechnya." <i>Journal of Conflict Resolution</i> 53, no. 3 (June 2009): 331-362.
	grievances, repression	Piazza, James. "Poverty, Minority Economic Discrimination and Domestic Terrorism." <i>Journal of Peace Research</i> . 48:3 (2011):339-353.
	natural resources	Ross, Michael. 2012. <i>The Oil Curse</i> . Princeton: Princeton University Press.
	networks and insurgent organizations	Sageman, Marc. <i>Understanding Terror Networks</i> . Philadelphia: University of Pennsylvania Press,
	networks and insurgent organizations	Siegel, David A. "Social Networks and Collective Action." <i>American Journal of Political Science</i> 53, no. 1 (2009): 122-138.
	repression	Stoll, Richard. <i>Between Two Armies in the Ixil Towns of Guatemala</i> . New York: Columbia University Press, 1993.
	repression	Walsh, James, and James Piazza. "Why Respecting Physical Integrity Rights Reduces Terrorism." <i>Comparative Political Studies</i> 43 (2010): 551-557.
	networks and insurgent organizations	Weinstein, Jeremy. <i>Inside Rebellion: The Politics of Insurgent Violence</i> . Cambridge: Cambridge University Press, 2007.

CONCEPT	KEYWORDS	RELEVANT REFERENCES
Africa, Insurgency, Contested Terrain	collective action	Wood, Elisabeth Jean. <i>Insurgent Collective Action and the Civil War in El Salvador</i> . Cambridge: Cambridge University Press, 2003. Omenya, Alfred and Grace Lubaale (2012) <i>Understanding the tipping point of urban conflict: the case of Nairobi, Kenya</i> . Urbantippingpoint.org Working Paper 6.

Appendix C: The Study of Insurgency in Social Science

by Isabel Scarborough, Duu Renn, Neil Vander-Most, and Wenshou Zhang

Characterizing insurgency

This overview of current academic literature on insurgency identifies how the concept is represented in different bodies of work from a handful of fields in social science. The document traces how social scientists study insurgency from a variety of theoretical and methodological lenses. More specifically, it provides details on how literature in cultural anthropology, work on social movements within political science and sociology, and intellectual production on civil conflict in political science examine this phenomenon. In addition, this overview presents a comprehensive look at scholarship on terrorism as a type of insurgency and, lastly, supplies a summary of how scholarly work analyzing public policy has dealt with insurgency.

These diverse contributions provide a sample of the wide array of theoretical tools that social scientists employ in an ongoing discussion on the origins and maintenance of insurgency. Because insurgencies take place within social structures and depend on the interactions and reactions of the actors who either support or oppose this conflict, social scientists have refrained from defining this term. Rather, they debate on the *characteristics* of insurgency and the factors that affect or influence its rise or demise.

A fact that all social scientists agree on is that insurgency or intra-state conflict encompasses a great range and diversity. Indeed, this is why the study of insurgency from academia has a history that traces its roots into strategic studies and has examined insurgency under the guise of civil wars, struggles for decolonization, guerrillas, terrorism, and global criminal networks (Rich and Duveysteyn 2012). In modern insurgencies, transnationalism has become a key constituent of this phenomenon, a fact that is due not so much to changes in the nature of this phenomenon but to awareness that the world around us is being transformed by technology and the global circulation of information. Because of the dramatic changes

in global society that have created and maintained a series of insurgencies in the developing world, there has also been a resurgence in the study of insurgency as a topic in the social sciences since the 1980s “amid the breakdown of the international bipolar political system, and the emergence of identity politics and of many more non-state actors” (Beckett 2012: 24).

The United States is asked by host nations to render aid in situations of conflict, instability, and insurgency that lead to interventions with a number of different tactical operations. The present review of scholarly thinking in the social sciences on the topic of insurgency is part of the effort to understand this phenomenon by the project Cultural Reasoning and Ethnographic Analysis for the Tactical Environment (CREATE). CREATE is designed to support civil-military operations stakeholders—particularly analysts—prior to collaborative operations such as the ones described above. In fact, part of the objectives of this project are to integrate the social science theoretical tools that we outline in this document in the civil-military analysts’ understanding of insurgency.

The army has a working definition of insurgency that is currently under development in Revision Issue Paper #1 to FM-324. This document defines insurgency as “the organized use of subversion and violence by a minority group or movement that seeks to overthrow, force change, or undermine the existing government authority” (Paganini 2011: 4). The literature summaries in the present review complement and inform this working definition, evidencing both the need for and the contributions of collaboration between the production of knowledge in the academic and the military spheres.

There is a wide range and scope of factors that the army definition and the social science discussion attempt to cover to explain how insurgency is produced, created, and maintained, which make for a confusing situation. As the title of this introductory section suggests, rather than provide a definition, CREATE works on characterizing insurgency in all its social complexity and, in this way, the project establishes limiting parameters that will focus subsequent work. For this purpose, the key components of insurgency as it relates to the CREATE project are as follows:

3. What? – Insurgency is concerned with violent or, more crucially, potentially violent conflicts that are directed against a national government (more specifically, a recognized administrative body of the state).
4. Who? – These conflicts are between state governments and non-state actors.
5. Why? – Insurgents oppose the government or ruling authority in a violent fashion due to a strong motivation that can usually be explained in terms of ideologies and/or grievances over material wellbeing.

These three key components of insurgency: what, who and why, appear in a number of empirically observed phenomena including war, riots, protests, and terrorism. The following literature review will summarize prevailing research trends and theories and provide synthesis when appropriate. This discussion will then be used to make clear the implications for CREATE's focus on insurgency.

Summaries of insurgency in social science by bodies of literature

Social science rarely studies insurgency as a holistic phenomenon and different literatures within their respective subfields study insurgency according to their respective research and methodological foci. The political science literature has traditionally based its analysis on the type of violence that is observed and classified *ex post* at the highest level of analysis, which includes genocide, civil war, and terrorism to name a few. Because of this, this document provides a review of the specialized branch of civil conflict literature within political science, as well as a review of scholarship on terrorism more generally. Falling under the “tactical” understanding of the term, literature of civil war within political science with its more formal understanding of conflict clarifies how these insurgent tactics are used, how they relate to other forms of combat, and the implications therein. Due to its relevance in current affairs, a focused literature on terrorism—here defined as a specialized form of insurgency—gives scholars detailed insight into how terrorist-leaning insurgencies operate, and hints at qualities that could more broadly be applied to insurgencies in general.

Social movement literature, another of the fields reviewed in this text, acknowledges insurgency as a form of popular movement based on Aberle's classic definitional typology where insurgency is incorporated into the literature based on its goal of revolutionary social change and its intended and wide-ranging effect area or scope (1982: 11). In contrast, the social movement literature explores the motivations for popular mobiliza-

tion. In fact, this literature argues that knowing why people form groups and how agendas and goals are set allows scholars to comprehend insurgency formation and motivation. Another body of scholarly literature that we review is how cultural anthropology studies insurgency. In this discipline, the research focus and analysis is at the micro level on the lived experiences of those who participate in insurgent movements, or on the effect of insurgency on the civilian populations or state officials opposing this phenomenon. Scholarship from cultural anthropology explores actor motivations and—based on long-term ethnographic fieldwork—provides a nuanced understanding of how insurgencies affect social interactions, including those of civil society with the state.

Both the literature in anthropology and that of civil conflict in political science focus on case studies for their theoretical analysis. Given that Africa is an area of the globe where the CREATE project contribution to civil-military operations is most likely to occur, the two literature reviews from these disciplines are Africa-centered, unlike the social movements and terrorist reviews which identify more general theoretical contributions to insurgency. Lastly, the literature on public policy is an interesting blend of academics and professionals who write about policy application, which results in texts whose discussion is an interesting combination of social science and more applied research.

Converging on a definition of insurgency has been difficult due to conceptual differences between the academic disciplines as well as between the academic and policy realms. However, characterizing insurgency from a variety of social science perspectives, as laid out in the literature reviews of the following sections, will contribute greatly to improve our understanding of this phenomenon and, at the same time, to the understanding of the civil-military analysts who are our target audience.

Political science literature on civil conflict

Civil conflict is a specific type of conflict that is defined by organized violence between a state government and non-state actor within the territorial borders of the same state. Although it is geographically constrained by definition, its explanations are usually general enough to be applied to other instances of violence. Studies of civil conflict have burgeoned in the past several decades. Political scientists and economists in particular have focused on this issue and developed a number of theories designed to explain the increasingly frequent instances of civil conflict throughout the

world. These studies span many levels of analysis and include examinations of individual motivations, group identity, and institutional strength—to name only a few. They also examine different aspects of civil conflict, including why these conflicts begin, how long they last, who wins, and their long-term impact. There are a number of theories on participation and conflict and Berman et al. present summaries for no less than fifteen of these theories (2011: 35). However, all of these can be grouped as explaining civil conflict occurrence as a function of either grievance *or* opportunity as detailed in the following paragraphs.

Conflict as an expression of grievance

Tedd Gurr coined and Daniel Horowitz further defined the term ‘grievance’ in the ethnic conflict literature as a substantive gap between expected and realized outcomes (Gurr 1970; Horowitz 1985). Key to this shared model of rebellion is that grievance is not sufficient for conflict, but must occur in the absence of effective political processes that allow for some degree of redress. An effective political process leads to an expectation that political structures, such as those present in democracy, are capable of reducing grievance and thus preventing conflict. Along the same lines, repressive regimes increase grievance and encourage civil conflict with the state. This theory receives mixed support within political science (Hegre et al 2001; Elbadawi and Sambanis 2000; Gurr 2000) and may best be examined on a country by country if not on an individual case by case basis.

The grievance argument has been the focus of more recent literature from political science that attempts to unravel how modern military technology used by counterinsurgent forces affects conflict against the state. Two case studies are prominent given their careful and thorough use of empirical quantitative data. The first, a research study by Jason Lyall, examines civilian targeting and shelling in Chechnya by Russian forces. Lyall argues for Chechnya as a useful case study in the causes of conflict through grievance given that it is “a lesson in the devastating spiraling dynamic of violence” (2009: 343). This author disputes the conclusions from previous studies that proposed that indiscriminate violence creates new grievances as it leads victims to seek safety by collaborating with insurgent forces. In contrast, Lyall’s study evidences how the random shelling by the Russian troops effectively suppressed rebel assaults leading to a decrease in post-strike insurgent attacks (ibid: 360). The other case study that complements the literature on civilian victimization in counterinsurgency warfare

looks at aerial bombing during the Vietnam War to determine the ability of insurgents to control small local populations over time (Kocher et al. 2011). Kocher's team looked at statistical data on bombing to Vietnamese hamlets by US forces in an effort to wrestle these out of the control of the insurgent forces. Careful not to attribute shifts in control of these populations to the bombing itself, the team employed instrumental variables and matching to account for endogeneity and unobserved variables. The results showed that bombing hampered the pacification campaign and more of it would have hastened a communist victory as the population allied with the insurgents through grievances. This is consistent with the view that the US and allied forces pacification campaign was successful due to a shift away from indiscriminate violence (2011: 16). The two contrasting views offered by Lyall and Kocher evidence that grievance is indeed a force that must be reckoned with by noncombatant populations in situations of modern warfare and the use of military technology.

Some literature arising from the grievance argument focuses on material well-being instead of political structures, suggesting that economic suffering leads to conflict. Instead of an individual's view of economic fairness, most studies use aggregate measures of income distribution. With this measure, grievance is not associated with the onset of conflict (Collier and Hoeffler 2004). Instead, more detailed treatments find that conflict is associated with systems of inequality between privileged and oppressed groups within a society (Murshed and Gates 2005). In addition, others find that some conflicts that are initially based on grievance transform into conflicts that are sustained by a desire for profit, which are further considered under political science theories as the opportunity for profit (Weinstein 2007).

Work by political scientist Elizabeth Woods on the guerrilla warfare in El Salvador argues against the notion that the wide gap between rich and poor, a feeling of exclusion, and a desire for profit can cause insurgency (2003). Using myriad quantitative and qualitative methods and the collection of primary data over the worst years of the guerrilla involvement, Wood's work argues that greed through grievance was not the main cause for the Salvadoran insurgency as there are no direct correlations between benefits in income and insurgency. Indeed, she shows how often the case was that participating in the insurgency had a high economic cost for those involved, not to mention the high cost to the insurgent's personal safety in a climate of unadulterated violence (2003: 10). Although at the macro lev-

el, the Salvadoran insurgency and other classic insurgency case studies can be viewed as insurgencies of socioeconomic class, Woods argues instead that an emerging political culture based on grievance is what ultimately sustains insurgency over time.

Empirical examination of the grievance argument is hampered by a lack of data. The theory, at its core, describes decisions that occur on the individual level and affect small groups before they affect the state as a whole. Data on individual and group beliefs, especially given an issue as subjective as “deprivation”, is difficult to gather systematically. Often, researchers settle for economic indicators that are neither measured on an individual level nor accurately gauge psychological content. These considerations suggest that the grievance argument should not be quickly dismissed due to past analysis. In a given context, the argument may be very powerful in its ability to explain and predict conflict, but evaluation depends on the proper collection and implementation of data.

Conflict as opportunity for profit

The current trend within conflict studies is to examine conflict as an opportunity for profit. This is supported by findings of prominent economists (Collier and Hoeffler 2004) and political scientists alike (Fearon and Laitin 2003), but once again these studies suffer from poor measurement. This argument was first described as the “greed” argument, corresponding to the explanation that the motive for conflict is often avarice. Since then, it has been renamed the “opportunity” argument. Essentially, it argues that conflict occurs when an opportunity for profit intersects with the likelihood of weak resistance on the part of the government. While this probably describes many conflicts in Africa, especially those surrounding resources, it is unlikely that such a simplistic explanation is completely accurate.

The opportunity for profit is often measured by the presence of valuable, transferable resources such as oil and diamonds. The theoretical argument is that rebels contend with the government, not over policy or territory, but to allow for the extraction, sale, and distribution of resources that convey selective, material benefits to the members of a rebellion. While some conflicts (e.g., Angola, Ivory Coast and the Democratic Republic of Congo) include such behavior, resource extraction is rarely the stated goal of rebels and is unlikely to be the only consideration for the entire rebellion (Lujala 2009).

Low government capacity forms the other half of the opportunity argument. States with governments that cannot provide or govern a population are often associated with civil conflict, but the exact mechanism between the cause and effect is unclear. The opportunity argument suggests that potential rebels observe and take advantage of weak government capacity by locating themselves in difficult to reach areas, and compete with the state over the provision of public services (Collier et al. 2003).

Data on civil conflict as opportunity for profit is fragmented. The two largest datasets are the Correlates of War (COW) Project (Sarkees 2000) and the Armed Conflict Database (ACD) (Gleditsch et al 2002). These datasets differ on their definitions of conflict and the scope of their data. COW only includes civil conflicts that kill more than 1000 combatants, while ACD includes lower level conflicts that kill only 25 combatants per annum. The Correlates of War dataset covers conflicts from 1816 to the present, while the Armed Conflict data only cover conflicts from 1946 to the present. Arguably, the ACD data is more consistent and detailed while COW includes a greater range of data that is more commonly used in political science.

These civil conflict datasets are designed for quantitative analysis and, thus, it is initially important to distinguish between the large civil wars captured by the COW definition and the smaller conflicts included in ACD. The analysis of these data sets has shown that it is possible that the difference between large and small conflicts is not only size but also what causes these conflicts. For instance, policies designed to avoid the large wars covered in one definition may overlook the causes of smaller conflict. The datasets also include some less reliable measurements that may require additional data collection or exclusion. In fact, while data regarding combat-related casualties is typically very accurate, that on civilian casualty data is notoriously inaccurate. Similarly, the specific identities of rebels—both rebel individuals and rebel groups—are not well-defined in either COW or ACD. Information on the size, goals, and location of rebels typically represents a snapshot of the development of a conflict on the ground.

What this short discussion has shown is that the results and analysis that are produced by the civil conflict literature are only as good as the data they are based on. Fortunately, many academics recognize these shortcomings as a hindrance to both academic and policy-related goals and have attempted to collect better data on civil conflict. Cunningham, et al. (2009) have expanded the ACD to include more accurate information on rebel

groups. There are also several efforts to specify the location of politically salient events, including protests (Saleyhan et al. 2010) and peacekeeping forces (Raleigh and Hegre 2005), using GIS technology. In future, the increased quantity and quality of information may prove beneficial to both policy and academic pursuits.

Social movements and political violence

Social scientists have long been interested in the study of social movements, or “those sequences of contentious politics* that are based on the underlying social networks and resonant collective action frames, and which develop the capacity to maintain sustained challenges against powerful opponents” (Meyer and Tarrow 1998: 2). In other words, a social movement is a *group* action, either formally or informally organized, that is aimed at carrying out or resisting some sort of social change.

Sydney Tarrow, one of the foremost scholars in the social movements literature, contends that social movements are “used by people who lack regular access to institutions, who act in the name of new or unaccepted claims, and who behave in ways that fundamentally challenge others or authorities” (Meyer and Tarrow 1998: 3). In addition, they are “seldom under the control of a single leader or organization” but are rooted in “dense social networks and connective structures and draw on consensual and action-oriented cultural frameworks” to sustain their conflicts (ibid: 7).

Much of the research on social movements has been done studying civil rights, environmental groups, and political movements in advanced industrial democracies in Western Europe and the United States, where mass support was evident, the methods were mostly peaceful and the movement was partially sanctioned. Under this definition, insurgent groups are excluded from social movements because they do not pursue what scholars see as righteous causes, nor do they employ palatable tactics in pursuit of those causes. However, when we look past normative evaluations to the functional and structural characteristics of these phenomena, significant

* Contentious politics defines a type of political engagement in which “ordinary people, often in league with more influential citizens, join forces in confrontations with elites, authorities, and opponents” (Meyer and Tarrow 1998: 2). Contentious politics has been further developed in recent years in McAdam, Tarrow and Tilly (2001) and Tilly (2004).

similarities emerge, suggesting that insurgent organizations may be studied effectively under the social movement framework.

The political violence literature has had more experience in engaging with movements that produce outright violence, but it is only recently that scholars in this area have stopped treating strategies of violence as irrational and begun to consider violence as a logical outcome of contextual constraints. While most case studies focus on domestic groups and their activities, political violence is an umbrella concept covering all uses of violence that people believe are necessary to achieve their political goals. The following paragraphs present a brief review of theories on the causes for insurgency from both political violence and social movement scholarship.

Social theory and political violence scholarship on insurgency

Social movements

Political violence literature often treats grievances that spark a series of violent events as phenomena that are unique and irreproducible. The social movement literature does a better job of abstracting away from the particulars of the grievance in order to study how grievances interact with contextual factors (political, social, and cultural) to produce mass movements. Several major groups of theories try to explain why social movements come into being. Some have received more support than others as detailed below.

Mass Society Theory argues that individuals mobilize because they feel insignificant or socially isolated. Mobilization then becomes a way for people to feel a sense of social belonging that they would not have felt otherwise. This theory enjoys very little credibility today, especially as scholars have found that people are more likely to join organizations if someone they already know is a member. However, it is true that movement members often feel deepening senses of solidarity with their movement mates (Kornhauser 1959).

Deprivation Theory argues that people are more likely to organize a social movement if they are deprived of some good, service, or comfort. However, this theory does not clearly determine the key issue in a movement (Jenkins and Perrow 1977, Morrison 1978).

Structural-Strain Theory incorporates deprivation theory to explain the origins of social movements. According to structural-strain theory, the following steps conditions must exist for a social movement to be born and take root:

1. People believe that there are problems in society;
2. People experience some form of deprivation;
3. Some proposed set of solutions for these problems/deprivations is identified and spreads;
4. Some event catalyzes latent discontent among the population into organization; and
5. The organized movement attempts to engage with authorities: if the authorities are receptive, then the movement can continue to organize and achieve its goal; otherwise it may be repressed or ignored and the movement goes nowhere* (Smelser 1962).

Resource Mobilization Theory contends that social movements develop when key individuals *with grievances* (deprivation or otherwise) have sufficient resources to mobilize efficiently. This theory is intended to explain why some movements gain traction and others do not. (McCarthy and Zald 2001)

Political Process Theory emphasizes structural elements that make movement proliferation possible. While all people may experience deprivation or common grievances, it is only when they have sufficient organizational strength in the face of political opportunities (such as perceived vulnerabilities in the government) that a movement will flourish. This is analogous to the 'political opportunity structure' proposed to orient the pre-intervention analytical framework under development in the CREATE effort (McAdams, Tarrow and Tilly 2001).

Cultural Theory emphasizes the centrality of the idea of unfairness or injustice that movement participants must experience. In this model, people join a social movement because leaders organize ideas and symbols around a problem, how it is experienced, and how it may be addressed in a

* However, observers of the Iranian Revolution points out that perception of opportunities and assessments of the authority is an intensely subjective assessment (see Kurzman in McAdam and Snow 1997).

way that motivates participants in order to sustain the growth of a social movement (Ryan and Gamson 2006).

Political opportunity structure is a social movement-specific concept that evidences the interaction of structural factors which determine the cost of action and, consequently, the likelihood of conflict between actors (such as insurgents and the government). It is important to note that political opportunity structure emphasizes resources external to insurgent groups, particularly opportunities when the insurgents' anticipated cost of action is lower. This may manifest as identification of the point at which elites and authorities are most vulnerable; finding social and cultural frames that best resonate with recruits for solidarity; opportunities to link up with potential insurgent allies, and others.

Recruitment into insurgencies

While there is a growing literature on identifying the types of people more likely to join social movements (and participate in protests, land riots, etc), there is not a corresponding literature on identifying the types of people more likely to join possible insurgencies. Instead, political science has focused on the structural dynamics of how certain types of people are brought into the insurgent framework, socialized, and then recruited.

Recruitment does not happen in a vacuum, but social movements also do not spontaneously emerge out of the morass of human connections. The decision to join is very rarely an individual choice made in isolation. Strong ties to people already in the organization will often entice a person to join in solidarity. In addition, people who have had previous experience with violence are often more likely to join. Many prospective participants often have ideological reasons for joining up, such as continuing the fight in the name of distant (but revered) martyrs or ideals that they swear to defend. Social marginalization often enhances ideological devotion (Della Porta 1995).

Not all recruitment is ideological however. Cases have been documented in which the decision to aid or participate in a radical organization is much more pragmatic, based on fear of reprisal; on an opportunistic assessment of the prospective winner in a conflict between insurgents and government; and on an assessment of the respective organizational strengths based on the conduct of insurgent and government forces (Weinstein

2007). Generally, this is for non-ideological recruitment that changes based on a specific scenario.

Radicalization and insurgencies

An insurgent group may have had a legitimate front before disillusionment with government response or repression may force it to 'go underground' and often to radicalize (Della Porta 1995). Radicalization is often an unanticipated consequence of the underground group's attempt to stay alive and visible. While there is not a large body of theoretical work in ideological radicalization or how groups turn 'insurgent', we may be able to derive important generalizations from political violence case studies.

Both organizational and sociopolitical resources determine a group's trajectory in radicalization. Organizational resources influence a group's strategies: resources such as the pool of available participants and the skills of those participants will determine what a group is capable of doing to make itself heard. For example, groups that recruit among marginalized populations tend to use more militant, hierarchical organizational forms and are more likely to use violence to achieve their goals (Della Porta 1995: 109). Environmental resources are not explained very clearly in the literature, but seem to be those resources in society that are *not* accessible only by the movement. These may include a variety of structural or cultural factors that may be conducive to or hinder the actions of the movement.

Various organizations tend to fine tune their organizational structure and ideology to be more attractive to their targeted audiences. Della Porta notes that more radical groups tend to be more successful when recruiting among the more marginalized social groups (1995: 109). These choices are, however, short-sighted. While such recruitment strategies produce short term advantages, they often trap the organization into increasingly escalating their radicalization in order to remain "competitive", and make the adoption of increasingly violent repertoires more likely.

Radicalization also isolates a group. Often a radicalized group's ideology becomes "less functional as propaganda and increasingly oriented toward the integration of the militants..." [t]he adversary [becomes] less tangible, more immanent. Outside the organization there was only evil, and everything but the organization is evil" (Della Porta 1995: 133). This alternative reality may explain why it is difficult to mediate between authorities and

underground organizations as they have no common frame of reference as to what is considered reasonable.

For any action, there is a target audience. However, it may be very difficult to determine the target audience for an act of violence, particularly in a transnational setting. What are these acts of violence supposed to convey, and to whom? The use of violence often increases internal cohesion but isolates it from the external environment, but determining who comprises an organization's idea of the 'internal' and who comprises the external is a difficult proposition, and not an issue that has been addressed by the literature (Coser 1956). Lastly, with regard to the target audiences, Political Communications has studied how media messages are crafted and aimed at *different* publics, a literature which may be of use here (Asen 2003).

Cultural anthropology, state violence, and insurgency

If we define insurgency as acts of violence against an established state, then cultural anthropology began to study violence and conflict among groups and the state with the advent of the globalization of the capitalist economy and the worldwide trend in former colonies to create new autonomous nations. Among this literature, Begoña Aretxaga's review essay on the anthropology of the state points to how the early scholars of globalization viewed these changes with trepidation as the erasure of state borders and economies by neoliberal market forces seemed to foretell the weakening, if not the disappearance, of the state. Instead, the state was reinforced as indispensable and desirable by the rise of voluble protest movements from marginalized populations in the developing world demanding the rights and benefits of citizenship (Aretxaga 2003: 394).

This concept of insurgency as a group action with a common goal is similar to the definition proposed by the social movement literature. In fact, cultural anthropology contributed a substantial body of work exploring insurgent movements and the construction of citizenship by marginal populations that engages with the social movement scholarship (Jackson and Warren 2005). This literature comes, for the most part, out of Latin American anthropology where a number of social movements centered on a new subjective construction of the indigenous self took place. In this work, indigeneity becomes a political instead of an ethnic identity and indigenous peoples assert their claims to citizenship rights and national belonging in novel ways through both violent and peaceful demonstrations against the state.

Partly due to this work on the proliferation of violent demonstrations, cultural anthropologists found it useful to study insurgency and its effects through the connections between the state and violence. Exemplary of this work is the collection edited by Fernando Coronil and Julie Skurski, titled *States of Violence*, where the authors define violence as “a complex set of practices where the constitution and denial of communal identities in the public and private spheres define the state” (2006: 2). The long-term ethnographic study by anthropologist David Stoll on the Guatemalan guerrilla war illustrates a situation where state violence affected the outcome of an insurgency by analyzing the situation of peasants who were caught between the guerrilla and the state armies in the mountains of this country (1993: ix). Stoll’s study examines the effect of indiscriminate violence and brutal reprisals by the Guatemalan military against noncombatants and concludes that although at times this was an effective counterinsurgency method in that it prevented the peasant communities from harboring or sympathizing with the communist guerrillas, at other times people would join the guerrilla against the government because they required protection from state violence (1993: 145). Cultural anthropology literature on insurgent and counterinsurgent practices, such as those detailed by Stoll’s study, is based on the idea that violence has become a constitutive part of modern states; a notion that is further discussed in the following section.

The anthropology of Africa and insurgency

Given the prevalence of insurgent movements and civil war in the African continent, cultural anthropologists working in these countries contributed to the discussion on insurgency from a variety of perspectives. The work of Africanist anthropologists working in situations of conflict shows how a fragile state, by repressing and opposing insurgent movements, defines itself and its mission. This is the line followed by scholars in this discipline who write on the dissolution of the Somalian state and describe how identity formation in Darfur affected violence in the Republic of Sudan to name a few representative examples (Besteman 1996; De Waal 2005). In fact, even after a violent conflict such as a civil war is officially over, insurgent movements can continue to exist based on this defining idea of opposing state oppression, as demonstrated by work with civilian populations in Sierra Leone and Liberia (Hoffman 2004). In other words, constituting a new state or strengthening a fragile state can be the cause for initiating an insurgent movement or upholding an existing one.

What else do anthropologists believe can cause insurgency? Ethnographers who carried out long-term fieldwork in Africa have explored how the violence and disease that result from droughts and other natural disasters that affect the production and distribution of food and water caused insurgent movements (Messer 2001; 2002). More specifically, the work of anthropologist Ellen Messer describes how the disruption and interruption of food distribution is both deployed as a weapon and as a recruitment mechanism for insurgent groups. She also examines how state policies and foreign aid can exacerbate these situations if the relation between the insurgent movements and the local population is not clearly understood, given that oftentimes these have reached some type of collaboration.

The critical importance of understanding the local context to either prevent or foment insurgency is also argued by ethnographers in research on the origin of insurgent activities in the Sahel region of Mali (Lecocq and Schrijver 2007). These authors demonstrate how much of the insurgent activity in the Sahara, including state-rebellion by Tuareg groups and transnational drug and arms smuggling, is organized using word-of-mouth and the circulation of rumors in what some call the Saharan telegraph (*telegraph saherien*). Ignoring these communications can have disastrous consequences for foreign intervention, including renewed confrontations, and can result in the disruption of a tenuous balance between the state and the insurgent organizations.

In regards to the relation of extraction of resources in Africa and insurgency, the existing literature in anthropology points to oil and mining as the two most important resources fought over by both insurgent groups and state governments. The state of oil production and distribution in Africa, instead of being conducive to peace and prosperity because of the wealth it generates, engenders insurgency and violence (Reyna 2009). Reyna states that this is because oil finances armament and technology in warfare and other confrontations. A similar case is made for the diamond trade in South Africa that explains how diamonds are part of a transnational trade that finances rebel movements across the continent (Moodie 1992).

There has also been important work done on the issue of refugees and how these help or hinder insurgency. Long-established refugee camps in Africa, anthropologist Liisa Malkki tells us, are zones of asylum where refugees are protected as often as the general population is protected *from* the refugees (2002). Refugees from these camps are just as likely to end up mi-

grating to refugee communities in the developed world as returning to their home country or eking out an existence in these camps (Daniel 2002). The close living conditions of refugees lead to the forging of strong bonds and the reinforcement of ideologies that sustain and encourage insurgency against the state that harmed the refugees. This also explains the existence of the mailing of remittances by displaced communities of refugees in the diaspora who send a steady stream of funds back to their families in Africa whose members just as often as not use this money to finance insurgent activities.

Insurgent groups oftentimes base their justification to fight or oppose the state on ideological grounds; religious, political, ethnic, or other. Anthropology's area of expertise is in this area of identity construction. There has been some work by anthropologists who study Africa that discusses identity and its links to insurgency, specifically in regards to "autochthony" or a sense of belonging to a place. In many places in Africa there is a resurgence of autochthonous groups who virulently oppose anyone who is considered an outsider or stranger to that region. A sense of communal belonging is created by the fact that a person was born to the region and can be carried as far as tracing several generations of ancestors who also lived and died in the area. These groups can either ally with the state or join against it in insurgent movements depending on which group claims autochthony in the region (Ceuppens and Geschiere 2005).

Summary of contributions to the literature on insurgency from anthropology

For the purpose of CREATE's efforts to gain an understanding of the social science literature on insurgency in Africa, we can sum up cultural anthropology's contribution to this topic as follows:

- Situations in which a state is weak due to its recent constitution or due to an ongoing situation of conflict are situations where insurgency thrives.
- Natural resources such as land and water and the distribution of food can help create insurgent movements and/or support existing insurgencies as members of these groups deploy these resources as a weapon, or use them to recruit new members.
- Other natural resources such as oil and diamonds can help finance insurgent movements, directly or indirectly.

- Refugee communities in the diaspora can also fund insurgent movements as part of a process in which bonds within the insurgent populations are forged and maintained.
- A sense of belonging to a place (autochthony) can be used to band a people around an insurgent movement or in support of the governing state.

Anthropology deals with insurgency indirectly through the lived experiences of the people in the insurgent movements, or through those of the civilian populations or state officials affected by the insurgencies. Because of this, ethnographers will provide theories on the causes of insurgency for the specific group of people with whom they worked. The value of ethnography is the wealth of data for understanding particular insurgents and those with whom they interact. Conversely, its weakness is that not every single insurgent movement has undergone ethnographic study. Ethnography also suggests the range of institutional and behavioral factors that may contribute to the production and maintenance of insurgency. The exploratory nature of ethnography yields information to confirm existing theories or to suggest the need for new theory development. For purposes of the CREATE project, ethnography can best contribute to our analysis of insurgency with data on a case-by-case basis.

Terrorism

Clarity of terms and definitions

This review of academic production on terrorism collects work from social scientists, mainly from political science, who examine this phenomenon. Terrorism and insurgency are often confused with each other conceptually and, as with insurgency, social science provides conflicting definitions for this term. The best choice for an authoritative understanding of terrorism thus comes from articles that look to a body of definitions in hope of greater understanding. We can deploy two strategies in this task, either formulating a maximal definition that attempts to produce the most detailed and specific picture of terrorism, or distilling a minimal one that looks for the one crucial element that all the definitions of terrorism have in common.

One maximal definition is: “Terrorism is an anxiety-inspiring method of repeated violent actions employed by (semi-) clandestine individual, group, or state actors, for idiosyncratic, criminal or political reasons, whereby—in contrast to assassination—the direct targets of violence are

not the main targets. The immediate human victims of violence are generally chosen randomly (targets of opportunity) or selectively (representative or symbolic targets) from a target population, and serve as message generators. Threat-and violence-based communication processes between terrorist (organization), (imperiled) victims, and main targets are used to manipulate the main target (audience(s)), turning it into a target of terror, a target of demands, or a target of attention, depending on whether intimidation, coercion, or propaganda is primarily sought” (Schmid and Jongman 2005).

On one hand, this definition leaves far too many options open for what can be defined as terrorism. The rationale for terrorism and the methods used by terrorists are very broad, and allow for a wide number of cases to be considered. However, it is explicit about the types of activities defined, and highlights the role of terrorism in generating anxiety, how it is distinct from assassination, and how terrorism works to deliver a message. Above all, terrorism is a method of communication.

This emphasis on communication is echoed in a minimal definition that deduces that terrorism is best defined as “a politically motivated tactic involving the threat or use of force or violence in which the pursuit of publicity plays a significant role” (Weinberg, et al. 2004). This definition again limits terrorism to political goals, but gives less guidance as to how these goals are realized.

In using these two definitions of terrorism—and paying special attention to their similarities—terrorism should be seen as a type of insurgency. However, terrorism adds an additional requirement, that of generating anxiety through its actions. This is particularly true if we look to insurgency as a movement with particular goals.

Methodological problems

Interest in terrorism studies greatly increased in the years following the terrorist attacks of September 11, 2001. Unlike some academic fields, terrorism studies have enjoyed a true cross-disciplinary effort to understand “terror, terrorism, and terrorists” (Tilly 2004). However, the study of terrorism is fraught with methodological difficulties, largely due to the covert nature of the subject of study and the danger involved in doing field research.

There are a number of important points that the researcher must keep in mind when studying terrorism. The first and most important is the screening mechanism that terrorist groups employ when accepting members into a cell, or ordering them to perform terrorist acts. First, there is empirical evidence showing that not everyone who wants to become a terrorist is accepted. Terrorist cells are strategic organizations that are concerned with the proper use of their human and material capital. Only the best applicants within a pool of potential terrorists will be chosen to become one. These screenings allow for more efficient, secure, and successful inter-group operations (Bueno de Mesquita 2005).

What this screening means for the researcher is that seeking causes for terrorism by looking at the individual terrorist will not lead to successful conclusions. The strategic picking-of-operatives creates an unrepresentative sample of terrorist supporters that does not include the hundreds of potential supporters that lie within a given population. It would be akin to judging the characteristics of US military support in the civilian population by only looking at enlisted soldiers. Qualitative research in the realm of terrorism studies should be particularly wary of drawing inferences about a terrorist support base from those who are actual terrorists.

There is a strong critique on the existing terrorist literature for its failure to maintain a clear distinction between countries that produce terrorists and countries in which terrorists conduct terrorist acts, and ask what it means for a state to be more prone towards terrorism. Too often, a country being prone towards terrorist attack will be theoretically confused with a country being prone towards terrorist formation (Krueger and Laitin 2004). These authors note that this distinction is particularly important, as countries that are attractive training grounds for terrorists, such as Saudi Arabia, are not always prone to inviting terrorist attacks, and vice-versa; as in the case of Italy or Finland. When discussing international terrorism, these authors recommend that full understandings are best created when considering “who, to whom”. This prevents researchers from looking for causes of terrorism in the wrong places, and provides an easy way to evaluate cases of international terrorism.

Theories of terrorist formation: institutional

A number of institutional level factors are consistently discussed in the academic literature with regards to the formation and support of terrorist groups. Looking first at the most contentious, education and in-

come/poverty are two popular correlates in these studies. However, the literature is inconclusive as to their significance. It is likely that the problem of screening is to blame for these inconsistencies, as those who actually become terrorists are more educated and wealthier than those that remain in the population (Bueno de Mesquita 2005).

Those who view education and income/poverty as important predictors justify their support using rational choice theory. Bueno de Mesquita's study frames the choice to support or become a terrorist as a cost-benefit analysis between the terrorist lifestyle and economic activity. Without sufficient education and an income that can meet the cost of living, the high-risk lifestyle of the terrorist becomes a more attractive option in comparison (ibid). This author believes that people constantly make these rational judgments, and that **if** terrorism offers more benefits than lawful employment, people will choose to support and engage in terrorism. The major drawback of this theory is a relative lack of empirical support, possibly due to screening on the part of potential subjects. Studies asking people about their hypothetical choices when presented with a chance to support terrorism are likely to introduce a strong bias towards socially desirable results.

Characteristics of a country's political system are often considered as some of the strongest institutional indicators as to the risk of terrorist-group formation. There are a number of different elements here that are important to touch upon; first of which will be government type. Risk for terrorist formation is best viewed as an inverted U shape when traveling along a continuum between authoritarianism and democracy (Kruger and Laitin 2004; Goldstone et al 2010; Fearon and Laitin 2003; Sirseloudi 2005). Pure authoritarian countries use the might of their centralized state to often effectively suppress the formation of dissident groups. Similarly, within democracies, social freedoms and high standard of living suppress the desire to form dissident or terrorist groups. It is in states that fall between these two extremes regime types that terrorists have the best chance of forming groups. In these "semi-democracies", the state is not strong enough to effectively wage a counterterrorism campaign and allows for free association of peoples without the corresponding freedoms or standards of living found in pure democracies. These generally weak governments provide the perfect conditions for terrorist formation and growth.

Additionally, a number of statistical studies have noted the importance of civil rights in discouraging acts of terrorism. The extent of human rights

protection is a telling factor in determining the creation rate of perceived enemies of the state (Kruger and Laitin 2004; Schmid 2005). This is due to state efficiency and control. Human rights are often luxuries that only safe and stable governments can afford to extend to their people. True autocrats hide and jockey between interest groups and parties in a constant search regime safety and stability. When citizens are not trusted with human rights, they may turn to other outlets of political expression, such as terrorism and crime. Kruger and Latin's results were drawn from the Freedom House annual survey, and Schmid's were pulled from a variety of expert terrorist databases, including ITERATE*.

A third institutional factor, more tactical than the others, is the importance of counterterrorism policies. A number of have noted the importance past counterterrorism policies have on predicting present and future terrorist formation and actions scholars (Bueno de Mesquita 2005; Bueno de Mesquita and Dickson 2007; Fearon and Laitin 2003). What makes counterterrorism policy a particularly compelling predictor is that it represents action by the responding government that is recent, physical, and local. The worst sorts of offending policy mentioned by Bueno de Mesquita are those types of counterterrorism crackdowns that are too broad and punish indiscriminately (2005). This scholar notes that the presence of counterterrorism actions that hamper economic growth can predict terrorist formation. The policies do much more harm than good, forcing those people that may have found an otherwise lawful job to partake in illegal activities in order to survive.

A final, more international, factor in terrorist formation is the effect of neighboring nations on a country. Studies on political instability review this neighborhood effect (Fearon and Laitin's 2003; Goldstone et al. 2010). Both of these research studies found that being situated in a bad neighborhood was a significant risk factor for a state developing its own insurgencies, with the Goldstone piece providing the most convincing results. Violence, it seems, is highly contagious. In fact, Fearon and Laitin describe the causal process, noting that these conflicts increase the availability of arms, support, and seasoned fighters within the region, which increases the chance these flows may move to neighboring countries.

* Freedom House is a think tank that publishes a popular yearly evaluation of freedom and civil rights in the world. ITERATE (International Terrorism: Attributes of Terrorist Events) is one of the oldest and most comprehensive terrorist event databases used by scholars today.

Theories of terrorist formation: behavioral

The alternate school of thought in discussing terrorist formation is to frame it in terms of behavioral appeals to the individual. Here, the opportunity costs are not as important as the grievances suffered by the individual. One of the more prominent behavioral theories of terrorist formation is known as the “frustration-aggression” hypothesis or FAH (Horgan 2003, Turk 2004). Drawing from the empirical evidence about who actually participates in terrorist groups, FAH states that support of terrorism is actually greater among the educated and the wealthy. The theory states that educated and affluent citizens in poor countries become frustrated that they are unable to use their wealth and influence to change their surroundings (because they are denied voting rights, or an occupying power has denied said change, or due to government restrictions, etc.). These educated people translate their frustration into aggression through their membership and support of terrorist groups, who work outside of the national and global system. Terrorist groups in turn seek to provide support that their actions are causing said change, vying for the support and talents of this valuable group of patrons.

Another consistent finding among the behavioral literature is the importance of the rule of law. Choi discusses the importance of non-violent means in which to resolve conflicts (2010). Similar to the FAH, Choi argues that people resort to terrorist tactics out of frustration that they are not able to adequately influence their environment. In a semi-democracy, where there is not a strong legal system present to enforce the rule of law, there is no institution to which people can take their grievances for resolution. Without this ability, people take justice into their own hands and conduct acts of terrorism. When effective, low-risk systems of justice are provided to people, acts of terrorism and terrorist support will decline. Choi notes here that a socialization period is needed before people set aside their willingness to conduct violence and embrace this system of peaceful conflict resolution; a fact that other scholars have noted as important (Sirseldoudi 2005). Choi also states the distinction here between rule of law and elections. Tying back into issues of government strength, this author argues that elections/democracy without the rule of law is only going to exacerbate the problem.

Inability to resolve conflicts peacefully is not the only way to foster grievances. Indiscriminate, broad-stroke styles of counterterrorist operations are excellent ways to turn a population towards supporting enemies of the

state. Innocent citizens quickly become resentful having to endure the conditions of the counterterrorist operation and, consequently, blame the state (Bueno de Mesquita and Dickson 2007). These authors go further and outline how terrorist groups strategically tempt governments into overreacting with their counter-terrorism policies. Such mistakes only make the terrorist groups stronger. A discussion ensues on how terrorists tend to congregate in urban centers where conducting counterterrorism activities are particularly expensive and challenging. Terrorists above all seek to court the loyalty of the native population, and therefore constantly attempt to trick the state into harming its citizens (Fearon and Laitin, 2003).

Organized crime

The distinction between insurgencies and international organized crime deserves discussion. While the conditions that spur support of insurgent and criminal groups are similar, their actions and interests are quite different (Bovenkerk and Chakra 2005). Both insurgents and international criminal groups seek to operate outside of the boundaries of the law, thus undermining state sovereignty. Additionally, insurgent and criminal groups operate under Bueno de Mesquita's tradeoff theory between legal and illegal activities (2005). If there is ample opportunity to create wealth through lawful economic activity, both groups would lose membership and support.

The differences between insurgencies and organized crime can be found in their goals and methods. International criminal organizations are primarily profit-driven groups. The risk they undergo in their operations must be in some way commensurate with the reward they expect to get. This is distinctly different from the more ideological and political positions often taken by insurgent groups. Additionally, insurgent groups attempt to legitimize themselves and court public opinion by their actions and polished group images (Bovenkerk and Chakra 2005). While insurgencies may cooperate with international criminal organizations for funding (eg: opium growing and the drug trade in Afghanistan), insurgent groups seek to keep these connections hidden or downplayed, so as not to mar their public image and claim of legitimacy.

Within the various components of the terrorism literature, a shared theme emerges that tends to pit institutional versus behavioral understandings of insurgency formation against each other. This debate boils down to a dis-

cussion about the role of human actors and the importance of their environment. Under the institutionalist understanding, insurgency is primarily a product of large-scale social forces. Humans are generally considered to be rational or semi-rational actors that react to certain situations in similar ways, all things held equal. The understanding of insurgency as a tactic tends to complement this reality, as a tactic is born primarily of material realities. Insurgents only indulge in guerrilla war because it is the most logical strategy to use given their situation compared to the national government. Factors that the institutionalist would be most concerned with would include international factors such as borders, the costs and benefits of doing insurgency, and the role of resources in pushing people towards forming insurgency.

The behavioralist would disagree at such an elementary understanding of human interaction. While the environment in which human actors operate is important, it is the actor's particular understanding of the events that surround him or her that drives said actors' actions. This explains the variability of responses among people to similar events. Behavioralism as an understanding of insurgency instead focuses on these perceptions. Behaviorists try to pinpoint what exactly is the goal or desire that is motivating the actor to, indeed, act versus do nothing. Here grievances play a large role, as hypothetically there is some undesired state of affairs that pushes people towards action. Explanations of insurgency then could be as elementary as expressing fears or uneasiness at a general situation. This understanding harmonizes well with the understanding of insurgency as goal-oriented. Whether explained through institutional or behavioral theory, or as part of organized crime, terrorism is a type of insurgency where often there is a particularly high level of perception of grievance that motivates the extreme violent actions that take place internationally, across political boundaries.

Public policy literature

The public policy literature recognizes insurgency as a coherent sociopolitical entity, providing an organizational structure under which clusters of people and their attendant incidences of violence can be more effectively linked and studied. In the past, extensive work within this literature focused heavily on building case studies of *individual* insurgencies, but the increased pace of globalization that decentralized the control of information dissemination and decreased its cost has created a new urgency in understanding the general characteristics of new post-Cold War conflict.

Nevertheless, current research coverage is highly uneven, with greater attention focused on areas that may be helpful to understand and counteract existing insurgency instead of aiding our understanding of the factors helpful in preventing its occurrence.

Definition

There is a general consensus in the policy literature on the definition of insurgency, despite some dissenting voices (Tan 2007; Rosenau 2007*). One of the most representative definitions from this body of scholarly work is the characterization by O'Neill that describes insurgency as "a struggle between a nonruling group and the ruling authorities in which the nonruling group consciously uses *political* resources (e.g., organizational expertise, propaganda, and demonstrations) and *violence* to destroy, reformulate, or sustain the basis of legitimacy of one or more aspects of politics" (1990: 13). Government publications have also followed this convention as seen in the *Guide to the Analysis of Insurgency* which defines insurgency as "a protracted political-military struggle directed toward subverting or displacing the legitimacy of a constituted government or occupying power and completely or partially controlling the resources of a territory through the use of irregular military forces and illegal political organizations" (2012: 1).

Despite individual embellishments with respect to the time frame or the degree of violence of the conflict, there exist key commonalities in both the government and the policy academic definitions. First, both types of definitions characterize insurgency as a *systemic* conflict aimed at reforming or replacing the existing state authority. Second, the authors acknowledge that insurgency is not merely a military conflict, but also a sociopolitical phenomenon.

The site of controversy between definitions in public policy lies in being able to clearly differentiate insurgency from other key concepts in conflict, such as "guerilla warfare" and "terrorism". Most authors, for example, acknowledge that Mao Zedong first proposed the use of guerilla warfare to

* Tan goes against the most common modern usage and defines insurgency as "violence aimed at establishing bases that are secure from the control of the central government and which would enable the establishment of what amounts to a counter-government", instead using terrorism, or "the use of violence, usually against selected urban or human targets, to press for ethno-nationalist or religious objectives" to stand in the government's place (2007: 4). Rosenau argues that insurgency is simply another tactic that non-state actors can deploy to achieve political goals (2007: 2).

help achieve some political objective (Hammes 2005), but treatments differ on whether guerilla warfare and insurgency are interchangeable terms, or whether guerilla warfare merely constitutes a tactic in the insurgent arsenal. Hammes equates guerilla warfare as a previous stage of insurgency during which warfare tactics dominated, as opposed to current thinking that emphasizes the dominance of political objectives (2005: 3).

The line between terrorism and insurgency is similarly unclear, with greater disagreement among authors on whether terrorism constitutes a tactic, a term interchangeable with insurgency, or even a different *type* of sociopolitical phenomenon. Bandura sees no difference between simple political violence and terrorism which he defines as “violent acts that dissident groups direct surreptitiously at officials of regimes to force a social or political regime” (1998: 162). Similarly, O’Neill argues that terrorism “is a form of warfare in which violence is directed primarily against noncombatants...rather than operational military and police forces or economic assets” (1990: 24), but then goes on to assert that insurgent terrorism is deployed differently, as it is “purposeful, rather than mindless, violence because [insurgent] terrorists seek to achieve specific long-term, intermediate, and short-term goals” (ibid). In making this distinction, O’Neill echoes later authors who distinguish between insurgents and terrorists on the basis of objectives. In this idealized dichotomy, while terrorists and insurgents *both* employ violence, terrorists wreak havoc for the sake of chaos and not in the pursuit of any long-term goals (Morris 2005; O’Neill 1990). Metz puts it more bluntly, when he assesses that “[p]ure terrorist movements are nearly always ones which are incapable of implementing a full scale strategy of insurgency” (2012: 38).

Classification

Throughout its history, public policy literature has set great store in creating different typologies to classify insurgency. Earlier classifications were based on the phenomenon’s operating objectives. In such an early analytical framework, O’Neill proposes seven ideal types of insurgency: anarchist, egalitarian, traditionalist, pluralist, secessionist, reformist and preservationist (1990: 17). While in the early 1990s some authors predicted that spiritualist or commercialist insurgencies would become dominant in the post-Cold War era primarily as a response to globalization pressures (Metz 1993), more recent literature continue to focus on political insurgency that they analyze based on functionality or structural features (Bunker 2012). In this vein, Mackinlay offers four distinct categories of insurgency that he

names lumpen, clan, popular, and global, based on its “practical manifestation, as well as the rhetoric of its motives and aspirations” (2002: 43). Likewise, the *Routledge Handbook of Insurgency and Counterinsurgency*, though not offering a typology, proposes that insurgencies can be analyzed as varying in three dimensions: functional focus (how the insurgency prioritizes resource generation, violence and the achievement of political goals), organizational coherence (a continuum with a formal hierarchy at one end, and informal semi-autonomous cells at the other) and objective (a continuum ranging between simple survival of the group to the achievement of some political goal) (Rich and Duyvesteyn 2012: 3). Intriguingly, as an example of a Cold War holdover, the recent *Guide to the Analysis of Insurgency* continues to classify insurgency according to a typology of goals or objectives including revolutionary, reformist, separatist, resistance and commercialist conflicts (2012: 3).

The post-cold war insurgency: its origins and its objectives

Scholars generally agree that insurgencies in the post-Cold War era, sometimes called the “fourth generation warfare” or “twenty-first century insurgency”, look very different from their classical Maoist counterparts. “While Maoist insurgencies were characterized by a clear ideology where the target of violence was a national state with a binary view of the audiences involved, post-Maoism relies on multiple audiences, a multiplicity of actors, and a proliferation of communications and virtual communities” (Mackinlay 2002: 47). Structurally, Richa and Duyvesteyn assert that the newer variant is a “network type of insurgency”, where “the challengers almost exclusively come from the ruling circles themselves” (2012: 360). In addition, these authors conclude that “[g]lobal insurgency does not display a centre of gravity that can be targeted by military and political instruments as such” (ibid: 12). However, the new insurgencies do share objectives with the Maoist form in the common urge to “create a shadow government which will ultimately replace the pre-existing government of a state through a phased process of resistance such as that defined by strategic defense, stalemate and eventual strategic offence” (Bunker 2012: 45).

Unlike earlier types of conflict or even the Maoist insurgency, the objective in twenty-first century insurgency is not to destroy the enemy’s armed forces or the capacity to regenerate them (Hammes 2005: 2). Rather, the new insurgent strategy is to “[seek] to postpone resolution of the conflict while it adjusts the power balance in its favour” (ibid: 38). No decisive battles need be won when the insurgency operates on an information strategy

designed to generate *influence* over population groups (Metz 1993; Kilcullen 2006; Packer 2006). In fact, Hammes continues, although “tailored for various audiences, each message is designed to achieve the basic purpose of war: to change an opponent's political position on a matter of national interest” (2005: 2).

Why, then, is there such a difference in structure and strategy between the Maoist and post-Maoist insurgency? Metz notes that “[i]nsurgency is born, lives and dies in a specific strategic, historical, and psychological context” (1993: 1). The post-Maoist insurgency emerged in a time of great upheaval, in which the pace of globalization increased sharply, and its attendant effects were also amplified due to greater interconnectivity. Mackinlay asserts that advances in transportation technology, the growth of more powerful and cheaper communications systems and the deregulation of the international economy had the greatest effects on the growth and form of insurgency as we observe it today (2002: 5). In particular, scholars recognize the growth of communications technology as key in shaping the new insurgency and differentiating it from the more classic Maoist version. Improved communications connect and mobilize citizens with similar grievances, assist them in finding weapons and knowledge, and in turn provide an outlet for their grievances that cannot be suppressed easily (Metz 1993: 40). The information-saturated environment has also forced structural changes to insurgent groups. In it, “organizations become less rigidly hierarchical, taking the form of decentralized networks or webs of nodes” to ensure rapid adaptability, thereby maximizing their operating efficiency as well as survivability (ibid: 12).

A common thread in twenty-first century insurgencies is the centrality they attribute to political challenge that can arise out of a lack of effective governance, security, and lack of political access (Rich and Duyvesteyn 2012: 360). While research in this area remains scarce and poorly documented*, most scholars agree that deprivation plays a large role in stirring up initial resentments. Some authors assert that insurgency proliferates in the Third World, where modernization has destroyed traditional systems of governance and beliefs without providing adequate replacements, thereby amplifying tensions and conflicts (Metz 1993: 3; Tan 2007: 27). Beckett builds on this idea that hybrid states—part autocracy, part democ-

* Many of the authors cite “root causes” of insurgency without attribution, leaving it impossible to determine the provenance of their knowledge.

racy—are more prone to conflict than pure autocracies or democracies and asserts that intra-state conflicts, such as insurgencies, increase where state systems remain underdeveloped (Beckett 2012: 25).

Lastly, what shapes insurgencies today is that the pace of societal change outpaces the development of political institutions, which gives rise to tensions given that the expectations of the population may not be met (Heaton and Alberts 1990; Metz 1993; O'Neill 1990). In this regard the maldistribution of wealth among classes leads to demands of change, but these demands are met with government repression, which in turn radicalizes and mobilizes the population to try to achieve those demands by force. More generally, tensions usually create conditions favorable to the formation of an insurgency “when a group decides that the gap between their political expectations and the opportunities afforded them is unacceptable and can only be remedied by force” (Metz 1993: 1).

Recruitment and operating logic

Two schools of thought, often complementary to each other, explain why people join insurgencies. In the first, scholars theorize that deprivation and governmental oppression inflames people’s emotions and makes them more amenable to the insurgency. In this scenario, people join because it is an opportunity to do something meaningful with their lives and/or to strike back against oppressors who are at fault, either real or imaginary, for their current misery.

Different scholars work at different levels of analysis. Metz generally theorizes at a very abstract level, tying the people’s malaise back to the monolithic force of modernization. He argues that “modernization tends to destroy traditional value systems without a fully developed and appealing replacement...[this] often leads to some degree of anomie – a widespread sense of normlessness bordering on moral chaos” for participants in the system. Thus, consequences of such a loss can manifest as “frustration and a propensity to look toward ideologies, some of them violent, for alternative value systems” (1993: 3). To the recruit, “to be an insurgent was seen as noble, a gesture of self-sacrifice, thus appealing to the idealism which was particularly powerful among the youth as they looked for new frameworks of identity and order to replace [crumbling] traditional ones” (ibid: 39).

Other, more recent, works in the same strain of literature propose economic or political circumstances that are more immediate to a person's motivation for participation. For example, Metz and Millen draw upon an 'inherent dislike' of outsiders (especially occupiers) to explain why citizens join insurgencies. "Insurgents inspire resistance and recruitment by defiance, particularly among young males with the volatile combination of boredom, anger, and lack of purpose....[It] can provide a sense of adventure, excitement, and meaning that transcends its political objectives...Thus, the greater the pool of bored, angry, unoccupied young men in a society, the more fruitful ground for insurgent organizers to work" (Metz and Millen 2004: 4).

As counterpoint, the second school of thought argues that idealism isn't necessarily the motivating force for participation. Abrahms uses the natural systems model to argue that "people participate in...organizations for the social solidarity, not for their political return" (2008: 94). He finds that people join insurgencies and other similar groups because they are socially connected with its members. Whether the members and recruits shared the same values, such as the same dislike of outsiders, is often a secondary consideration. This school cannot explain the origins of an insurgency, as recruitment in this framework is dependent on *already* knowing some of its members. Nevertheless, this hypothesis enjoys great empirical validation with regard to recruiting by existing insurgencies.

Investigatory frameworks

To close this section on the thoughts of policy scholars and government agencies on policy, we will point to the two most influential frameworks for analyzing insurgency from this body of literature. The first, formulated by Bard O'Neill (O'Neill, Heaton and Alberts 1980; O'Neill 1990), presents six major factors for analysis: popular support, organization, cohesion, external support, environment/contextual conditions, and government role that will have a major bearing on the outcome of insurgent conflicts. His framework resembles the PIAF in that it recognizes that insurgents interact with multiple actors (governments, external supporters, popular support) in a local terrain. In other words, O'Neill recognizes and accounts for the polycentricity of power possible in a geographic space. The complex interactions among actors— or the centers of power—in this environment will determine the outcome.

In contrast, *The Guide to the Analysis of Insurgency* presents the second investigatory framework; a relatively myopic effort that focuses only on insurgent and government actions and counteractions. This is a suboptimal analytical framework, as the narrow focus on the two "sides" cuts out potential interactions with other important actors in the vicinity of the conflict. In its limited focus, this framework seems complementary to the "center of gravity" school of thought of counterinsurgency. The flaws in this line of thinking are that the framework can become too dependent on finding and addressing *one* center of power that is counter to the government, when in reality multiple centers of power can co-exist.

Concluding remarks

The social sciences have much to contribute to the study of insurgency. Literature on civil conflict in political science informs the tactical end of insurgency, such as what conditions on the ground favor insurgents, and what tactics they use when opposing the government. Literature on social movements sheds light into how these groups form and what the internal dynamics look like within them. Cultural anthropology sets the phenomenon of insurgency into a larger frame, explaining how it affects social interactions in general and how this can relate to state strength. Terrorism studies inform the study of insurgency as to the nature of one of its more scrutinized forms and, lastly, policy studies bridge the more applied government documents that address insurgency with the work of analysts and intellectuals who attempt to describe and explain this phenomenon based on a cumulative history of experiences of intra-state conflict.

The different characterizations of insurgency and theories from social science that attempt to describe the creation and maintenance of this phenomenon and that have been detailed in this document are meant to complement CREATE's identification of the factors that define potentially violent conflicts, their government and non-state actors, and the ideologies and grievances that motivate these conflicts. These factors ultimately answer *what* are the components of insurgency, *who* participates in insurgency, and *why* insurgency takes place. Military doctrine has worked on and continues to research what the components and who are the actors of a particular insurgency. A framework identifying why the insurgency erupted and how it works and, more importantly, how it can be prevented or stopped are what CREATE will contribute to civil-military operations through the review and scrutiny of general social science theory as detailed in the present document. A complementary task to this general review that

constitutes an additional aspect of CREATE's contribution will come from the examination of situation-specific social science literature such as scholarly works on the production and maintenance of insurgency in specific geographic locations in, for instance, the African continent. What emerges from the present document is that bridging the production of knowledge in both the academic and military spheres with projects such as CREATE is a critical necessity in the study of twenty-first century violent conflicts.

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Appendix D: Development of the Factor Map

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Development steps

The Factor Map is the analytical framework for CREATE. The map visually represents the factors that contribute to the production and maintenance of insurgency through a downward-branching hierarchical structure. The relationships between factors are supported by literature and articulated in linking phrases such as “gives rise to”, “results in”, “is required by”, or “contributes to”. The literature review was limited to Africa. The development process involved five steps: (1) identify concepts that may contribute to the production and maintenance of insurgency in Africa; (2) systematically collect literature to support or refute these hypotheses; (3) sort concepts based on how the literature said they contribute to the production and maintenance of insurgency; (4) visually map the concepts as factors that contribute to the production and maintenance of insurgency; and (5) solicit expert review of the Factor Map and refine factor linkages based on extended literature searches. The following pages will walk readers through the steps.

Step 1 | Potential factors

A multidisciplinary team (composed of political scientists, sociologists, urban planners, engineers, agricultural/public health professionals, and modelers) brainstormed and discussed concepts that could potentially contribute to the production and maintenance of insurgency. A variety of scenarios were considered to help draw out relevant notions until all team members were satisfied. The list was finalized as 83 of the most pertinent concepts that might contribute to the production and maintenance of insurgency (Figure D1). Annex A shows the team’s hypotheses regarding

* 1 = ERDC/CERL, 2=The Pertan Group, Champaign, IL, 3 = University of Illinois at Urbana-Champaign.

how each concept might contribute to the production and maintenance of insurgency.

Figure D1. Concepts that may contribute to the creation and maintenance of insurgency.

access to capital	elite approval	inter-group relationships	public services
access to weapons	energy	internal actors	regime type
agriculture	ethnicity	military investment	religion
built environment	exposure to information	natural disaster	rule of law
civil liberties	external actors	natural environment	sanitation
civil society	extraction	natural resources	service delivery
climate change	food system	opposing forces	size of military
communication	freedom of choice and action	opposition	social class
consent of governed	government accountability	perception of equity	social cohesion
corruption	government capacity	physical security/personal safety	social services
culture	government partnerships	physical spaces	social ties / interactions
debt	government transparency	policy	strength of government institutions
diaspora	grievances	political boundaries	TCOs
disparities	healthcare system	population	technology
distribution of resources	history	power relations	terrorism
economic development	ideology	privilege	tradition
economic class	individual in charge	public approval	transportation
economic opportunity	industry	public goods	VEOs
education	influence	public health	water
effectiveness of military	infrastructure		

Step 2 | Literature collection

Concepts were distributed among half the team members, who then performed a quick, broad, systematic literature review. The criteria for the review follow.

- Spend about two hours on each concept.
- Use only Google Scholar to identify relevant literature.
- Include the keywords ‘Africa’ and ‘insurgency’ in all searches. Use the hypothesized contribution statement to derive initial keywords for the Google Scholar search. Use the resulting literature to guide further keywords. Document all keywords used.
- Read abstracts, and more if necessary, to determine relevance. For relevant articles, collect citation and abstract.
- For each abstract include a comment (sentence or phrase) about content, quality, and relevance in elucidating if/how the concept may factor in the creation and maintenance of insurgency.
- Sort relevant abstracts in order of perceived importance, and provide comments regarding the overall literature review for each concept.

The result of the literature review was the corpus that is documented in Appendix B of the main report. Comments associated with each literature review are employed in Step 3.

Step 3 | Factor sorting

Remaining team members divided the completed literature reviews for further evaluation—scrutinizing each abstract for evidence to support or refute the concept's contribution as a factor in the creation and maintenance of insurgency in Africa. Contributing to this assessment were the literature collector's comments from Step 2. These comments addressed the importance or merit of ideas in the literature by commenting on the importance of articles, authors, and journal quality. Because groundbreaking ideas are often first published in unranked journals or periodicals, literature was not dismissed based on a perceived lack of merit; merit simply reinforced legitimacy of factors. Literature that had not been applied to/considered in relation to Africa was not considered. When nothing Africa-specific was found, a gap in the existing literature was noted.

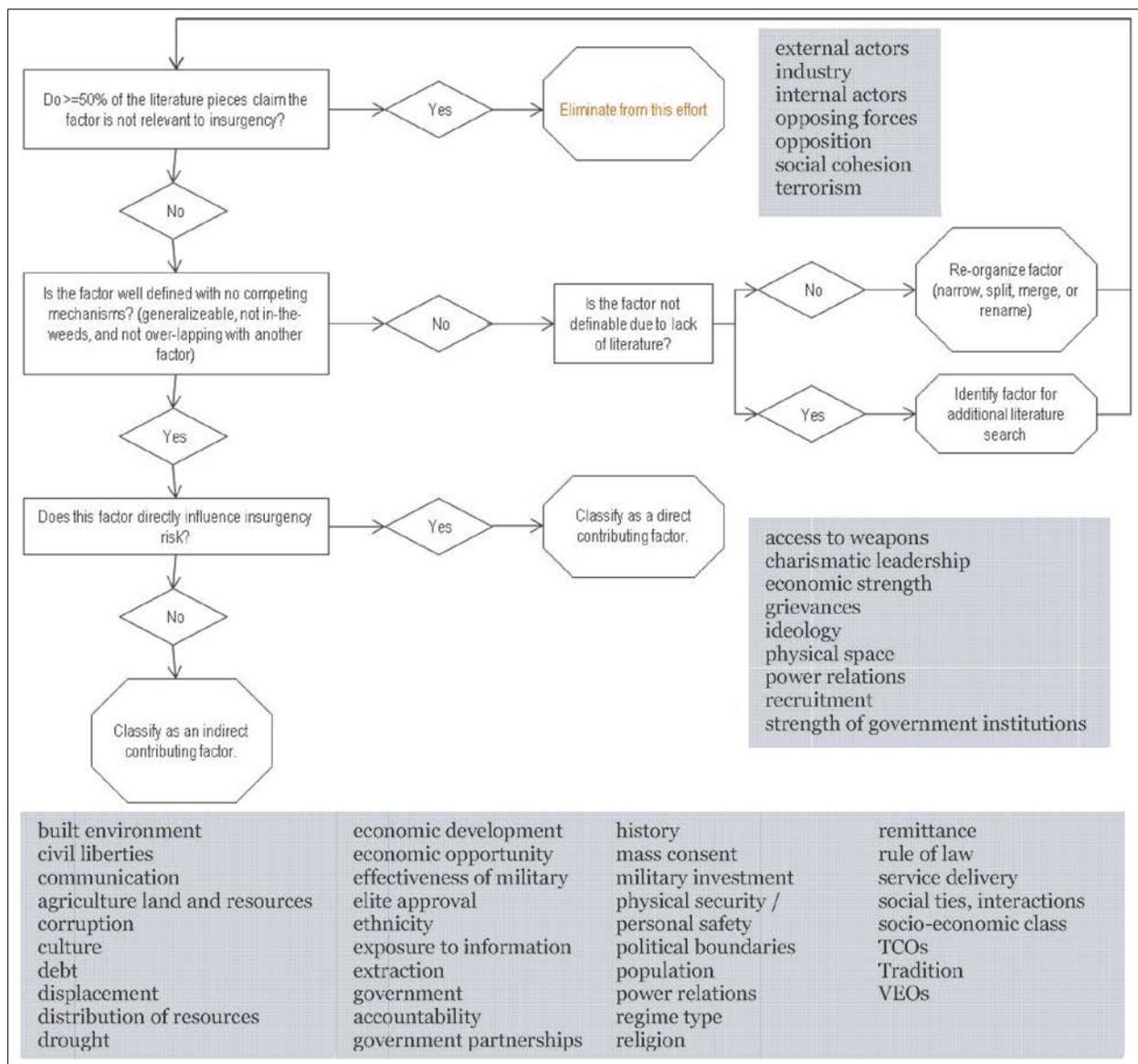
The full text of each literature piece was also collected during this phase and made available to all team members. In numerous instances, reviewers found the abstracts inadequate to fully articulate mechanisms for causal relationships and thus referred to the full text. Each literature collection was characterized as either supporting or refuting the concept's contribution to insurgency. If there was a lack of literature supporting the concept's contribution, the concept was eliminated from this effort. In many cases, the absence of articles does not mean the concept is not an important factor, it means nobody has published on the topic.

This effort does not seek to generate new theories, but rather to map the existing literature as a foundation for a scientifically defensible model. If a majority of authors argued that the concept contributes to the creation or maintenance of insurgency, the pieces were then evaluated for clarity regarding mechanisms for that contribution. If the mechanisms were unclear, reviewers determined whether this was due to a lack of relevant literature or because the concept needed to be refined (e.g., too broad or narrow, or ambiguous). If the mechanisms were presented clearly, the references were categorized as describing direct or indirect mechanisms.

By (1) commenting during the literature collections and (2) evaluating those collections, the two team members reviewing each concept deter-

mined whether the concept's role in creation and maintenance of insurgency was supported/unsupported, clear/unclear, and direct/indirect. Figure D2 illustrates this decision tree and notes how each concept was categorized. Seven concepts were eliminated. The remaining concepts were reorganized into the direct and indirect factors listed in the text boxes in Figure D2. Annex B details how these concepts were eliminated and reorganized. In the end, nine factors were identified as direct contributors and 37 as indirect contributors.

Figure D2. Factor sort.



It is important to note that the distinction of direct/indirect factors is a function of mechanism not magnitude or importance. A direct factor may

be relatively low-impact. A very important factor may be indirect—simply working through another factor in its contribution to the creation and maintenance of insurgency in Africa.

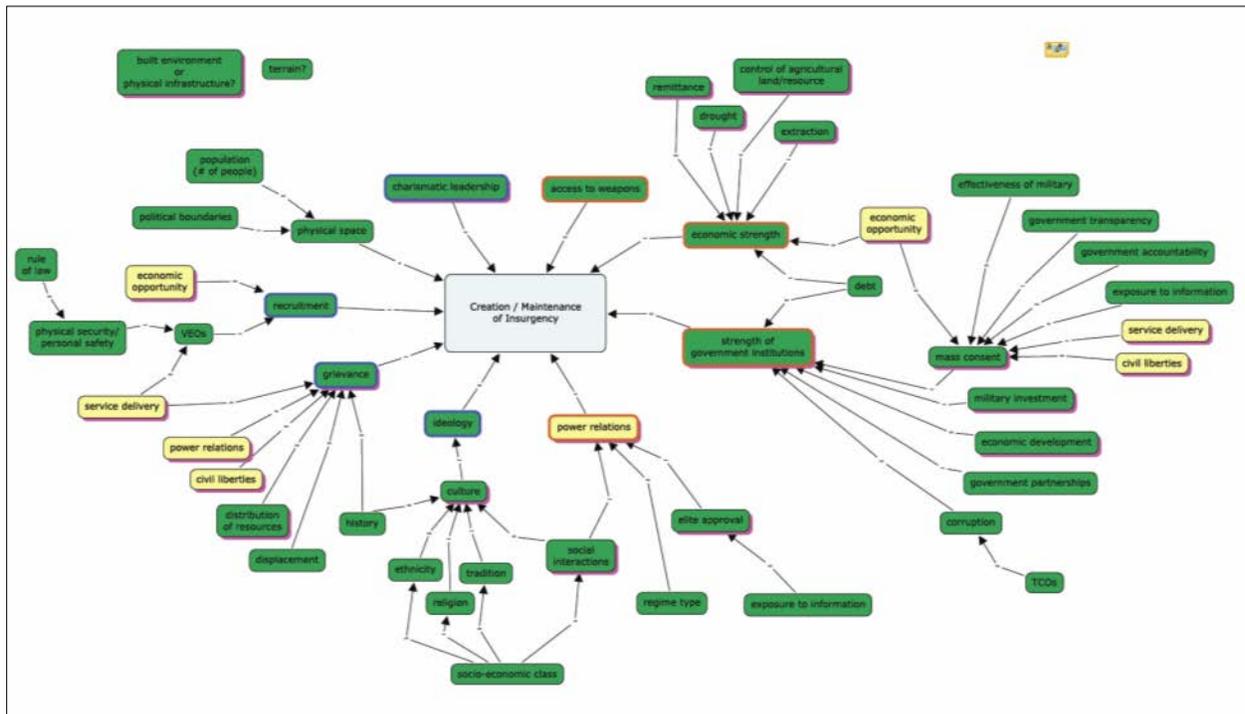
Step 4 | Initial Factor Mapping

The nine factors with direct mechanisms contributing to the creation and maintenance of insurgency in Africa were centrally placed in the Factor Map, and their hypothesized contribution statement revised to reflect the literature. From there, the mechanisms of the indirect factors were identified relative to other direct and indirect factors. For example:

The provision of services is likely to undermine or strengthen citizens' legitimating beliefs. As such, services are a tool for manipulating mass consent and grievances (Kevlihan 2009; Flanigan 2008; Bratton 2006). Who delivers the services is the key tool of manipulation (Grynkewich 2008; Englebert et al. 2008; Faranak 2004). Drawing on field research, Faranak (2004) describes a situation where the government provides municipal waste collection. Mass consent toward the government is altered as the local government begins to treat citizens as customers. Grynkewich (2008) describes a situation where violent non-state groups administer social services and resultantly receive support and sympathy for their cause. Englebert (2008) concludes that a poor record of past external efforts to provide services or a belief that the service is best provided by the government can increase grievances regardless of service provision. Getmansky (2000) alternatively argues that service delivery directly supports/reduces insurgencies.

In this example, service delivery is mapped as contributing to the creation and maintenance of insurgency through grievances, recruitment via VEOs, and strength of government institutions via mass consent. Figure D3 illustrates the initial concept map. Annex C provides the literature-supported logic describing how each factor contributes to the production and maintenance of insurgency.

Figure D3. Creation and maintenance of insurgency initial FACTOR map.



Step 5 | Expert review and factor refinement

The initial systematic literature review was designed to cover a broad spectrum of concepts on a “level playing field” and within project time and budget constraints. An interdisciplinary team with a wide range of expertise in this arena generated the initial concept list, but other valuable knowledge also exists. Anticipating that this initial literature sweep would miss some concepts and some literature, project planners scheduled the review phase to include:

- Review of search results with the option to specify keywords and/or sources for additional literature search
- Review of Factor Map organization and linked concepts
- Solicitation of recommendations for addition, removal, or restructuring of factors in the Factor Map.

To fulfill this, the entire multidisciplinary team—objectively and drawing from their field of expertise—reviewed the initial Factor Map. Table D1 lists the compilation of concerns.

Table D1. Initial Factor Map review comments.

Section	Review Comment	How Team Responded/Addressed the Review Comment
general	Most of the contributing publications describe contribution to insurgency without separating creations vs. maintenance vs. end. Collapsing the creation and the maintenance of an insurgency into a singular conceptual bubble makes the erroneous assumptions that similar causal factors drive both processes. Della Porta (1995) observes that, in historical studies of European extremist groups, circumstantial factors that led to the formation or the radicalization of political groups were often distinct from factors that perpetuated these organizations once they have gone underground. Similarly, International Relations make clear distinctions between factors that precipitate the onset versus the duration of a conflict (Diehl 2006; Walter 2002). When operationalized, the dynamic model should mitigate this gap.	Most of the contributing publications thus far have described contribution to insurgency, without separating creation vs. maintenance. When operationalized, a dynamic model can respond to initial state (does insurgency already exist, if so what phase?) if the literature provides us with data on how it would respond. These sources will be considered in further development/revision.
general	Alternative techniques in sorting and categorizing literature may allow for broader literature searches and address variety in terminology across fields. Schneider et al (2007) lists categories as they exist within a specific field. Combining this list with concepts that are important to the US Government may help reduce misunderstandings that are a result of terminology. Keeler (2005) and Sillanpaa and Koivula (2010) use network analysis to describe the relationship and development of literatures. This method suggests an alternate way to develop the linkages that we see in the concept map and identifies "important" articles through a set of (more) objective criteria, such as citation count and journal placement.	These sources will be considered in recognizing the strengths and weaknesses of our methodology.
Charismatic Leadership	This factor is a personal trait and thus may explain why there is a lack of indirect factors stemming from it. Still, the lack of shaping factors flags it for refinement.	Seek subject matter expert review. Redefined to contribute through Recruitment.
Access to Weapons	The collected literature defines this concept as a direct factor. But perhaps weapons are not independent of other factors. This is not simply a supply-demand story, but also involves enforcement, training, and implementation. In this respect, weapons alone mean very little at the onset and continuation of an insurgency without considering these other factors (funding, training, etc.). As long as the other, key conditions are met, then weapons are readily available and relatively easy to use in current contexts. Reconsider as an indirect factor.	Seek subject matter expert review. Redefined to contribute through Strength of Government Institutions and Recruitment.
VEOs TCOs	VEOs and TCOs are actors and thus should be removed from the Factor Map. The Factor Map is actor-centric—showing “things” or “situations” that are factors in insurgency. Actors are implicit in the model, and not represented as things. Instead, we understand that they are the agents of action. Actors respond to or change the factors.	Agree. VEOs and TCOs are removed as factors in the Factor Map. They will be discussed as actors within the operationalized model.
Mass Consent Strength of Government Institutions	It's unclear why the strength of government institutions has a causal effect on mass consent/public opinion. Mass consent empowers a government to establish	Seek team member review. Mass Consent as a factor was eliminated

Section	Review Comment	How Team Responded/Addressed the Review Comment
Grievance	certain institutions, but consent does not necessarily dictate how such an institution may exercise its power or how effectively it may perform. In many cases, employees of government institutions are deliberately insulated from public opinion to ensure stability in the bureaucracy (see Chalmers Johnson on Japan 1982; 1994). Subsequently, strength and performance of government institutions affects public opinion but not the other way around. Grievance a subset of public opinion in that it is the opinion of a subset of citizens who feel like they have been wronged. Thus, grievances should be combined with public opinion in some way to show their close relationship to each other.	and its components redistributed within the existing direct factors. Effectiveness of Military and Exposure to Information redefined to contribute through Recruitment. Government Transparency, Government Accountability, Service Delivery, and Civil Liberties redefined to contribute through Grievances. Economic Opportunity redefined as directly feeding Strength of Government Institutions.
Physical Space	This factor lacks connection. The literature points to terrain, population size, physical infrastructure, and political boundaries and key concepts. This appears insufficient to connect it within the existing Factor Map. Consult a subject matter expert to refine this factor.	Seek subject matter expert review. Redefined as Ungoverned/Under-governed Spaces with Political Boundaries, Strength of Government Institutions, Population Density, and Physical Geography as contributing factors. Built Environment redefined to contribute through Physical Geography.
Education	This factor has disappeared. It appears on the original list of terms, but then does not appear in either the list of discarded terms, consolidated terms, or final concept map.	Seek team member review. Education redefined to contribute through Economic Strength and Ideology.
Economic Opportunity Economic Strength	There are three different definitional entries for economic opportunity in this paper, nothing for economic development, and essentially a place-holder for economic strength. These three concepts are very similar to each-other, and should be defined more rigorously. The ability to answer questions such as why economic development is separated from the rest of the economic “node” centered on “economic strength” requires a clear understanding of these terms.	The team decided specifically not to create definitions for the factors, but instead focus on literature defined contributions. This distinction should become clearer as contribution statements get refined in the Results: Factor Map narratives.
Regime Type	The importance of regime type is something that needs to be moved closer toward the center of the concept map, either as a direct effect or an indirect driver of multiple direct effects. The Goldstone et al 2010 piece is particularly strong, whereas the dissenting articles are either working papers or found in less prestigious journals. Additionally, regime type is thought to influence economic development (Burkhart and Lewis-Beck 1994) as well strength of government institutions (Held 1995).	Seek team member review. Revised to contribute through Power Relations.
Social Services Service Delivery Civil Society	The inclusion of civil society in “social services” and therefore into to “service delivery” is confusing and conceptually unwarranted. Putnam (1993, 2000) narrowly defines “civil society” as the arena of “uncoerced collective action around shared interests, purposes and values.” It is otherwise defined as the arena outside of the family, the state and the market. The government, by definition, cannot provide the service of civil society, though it may create favorable sociopolitical conditions that citizens may take advantage of to form a civil society by themselves.	Seek team member review. Comment noted as unresolved.
Counterinsurgency	This concept merits inclusion in the creation or maintenance of insurgency. Respected political scientists (e.g.: Bueno de Mesquita 2005, Bueno de Mesquita and Dickson 2007, Fearon and Laitin 2003)	Seek team member review. Research does not merit inclusion.

Section	Review Comment	How Team Responded/Addressed the Review Comment
	have noted the power that past counterterrorism policies have on predicting present and future terrorist activities.	
Service Delivery	Service delivery is by anyone not just government. Clarify Factor Map to preclude erroneous assumptions that service delivery means government only.	Clarification made in factor contribution statement.
Technology	Clarify Factor Map to describe how technology is encompassed in communication.	Note possible need for further citing. For now, refer reader to the original literature sweeps if Reorganized Factor graphic is not descriptive enough. These decisions were the result of Step 3, Factor Sorting.
Privilege	Appendix C states Privilege falls under Elite Approval. Privilege is the outcome of a system of power relations that is built on such social identities as race, class, gender, tribe, religious affiliation, sexual orientation, etc. within any given society. A system of power relations constructs sources of both privilege and oppression. Clarify this distinction.	Reviewed existing literature sources and agree, Privilege does not necessarily fall under Elite Approval. Privilege is no longer part of Elite Approval and redefined to contribute directly to Power Relations.
Social Interactions Civil Society Diaspora	These factors are not adequately captured in the Factor Map. What the neighboring country is doing is a factor in insurgency formation. Violence is contagious. Similarly, refugee communities in the diaspora can forge insurgent movements.	Comment used to revise factor contribution statements.
Perception of Equality Mass Consent	It may be argued that "perception of equality/inequality" is directly related to "consent of governed". If the public perceives that its government functions only for some groups, those groups for whom it does not function so well or who are actively disadvantaged by the system of governance in play are more inclined to withdraw their approval/consent to be governed and are more likely to support or actively participate in insurgency/revolution - think US War of Independence.	Considered in team member review of Mass Consent. See earlier comment on Mass Consent.
Grievance Strength of Government Institutions Recruitment	The relationship between Grievance and Strength of Government Institutions determines potential for conflict. Deprivation of goods, services, and quality of life, frustration of not being able to influence your environment, and social acceptance (sense of belonging) are reasons why people join insurgencies. It is these things in relation to organizational strength/strength of government that contribute to insurgency, not them alone.	Note to define the linkages between direct factors when quantifying the mechanisms in the next phase—operationalizing the model.
Recruitment	The following concepts of Recruitment are not well defined/recognized. Recruitment is based on ideology, fear, or desire to be on the "winning" or "better" side. Insurgent groups attempt to legitimize themselves and court public opinion by their actions and polished group images. Terrorist screening mechanisms influence the organizations power. The target audience dictates the tactics used by insurgents.	Seek team member review. Comments used to revise factor contribution statement.

Many of the review comments required re-evaluation of the existing re-source collection. This was accomplished through team discussions. Other factors were identified that needed more in-depth literature reviews. These were either studied by team members or sent to subject matter experts

(SME). Team-member in-depth review consisted of reviewing the full text of all collected literature and following any referenced documents in those for further clarification. Team Member in-depth review was accomplished for: Recruitment, Education, and Mass Consent.

The team member review for Recruitment revealed that an initial literature search was never completed for Recruitment. Thus, a Google Scholar literature search (following the original rules) was completed for Recruitment and the factor underwent the same steps as the other factors to this point.

SMEs were asked to review: Physical Space (reviewed by geographer); Access to Weapons (reviewed by political scientist); and Charismatic Leader (reviewed by political scientist). The SME engagement process was as follows.

- Each SME was asked, “What difference does this factor make to the production and maintenance of insurgency in Africa?”
- SMEs were oriented to the project and allowed to ask questions.
- Each SME was asked to provide the team with an outline of issues as presented in current literature a proposal regarding how this factor might be framed within the conventions of expression in the Factor Map vehicle and a bibliography of literature to support these recommendations.

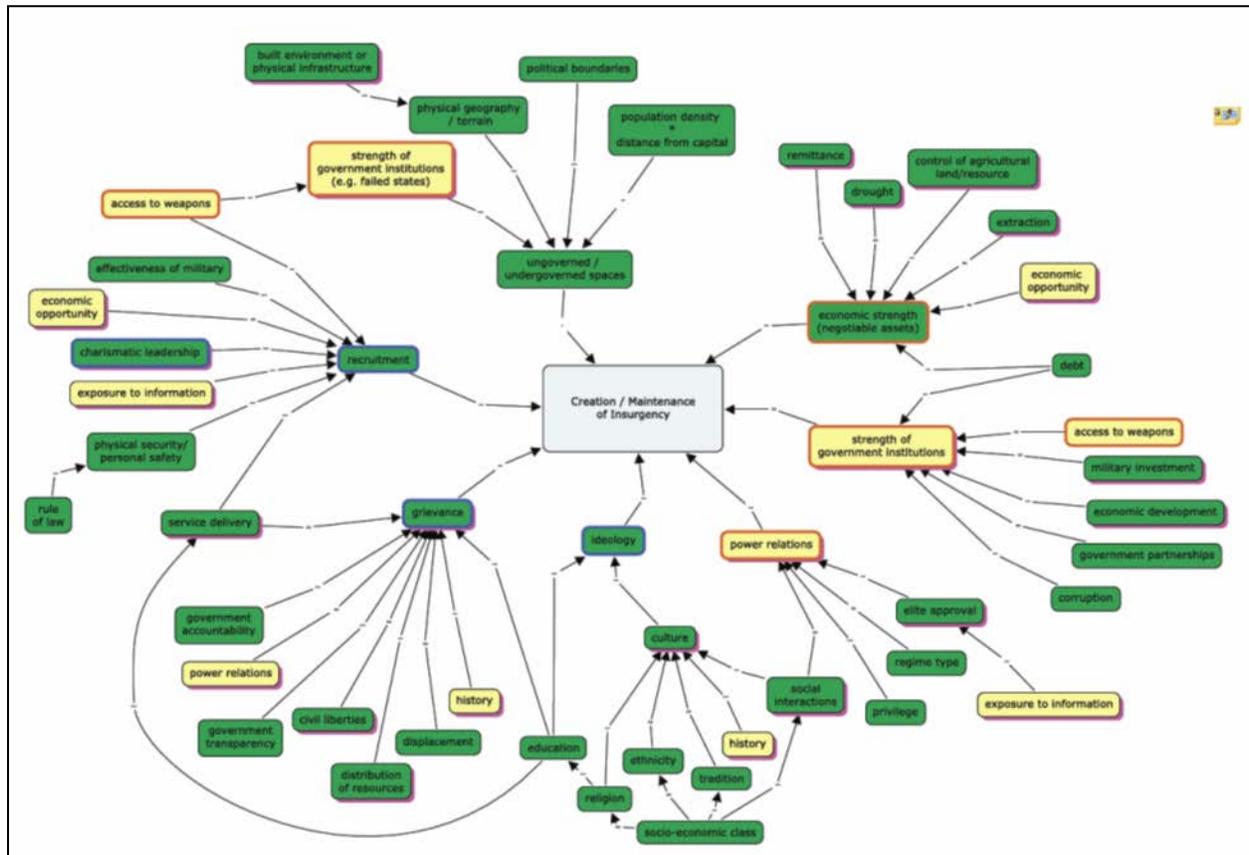
Based on the outcome of the Initial Factor Map review, a variety of factors were reorganized. Table D1 notes many of these changes. Annex D details this reorganization.

Final Factor Map

The Factor Map depicts how relevant academic literature—mainly from social science—explains the role played by different phenomena and processes that contribute to the creation and maintenance of insurgency in Africa. Discourse surrounding the causes, effects, and feedbacks associated with insurgency in the African continent is ongoing, and contributors bring to the discussion a multiplicity of training and backgrounds from a variety of disciplines. The Factor Map unites a broad assortment of academic contributions, identifying common threads to highlight essential characteristics and show how each factor is thought to influence conflict and instability (Figure D4). It does not pretend to provide an exhaustive

review of all of the social science literature, or even a review of any of the disciplines within social science. Rather, it offers a concise snapshot of a number of factors that current social science literature recognizes as influencing insurgency, and represents documented interrelationships between those factors.

Figure D4. Creation and maintenance of insurgency final Factor Map.



In a manner similar to the social science that guides the relations between its many parts, the Factor Map is actor-centered. Implicit in the map is that the actions of people on the ground within civil societies, government administrations, oppositional groups and international organizations, to name only a few, create and maintain insurgency in its many and diverse forms. The core factors that directly affect the creation of insurgency are classified as primarily affecting either actor capacity (power relations, strength of government institutions, access to weapons, and economic strength) or actor motivation (ideology, grievance, recruitment, ungoverned/under-governed spaces).

The following sections provide written narratives and diagram submodels for each of the seven direct factors in the Factor Map. These provide greater detail on how the direct factors are linked to and affected by the indirect factors that surround them. In other words, the narratives as a whole walk the reader through the different parts of the map. In addition, they provide references to relevant academic articles within the social science literature that describe the connections or relationships for every single factor. For instance, readers interested in how power relations affect the creation and maintenance of insurgency in Africa would find that regime weakness, type, or abuse of privilege acquired through clientelism, wealth accumulation, or political alliances can increase the probability of violent conflict. This describes two of the relationships asserted in the academic literature as causes of insurgency. Each of these statements is supported by a series of references comprising a corpus of social science literature documented in Appendix B of the main report. This corpus provides a point of entry into specific academic conversations on insurgency. The references that are provided are interdisciplinary and include scholars from anthropology, ecology, economics, geography, health science, political science, sociology, and urban studies among others.

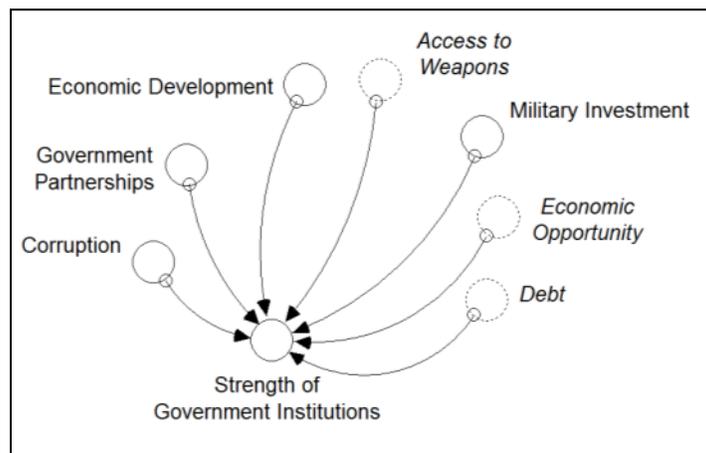
The purpose of the Factor Map, for both current and future phases of this project, is to allow for the integration of concepts and data found in the literature across many disciplines, including variations in how these terms are used by different social scientists. The tool that we design with the Factor Map will be a flexible and accommodating instrument that will guide thinkers in applying diverse literature to understand a system in ways that a strict, targeted diagnostic tool would not.

Factor contribution to the creation and maintenance of insurgency

Strength of government institutions

The strength of government institutions is the ability for the government to exercise its power or strength. Military investments, economic development, and government partnerships and corruption all shape the strength of government institutions (Figure D5). Government legitimacy is very important in any civil way. “Insurgents seek to break that governments link with the people by demonstrating its inability to govern. Attacks on government officials and supports reveal the regimes impotence while strikes on economic targets undermine its ability to provide for the material needs of the population” (Jogerst 2005).

Figure D5. Factors contributing to the strength of government institutions.



Many insurgents offer competing services both economic assistance and “shadow” government – to begin actively replacing the government and strengthen links with the people. Civil conflict and state failure is linked to a regime breakdown in legitimacy. The government must address the grievances that give rise to the insurgency (Jogerst 2005; Hutchison and Johnson 2011). Authors Hutchison and Johnson contend that government capability is a primary factor in shaping individuals ascription of legitimacy to the state. Furthermore, capable governments foster perceptions of legitimacy while poor institutional performance decreases trust. The authors find that higher institutional capacity is associated with increased levels of individual trust in government across African countries.

Military investment, economic development, government partnerships, debt, and corruption all contribute to the strength of government institutions. Military investment is significant to the strength of government institutions even though the literature is very diverse on the subject. Howe (2001) asserts that effectiveness and size of the military seem to follow a number of factors such as economic strength, regime, and history; equally, these factors support strength of government institutions as a factor.

Government partnerships, the hypothesis is put forward that the institutionalization of power-sharing agreements for the sake of ‘peace’, i.e., providing rebels with a share of state power, has important demonstration effects across the continent of Africa. Furthermore, it creates an incentive structure would-be leaders can seize upon by embarking on the insurgent path as well. Essentially power-sharing partnerships may contribute to the reproduction of insurgent violence (Tull and Mehler 1996).

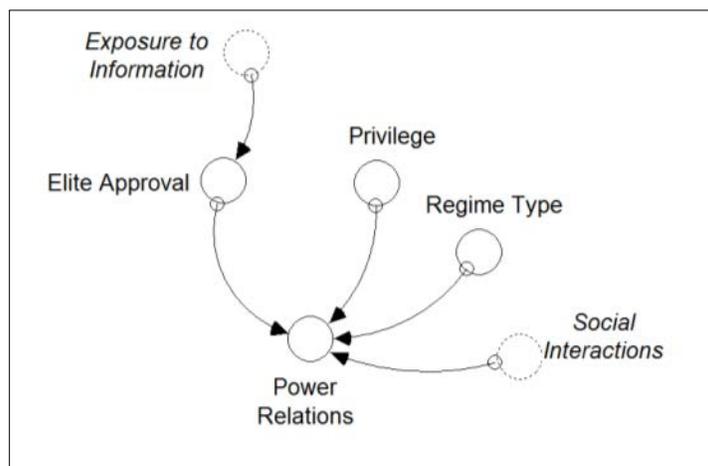
Foreign debt can affect a government's stability and strength by either supporting that government against competitors to the point where that government can prey on its weaker unstable neighbors (Reno 2001; Reno 2002), or it can weaken a government if the austerity policies that are the preconditions to foreign debt loans from the IMF and the World Bank provoke anti-state protests in debtor countries (Bond 2003; Mbabazi, MacLean and Shaw 2002; Walton and Ragin 1990). Foreign debt can also pull a country out of dire economic straits and, though an economic practice directly linked to the economy of debtor nations, debt is inextricably linked with politics as evidenced by the collapse of the South African economy post-apartheid (Lowenberg 1997) or when debt relief actually strengthened a country's security forces rather than its economy (Howe 1998)

Corruption was found to be widespread among government and insurgent agencies in Africa. It was generally found to have a deleterious effect on government performance and transparency/accountability, both of which contribute to the loss of public support and social stability, providing entry points for insurgency or at the least, grievances that may erupt into conflict (Hanson 2009 and Rotberg 2003).

Power relations

Power relations between the state and civil society can create or maintain insurgency. Social interactions, regime type, privilege, elite approval, and exposure to information all shape power relations (Figure D6). In the African continent, the colonial history of the region created weak civil societies after independence and caused the emergence of a number of authoritarian regimes (Clapham 1998). In other words, *regime type* can strongly affect the probability of violent insurgency, and authoritarian governments are more prone to instability and violence than democracies (Goldsmith 2010; Goldstone, Bates, Esptein et al. 2010).

Figure D6. Factors contributing to power relations.



Power struggles within the many African countries are influenced by the conquest of state power by violent means, or through mechanisms of power sharing between the government and civil society, including claims of state attributes by insurgent groups (Makumbe 1998; Tull and Mehler 2005). Another level at which the influence of power relations on insurgency is direct is at transnational and international power structures where foreign aid and development programs provide the resources to local African governments to both counteract and encourage insurgency (Katerere, Hill and Moyo 2001; Wall 1997).

Exposure to information of a populace will contribute to insurgent groups if the type of information disseminated supports the insurgent movements' cause with an increase in the amount of aid and support received by the insurgents (Ford 2005; Innes 2004; Jackson 2004). However, exposure to information could just as likely increase support of counter-insurgent groups such as the military or the state (Eikmeier 2005). The amount of information available to a population will affect power relations through *elite approval* or the combination of how much a people support their ruling elite, and how privileged groups acquire power. Some scholars argue that elite approval in different states across Sub-Saharan Africa is largely determined by the varying ability of ruling political parties to overcome the specific colonial legacy of social fragmentation, by forging and maintaining alliances with other groups (Lindemann 2008). In this case, the level of dissatisfaction with a system that continues to benefit the elites can rise to the point of insurgency (Fanthorpe 2001), and it can also foster insurgency and violent actions against excluded or marginalized populations such as in the case of the Hutus in Rwanda (Jackson 2004). In fact,

privilege affects the balance of existing power relations either through the acquisition or accumulation of wealth, through strategic political alliances including clientelism, and through traditional forms of patronage (Malaquias 2001; Reno 1997; Tomlison 2008).

In Africa, power relations also contribute to insurgent movements when a group's perceived *socioeconomic class* status determines how people situate themselves politically and ideologically; either in support of or against insurgency (Ingelaere 2010; Isaacman 1990; Segal 1996). This perceived status will then affect group *social interactions*. A body of literature that explains how social connections are forged and affect insurgent movements explores the politics of patronage, or where patron-client relationships operate behind the state bureaucracy to negotiate who will be awarded political and social power that can affect the rise or collapse of violent protest movements or of government administrations (Murphy 2003; Pollett and Jasper 2001; Reno 2009; Taylor and Williams 2008). Lastly, other researchers argue that studies showing combatants—either the military or insurgents—interacting with the civilian population, indicate that these interactions have the armed group acquiring and asserting power over civilians and thus transforming existing social networks to meet their needs (Humphreys and Weinstein 2006; Wood 2008).

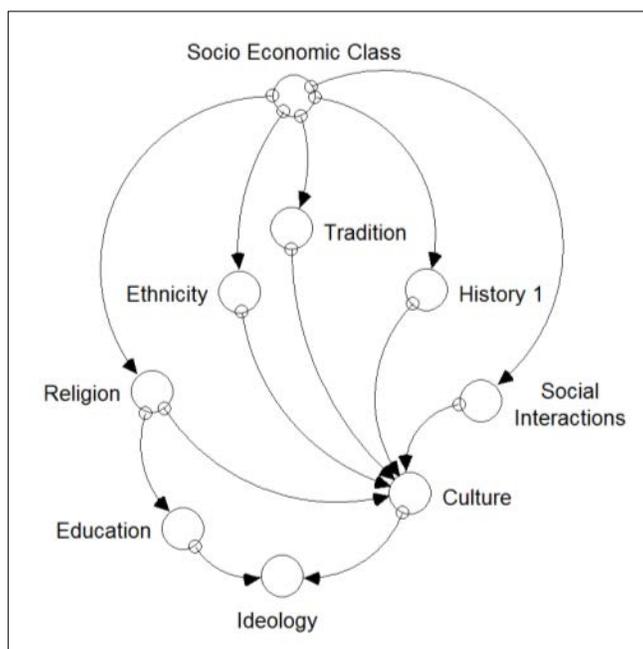
One last instance in which power relations affect the creation and maintenance of insurgency is *indirectly, through grievance*. As mentioned at the beginning of this narrative, a divisive civil society and a weak democracy promote insurgency because different groups will have different grievances with the central government (Ikelegbe 2001; Ismail 2008). In the African nations where clientelism and patronage are strong they can also become a catalyst for insurgent actions through power relations when claim to specific natural resources is also a claim to strength as in the case of oil, water, or arable land (Collier 2008; Kandeh 1996; Obi 2009).

Ideology

Violent insurgent movements are often directly driven by ideology and, in Africa; a primary motivation for the violent movements in this continent is ideological. For instance, the driving force behind the conflict opposed to the government in Afghanistan was the claims of different insurgent leaders to power and an extremist Islamist government. Yet another example shows how the violence born of the dispute between the fundamentalist war theology and the imported democratic ideology caused ongoing con-

flict in Zimbabwe (Chitiyo 2008; Jones 2008). On the other hand, political ideologies can also be deployed by governments to create situations of violent strife. Examples that come to mind are those of Rhodesia and the political victory for the insurgent guerrilla movement, or Rwanda's Hutu extremist genocidal insurgency (Evans 2007; Orth 2001). Another role that ideology plays in the creation and maintenance of insurgency in Africa is that radical insurgent Islam and its dissemination in civil society is supported by individual ideologies and political commitments (Githens-Mazer 2008; Gray and Stockham 2008; Kilcullen 2005; Thomas 2004). As such, education, culture, religion, social interactions, ethnicity, tradition, history, and socioeconomic class all shape ideology (Figure D7).

Figure D7. Factors contributing to ideology.



Religion plays a primary role in the creation of ideologies that affect how violence is accounted for in conflicts in Africa. Religious networks and religious peace initiatives can help ameliorate the effects of violence and, some scholars argue, can even reduce the incentive to join insurgencies (Basedau, Strüver and Vüller 2011; MacCulloch and Pezzini 2010). However, religious ideas are a major force that has helped pattern postcolonial development and the experience of violence in this continent, and weakened states and the rise of insurgency are typically traced to religious and ethnic competition (Haynes 2007; Jones 2001). Religious ideology influences the maintenance and growth of insurgent movements not only through a nation's culture but also through *education*. The imposition of a

fundamentalist Islamic discourse that fosters rebellion against state powers is both supported and fiercely contested in different parts of Africa. For instance, there are some countries, such as Sudan, where though the government attempts to impose a Muslim education with fundamentalist discourses, different groups of a more tolerant Islamism oppose these ideologies (Breidlid 2005; Panzer 2009; Mamdani 1996; Sommers 2005). In contrast, Islamic proselytism has played a key role in encouraging a radical Islamic worldview that has served as the basis for insurgent movements against the state in South Africa, Malawi and Mali, to name a few (Bush and Saltarelli 2000; Mumisa 2002; Stambach 2010).

Culture affects how insurgency emerges and is maintained in a society through ideology. In turn, culture is shaped by a number of factors that involve ethnicity, tradition, history and social interactions and, to a lesser degree, socioeconomic class. For instance, some cultural factors that affect insurgency are *tradition* based notions of revenge and honor (Hussain 2008; Richards 2011). In addition, traditional cultural practices such as initiation ceremonies, claims to ancestral land rights, and war rituals all contribute to mobilize and motivate insurgents (Cline 2003; Richards 2008; Wall 1996; Zack-Williams 2001). In contrast, traditional mechanisms of reconciliation can also be deployed to end insurgency and negotiate peace after violent conflicts (Abbink 2008; Juma 2005; West and Kloeck-Jenson 1999). Africa's colonial *history* is directly related to how the citizens from different African nations today respond to insurgency in that historical notions of war and conflict in Africa can view authoritarian regimes in a positive light and thus favor insurgents and their cause (Abdullah 2002; Henderson 1998). In addition, historic characteristics of the colonial administrations that ruled these nations can affect insurgent movements today including policies of ruthless extraction; legacies of ethnic stratification; virulent racism that distances rulers from subjects, and generational rivalry in African resistance as younger generations look upon older Africans who accommodated to the colonial rulers as traitors (Blanton, Mason and Athow 2001; Carton 2000; Clapham 2002; Mkandawire 2002; Young 1997).

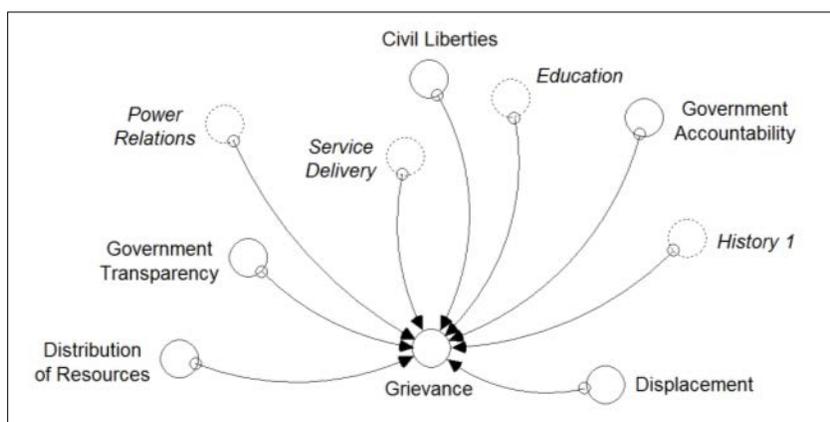
Ethnicity can affect insurgent mobilizations through ideology as many of these rebellious movements in Africa are centered on achieving citizenship and its privileges through a claim on ethnic identity (Besteman 1996; Herbst 2000; Keita 1998; Rothchild 1995; Young 2006). *Social ties and interactions* between insurgents and between insurgents and non-

combatants can determine the level of grievance and frustration that will lead a population group to carry out insurgent actions in unstable situations where ethnicity is a factor contributing to conflict (Humphreys and Weinstein 2008; Mamdani 2001). Other ways in which specific social and cultural interactions improve our understanding of the causes of violence is in the relation of insurgents to other populations when fighting over scarce resources such as food or health care or when indigenous authority and practices support or resist insurgent movements (Obarrio 2010; Singer 2011). In fact, these grievances are supported by *socioeconomic class* and status which play a part on how people situate themselves politically and ideologically (either in support of or against insurgency) (Bienen and Herbst 1996; Ingelaere 2010; Isaacman 1990; Mirafteb 2004; Segal 1996).

Grievance

It is important that grievance be evaluated not by objective evaluation of justice or fairness related to actual events, but through the eyes of the aggrieved. In a situation in which no actual wrongdoing has occurred, misinformation or propaganda may instill a common belief that a legitimate grievance exists, and this belief alone may be adequate to garner populace support for an insurgency, including recruitment of economic aid (Jackson 2004). Further, grievance adequate to fuel insurgency may be related not to an actual or purported event, but rather to the absence of one; particularly in the face of rapid change, individuals may be driven to participate in a “spiritual insurgency” by feelings of frustration or discontent stemming from a perceived lack of meaning or justice in their lives. (Metz 1993). Distribution of resources, government transparency, power relations, service delivery, civil liberties, education, government accountability, history, and displacement all shape grievances (Figure D8).

Figure D8. Factors contributing to grievances.



Service delivery: A perceived deficit in service delivery relative to citizens' expectations can generate grievance that contributes to both a decrease in support for government, and increased support for insurgency. Public support for government institutions can vary to mirror the extent to which the government provides such services (Faranak 2004); public support may give way to grievance when the government fails to meet citizens' needs and expectations. (Faranak 2004) In the face of this grievance, the provision of social and infrastructure services such as waste removal or health care can be a powerful tool to recruit public support (Kevlihan 2009; Flanigan 2008; Faranak 2004). The public may sympathize with and support insurgent groups who palliate their grievance by meeting or exceeding expectations in service delivery. (Grynkewich 2008).

Power relations: In Africa, grievances that result from marginalization may be expressed through support for groups that exercise power through violence or the threat of violence. (Ikelegebe 2001) Grievance may also result when the exchange of economic goods involves negotiation for political favors or support. This may lead to insurgency particularly when individuals or groups exercise control over natural resources that are valued at an international scale. (Collier 2008, Kandeh 1996, Obi 2009).

Civil liberties: A lack of civil liberties or the abuse of human rights may lead to grievance that directly fuels participation in insurgency. Because counterinsurgency efforts tend to involve the compromise of civil liberties (Fearon 2003), this may produce a vicious cycle, as public grievance over state actions to limit civil rights may contribute to support for insurgent efforts. (Krueger and Maleckova 2003; Kreuger and Laitin 2003; Fearon 2003; MacCulloch 2010).

Distribution of resources: As with service delivery, grievance regarding economic resources may arise due to an unmet need, or as the result of a difference between individuals' expectations and actual conditions. (Nafziger 2002) Even in the absence of maldistribution, the perception of relative deprivation or exploitation, or the fear of loss or exploitation, can also fuel grievance that can in turn fuel insurgency. (Thiesen 2008, Nafziger 2002, Lake 1996) As with power relations, international involvement may further promote resource-related grievance by placing incentives or constraints on redistribution. (Nafziger 2002).

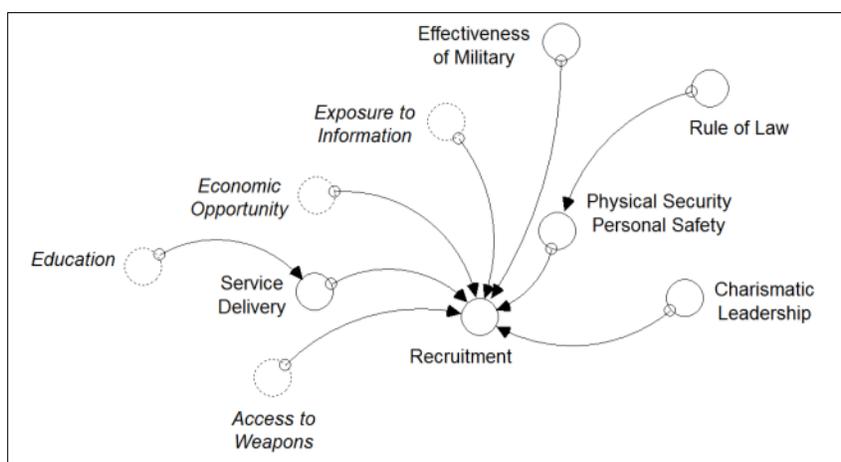
Displacement: The relocation of populations may be perceived as a direct injustice, as individuals lose long-held tenure to lands that may be valued culturally, or for subsistence or economic production of food. Displacement may contribute to changes in economic opportunities or the adequacy of the food supply; in Africa, any of these may create a grievance that leads to insurgency. (Abrahams 2010; Verhoeven 2011; Wall 1993).

History: Violence, and disparities associated with race, ethnicity, and socioeconomic class (Clapham 2002; Mkandawire 2002; Young 1997) are found throughout the history of the African continent. These legacies of colonialism continue to shape perceptions of injustice, and are considered important factors in African insurgency. (Blanton, Mason and Athow 2001, Clapham 2002; Mkandawire 2002; Young 1997).

Recruitment

Recruitment contributes significantly to the creation/maintenance of insurgency and its factors can include the following: effectiveness of military, economic opportunity, charismatic leadership, exposure to information, physical security/personal safety and service delivery (Figure D9).

Figure D9. Factors contributing to recruitment.



Recruitment can be viewed through two lenses in the social sciences; first as a case study based fieldwork perspective in which recruitment is a unique process in each insurgency and the second in which quantitative analysis tried to uniform patterns in how people respond to recruitment, and thence how insurgency changes based on recruitment patterns. Recruitment is deemed a contributing factor because both major perspectives

offer varied significance and importance in contributing to insurgency. Financial and bureaucratically weak states favor rebel recruitment. (Ethnicity, Insurgency, and Civil War, Fearson, James and Laitin, David.) Weinstein and Macartan 2008 explain that regression based research tends to focus on measureable characteristics such as education attainment and attitudes and believe that empirical research even anecdotal, may tap into truer characteristics of what drives susceptibility to recruitment.

Charismatic leadership is a direct variable supporting recruitment. Groups with charismatic leaders attract more followers that are devoted to the cause and have a lower rate of turn-over (Ehrhart 2001; Dekmejian and Wyszomirski 1972).

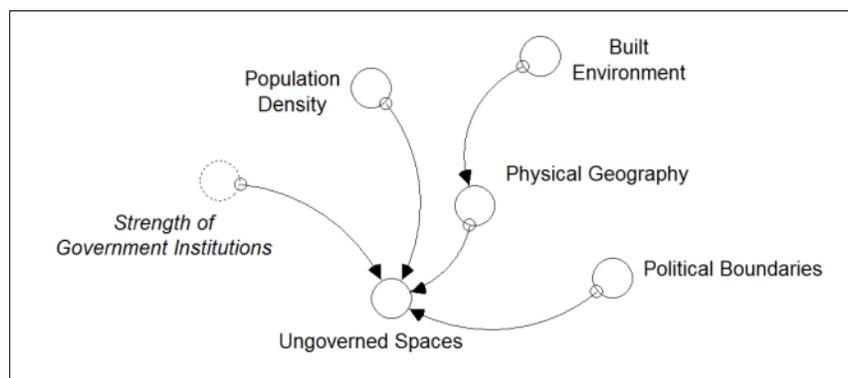
Economic opportunity emerged as a direct variable for recruitment because resource availability on the aggregate level spurs different types of people to act/join rebel organizations. "While the presence of economic endowments make it possible for leaders to recruit on the basis of short term rewards, these groups are flooded with opportunistic joiners who exhibit little commitment to the long-term goals of the organization." (Macartan and Weinstein 2008) In resource poor environments, leaders attract new recruits by drawing on social ties to make credible promises about the private rewards that will come with victory. (Macartan and Weinstein 2008) Additionally, an individual's economic opportunity is based on his or her level of education, occupation and local economic conditions affects the rebel or insurgent recruitment marketplace. Individual's with little or no economic opportunities accessible to them will be more likely to join an insurgent movement to make a living or to express their grievances (McIntyre 2005; Weinstein 2003; Ylonen 2005).

Exposure to information offers the perception of momentum and it may drive support for insurgency. (Ford 2005) Whether from foreign or local sources, the type of information to which a populace is exposed contributes to the audience's attitude toward and support for related causes. (Eikmeier 2005) Propaganda delivered to the populace by insurgents can increase the amount of aid and support that reaches the insurgents. (Jackson 2004, Innes 2004).

Ungoverned spaces

Ungoverned or under-governed space can create or maintain insurgency in several ways. Ungoverned or under-governed space undermines the strength of government institutions and promotes failed or failing states; they may be influenced by a pronounced spatial dyad of urban-rural or center-hinterland; they enable and foster a socioeconomic environment of uneven development that not only connects to failing states but also to the urban-rural dyad; they allow political boundaries to become porous and unsecured; and they allow for the contestation over as well as deterioration and manipulation of the physical terrain, infrastructure and built environment that can support insurgency (Figure D10).

Figure D10. Factors contributing to ungoverned spaces.



Ungoverned or under-governed spaces, in and of themselves directly support insurgency by providing hiding places or havens, training centers, being host to unscrupulous charities that support insurgents, assassinations and targeted attacks and other persons who supply weapons as well as allowing the movement of weapons, money, persons and information without regulation or oversight (Menkhaus 2007). It is important to note, however, particularly when considering the continent of Africa, that not all ungoverned or under-governed space automatically supports or contains insurgents. Clunan and Trinkunas (2010) caution against labeling the tribal spaces of Africa, which they refer to as “other governed space”, as ungoverned space, while Forest (2010) argues that ungoverned space may be governed by “entities other than the forces of an established nation-state.” The more inhospitable areas of Africa may also be deemed ungoverned space but are “no more hospitable to [insurgents]* than they are to any

* Berschinski uses the term “terrorists” but considers terrorists as part of insurgent groups.

other inhabitant” (Berschinski 2007: 47), a point echoed in the literature (Menkhaus 2007, 2010; Kilcullen 2006; Watts, Shapiro and Brown 2007). Despite these cautions, the literature, including those cited above, overwhelmingly connects ungoverned or under-governed space to insurgency (see also, Hastings 2009; Rabasa, Boraz, Chalk, Cragin, et. al. 2007; Peltier 2009; Innes 2007; Harpviken 2010; Rotberg 2003, 2005; Williams 2007; Clapham 1996, 1998).

Strength of government institutions (e.g., failed states)

The manner in which ungoverned spaces undermine the strength of government institutions and promotes failed or failing states is significant to the creation and maintenance of insurgency. Rotberg (2005) and Mills (2007) find that all the consequences of a failed or failing state provide fertile circumstances for supporting insurgent groups in a similar fashion to how ungoverned spaces support insurgencies stated above. Piazza (2008) tests this theory, paying particular attention to transnational groups, and finds empirical evidence that failed and failing states are “statistically more likely to host terrorist groups that commit transnational attacks, have their nationals commit transnational attacks, and are more likely to be targeted by transnational terrorists themselves.” Williams (2007) counters that aside from Somalia and Sudan, transnational terrorism is not the most prevalent byproduct of Africa’s failing and failed states but rather “small arms and light weapons proliferation, transnational crime (especially the illicit trade in drugs, arms, minerals, petroleum, timber, wildlife and human beings), infectious diseases (including HIV/AIDS, malaria, tuberculosis, hepatitis B, Ebola, measles, and the West Nile virus), and political instability in the Horn of Africa and the Gulf of Guinea oil states,” that are of the greatest concern.

Failed and failing states also support insurgency by creating a vacuum within which various actors and non-state groups are able to create “zones of competing governance” (Forest 2010) where they compete for control of ungoverned territories and influence over geographical segments of the population (Kilcullen 2006; Peltier 2009). Not only does this create instability and undermine security and state-building, but it allows non-state actors and groups to influence events that may create an environment favorable to insurgencies, such as Pham (2011) found in his case study of Somalia’s Transitional Federal Government’s inability to defeat the al-Shabaab insurgency group. For example, the political vacuum created by failed and failing states may lead to “widespread conditions of conflict and

poverty” which provides fertile breeding ground for recruitment into insurgencies (Mills 2007: 20-21). As Rotberg (2003) states, “failed states provide no safety nets, and the homeless and the destitute become fodder for anyone who can offer food and a cause.”

Uneven development

Hand in hand with failed states in the creation and maintenance of insurgency is uneven development. Uneven development can be a contributing factor to as well as a result of state failure. Both Metz (1993) and Rotberg (2003) argue that a nation-state fails when it loses its legitimacy which may occur as the result of the state’s failure to provide the aforementioned social and economic safety nets because the state’s resources are being (or are perceived to be) channeled to a select or favored class or group thus disenfranchising the majority of citizens who turn their loyalties and allegiances to local sources, some of whom become “warlords” and leaders of insurgencies. As Rotberg (1993) states, “In the wilder, more marginalized corners of failed states, terror can breed along with the prevailing anarchy that naturally accompanies state breakdown and failure.” In African history, uneven development can also result from post-conflict reconstruction efforts wherein outside forces impose foreign concepts, institutions and structures that are not transferable to the indigenous recovering state; this can result in new influx of resources that are either controlled by existing elites or fuel the continued competition over resources by new means (Englebert and Tull 2008).

Among the state’s resources directly involved in uneven development is land. Muller and Seligson (1987) found that maldistribution of land in agrarian societies when it is part of an inegalitarian distribution of income nationwide is an important precondition of insurgency. Isaacman (1982), in his history of the Cotton Cooperative formation, discusses how the Cooperative laid the foundation for insurgency to form against the state based on agricultural production issues. Watts (2008) discusses how the commodification of the African countryside and the dismantling of the African commons in the competition to control high value agricultural products as part of the transitioning “neoliberalism” social structure, along with demographic pressures caused by high fertility, displacement and civil war, has increased land struggles and contributed to insurgency. Watts’s study validates the research done by Weiner (1991) regarding the effect of Zimbabwe’s liberation struggle on agrarian restricting. Even when state institutions seek to enact land reforms to try and counter some of the in-

equities, such as resettling or repatriating the “landless”, the reforms themselves can, perhaps unintentionally, further uneven development that contributes to insurgency (Harbeson 1971; Moore 1998; Weiner 1991). Conversely, though, Kiamba (1989) and Adams (2001) found that land reform could be an effective counter insurgency tool in some cases. Klugman, Neyapti and Stewart (1999) argue that economic motivation for conflict centers on the control of resources, “to which horizontal inequality (inequities between or among groups) has more importance than absolute access because conflict happens when one group attacks another to improve its relative position.” Similarly, Clapham (1990) finds that a complete lack of viable agricultural land, export production and access to an external market tend to characterize, “more than anything else,” insurgent regions in the Horn of Africa.

The role of uneven development in causing and supporting insurgency is multifold. As stated above, uneven development, or horizontal inequality, in the distribution of land and other physical resources is causal factor in insurgency and conflict, especially when a nation is transitioning from Marxist-based socialism to capitalism via intense, and often externally-supported, modernization, such as is the case with the majority of African nations. The vast amount of natural, physical resources (oil, gems, minerals, agriculture) discovered in Africa has led to rapid and uneven development. The resulting inequities that occur when a small portion of society controls access to the natural resources and its resulting wealth can lead directly to insurgencies by remaining segments of the population to balance the equation. The conflict between competing groups can in turn create localized destructive impacts to land, infrastructure, resources and the economy that result in horizontal inequalities and development gaps that may perpetuate continued conflict (Fukuda-Parr, Ashwill, Chiappa, and Messineo 2008). This situation is further compounded when it is external sources who are mining the resources, particularly as concerns oil, minerals and gemstones. Watts (2008) refers to this as a “geo-political contradiction of oil without wealth” that compounds a long standing geography of exclusion and marginalization in the oil rich areas of Africa, particularly as the indigenous populations receive none of the revenues but all of the social and environmental degradation involved in oil industry. Paes (2004) extends this concept to describe how external oil companies create enclave economies around oil extraction areas wherein all of the labor is brought in from outside and all that the surrounding communities are left with is the environmental degradation caused by resource exploitation.

Both Paes (2004) and Watts (2008) argue that this situation directly contributes to insurgency and conflict.

Paes (2004) and Banks and Sokolowski (2010) further find that insurgent groups will often engage in competition to control physical resources as a means of funding their continued operations, and use the surrounding uneven development as a means of recruitment to their cause. As Paes (2004) states, in the absence of good governance, where horizontal inequities are allowed to grow, “conflict commodities” and what he refers to as “lootable” and “obstructable” commodities directly support civil war and insurgencies. Both Le Billon (2001) and de Waal (1996) support and extend this argument stating that the decline of Cold War sponsorship has caused economic decline for both governments and rebel movements has driven military-oriented groups to seek control of commerce, resource extraction and even humanitarian aid programs in order to derive revenue to perpetuate their own objectives. Indeed, LeBillon (2001) stresses in his research the “the risks of violence linked to the conflictuality of natural resource political economies, and the opportunities for armed insurgents resulting from the lootability of resources.”

Political boundaries

The inability to secure, defend, enforce and/or clearly define political boundaries, both at the state and sub state level indirectly creates and maintains insurgency by contributing to the creation of ungoverned space. Aligned with the impact of uneven development in failing states, and given the importance of physical resources to funding insurgency, the inability to secure and enforce political boundaries allows for conflict and the “territorialisation of sovereignty around valuable resource areas and trading networks” (Le Billon 2001: 561). Even when resources are not involved, when states fail to enforce their political boundaries and the actions that occur within them, groups including insurgents find it easier to pursue autonomous control both within the state territory and across international borders (Rotberg 2003; Lohman and Flint 2010). In under-governed space, political boundaries have little meaning and minimal to no state control of the activities within them, and as a study by Lai (2007) concluded, a state’s inability to impose costs on terrorist groups within its own borders is directly correlated to the amount of terrorism produced from within that state. This is supported by Innes (2007) who notes that because terrorist and insurgent sanctuaries are fluid and not-static, porous borders facilitate their transnational networks.

In addition to transnational networks, weak and porous boundaries more easily facilitate the movement of transnational groups into state territory, along with the movement of weapons, funds and other logistical support (Flint 2011; Lai 2007; Swart 2009). Indeed Swart (2009) contends that not only is Africa's political borders porous, but so too are its coast lines which has allowed the proliferation of piracy and the export of terrorism. "In Africa, the threat to maritime security and the proliferating threat of ungoverned spaces have lethally combined to spawn the major threat of piracy and now also the potential threat of maritime terrorism off the insecure coastline of Somalia" (Swart 2009). Furthermore, Harpviken (2010) finds support within the literature that state failure is contagious across borders wherein a state's strength and functionality can be partly measured as a function of its ability to secure its borders and its failure to do so allows the formation of transnational networks, the movement of transnational actors and their resulting potential to support and maintain insurgency.

Population density and distance from capital

The creation of ungoverned or under-governed space may be influenced by a pronounced spatial dyad of urban-rural or center-hinterland. Classic insurgency theory often held that the origins of insurgency were closely tied to rurality or rural areas. Recent research has challenged the classic and rural insurgency theory questioning whether or not rurality really forms an increased likelihood of insurgency. While the research found that rural areas are a viable factor in the insurgency equation, they are not in and of themselves causal indicators (see Buhaug and Rød 2006, Sidaway 1991, Fearon and Laitin 1999, 2003). Indeed, these studies found that rural areas were not causal indicators, but rather offered strategic terrain for insurgent movements when the areas were distanced from the central governing area. Although Fearon and Laitin (1999) did find that groups with some sort of rural base were far more likely to experience large-scale violence than urban and widely dispersed minority groups. Furthermore, it is often the socioeconomic conditions enabled or fostered within rural areas or by the nature of their distance from central governance that are more likely to be strong indicators of insurgency. For example, Pinstруп-Andersen and Shimokawa (2008) found that it was the combination of population density, poor health and malnutrition within a rural area and dependent upon agriculture that was more likely to cause armed conflict. Clapham (1996) likewise argues that in many areas of Africa, settled agriculture was not sufficient enough to maintain the population density re-

quired to support local-level authorities making it difficult to draw tax revenue from the rural areas of a state, which not only weakened the central state's authority but also led the state to seek external revenues in compensation which created the conditions necessary for uneven development, which as discussed above can lead to under-governed spaces and insurgency.

Much of the recent research challenging rural insurgency theory, which involved empirical data analysis of African civil conflicts, found that generally speaking, population density and areas of high strategic value (e.g., areas rich in natural resources) have a greater risk of insurgency and armed conflict than do rural and difficult to access areas (Raleigh 2007, 2010; Raleigh and Urdal 2007; Raleigh and Hegre 2009; Buhaug and Rod 2006; Fearon and Laitin 1999, 2003). This consensus begins to fracture into more nuanced findings, though, as individual variables are examined and considered. Buhaug and Rod (2006) find a difference between territorial conflict and conflict over state governance wherein territorial conflicts are more likely to occur in sparsely populated regions near state borders and at a distance from the capital while conflict over governance is more likely to occur in densely populated areas, with high value resources and near the capital (see also Buhaug, Cederman and Rod 2008). Raleigh and Hegre (2009) find that "conflict events cluster particularly strongly in larger population concentrations that are distant from the capital," but that there is only a moderate difference in conflict-proneness between capital and periphery when population density is removed as a variable. Fearon (2004) and Buhaug and Gates (2002) also support the finding that increased distance from the capital is positively correlated with a higher risk of armed conflict due to a decrease in the state's ability to effectively govern in distant areas, which created opportunities for insurgents and rebels (Buhaug and Rod 2006). Still other studies found "While population growth and density are associated with increased risks, the effects of land degradation and water scarcity are weak, negligible or insignificant. The results indicate that the effects of political and economic factors far outweigh those between local level demographic/environmental factors and conflict" (Raleigh and Urdal 2007). Pasquale and Travagianti (2009) reached a similar conclusion using regression analysis on the effects of state level economic shocks versus local economic conditions.

Physical geography/terrain

A country's physical geography, and in particular certain types of terrain, has been found to be positively correlated with increased chance of ungoverned or under-governed space, armed conflict and insurgency. Rough terrain, particularly that associated with hills and mountainous terrain, is more likely to be associated with armed conflict and insurgency than other forms of terrain according to several studies (Hendrix 2011; Fearon and Laitin 1999; Fearon and Laitin 2003; Richards, Paul 2001; Buhaug and Rød 2006; Raleigh 2007; Buhaug, Cederman and Rod 2008). While the literature, to a significant extent, agrees on this point, the causal explanation for this based on analysis varies. Some studies contend that the reason for this relationship is that rough terrain is harder to subject to state control, weakening state capacity, and thus rebels and insurgents are more likely to use it for a base of operations (Richards, Paul 2001; Rustad, Camilla, Rod, Larsen, and Gleditsch 2008; Fearon and Laitin 2003 and Buhaug and Rød, 2006; Raleigh 2007). Richards (2001) and Rustad, Camilla, Rod, Larsen, and Gleditsch (2008), in particular discuss how mountains and forests in Africa can provide the resources (both commodity and food) necessary to sustain rebellions and insurgencies. Hendrix (2011) argues that this relationship is based on the state's inability to properly tax these areas reasoning that "because tax capacity proxies bureaucratic and administrative capacity as well as material resources, it conditions the decision to rebel more than military capacity per se." Several studies also note that these findings are typically found when the variable of rough terrain is combined with other variables such as presence of minority groups, poverty, political instability, population density, and distance to capital (Fearon and Laitin 1999; Fearon and Laitin 2003; Fearon 2004; Buhaug and Rod 2006; Buhaug and Gates 2002; Buhaug, Cederman and Rod 2008).

Conversely, some studies have challenged the connection between rough terrain and state weakness and insurgency. Raleigh (2007 and 2010) finds that it is the political geography, with an emphasis on power and control, more than the physical geography that will determine the likelihood and location of experiencing a conflict event. He still agrees, though, that physical geography does play a role, but simply that the role is not uniform in its effect and that different "components of physical geography correlate differently to conflict risk" (Raleigh 2007). Analysis conducted by Buhaug and Lujala (2005) revealed that while conflicts may still occur in mountainous and forested areas, the areas tend to be less mountainous and for-

ested than the mean value of those features for the country in which they occur. [Essentially, Buhaug and Lujala (2005) argue against using country level statistics in quantitative analysis of where and in what type of areas conflict zones occur, finding that when local level data is used, the findings will differ significantly from those using country level aggregates.] Continuing this line of investigation using disaggregated country level data, Buhaug and Rod (2006) find that in matters of *territorial* conflict (vis a vis conflicts over state governance) they are more likely to occur in areas far from the capital, close to state borders and without significant rough terrain. Yet another study found that when using disaggregated country level data, forested areas were no more or less likely to have longer durations of conflict than other areas, but that a shorter distance to a coast tended to “make conflicts in forested conflict zones longer” (Rustad, Camilla, Rod, Larsen, and Gleditsch 2008).

In a different vein of inquiry, some studies have examined the connection between agriculture, climate and the likelihood of conflict. Hendrix and Glasser (2007) find that “Climates more suitable for Eurasian agriculture are associated with a decreased likelihood of conflict, while freshwater resources per capita are positively associated with the likelihood of conflict. Moreover, positive changes in rainfall are associated with a decreased likelihood of conflict in the following year.” Meier, Bon and Bond (2007) find similar results in their study on the influence of environmental variability on pastoral conflict in the Horn of Africa. They also note that preliminary statistical analysis revealed an escalation in pastoral conflict when other variables were coupled with “an increase in vegetation that may provide cover for organized raids.”

Built environments/physical infrastructure

Another indicator of ungoverned or under-governed space that contributes to the maintenance and creation of insurgency is the condition and usage of a state’s built environment and physical infrastructure. Although there is not much literature directly linking ungoverned and under-governed space in Africa with the built environment and physical infrastructure, studies do exist for other places that can be appropriately extrapolated to understanding insurgency in Africa. Primary among them is Zhukov (2012) who argues that combatants face daily “real-world logistical constraints” and examines the role that road networks play in the diffusion of insurgent activity in the North Caucasus. He finds that “Roads shape the costs of sustaining and expanding operations, which facilitates the trans-

mission of violence to new locations, but can also intensify competition for limited military resources between nearby battlefronts. At the local level, this dynamic makes the relocation of insurgent activity more likely than its expansion.” Indirectly, Menkhaus (2007) acknowledges the importance of physical infrastructure and the built environment to sustaining and hosting insurgents and how ungoverned or under-governed spaces tend to lack such sufficient or quality infrastructure: “The Horn of Africa region’s many ungoverned spaces are, it turns out, difficult and dangerous not only for international relief organizations but for international terrorists as well. There, logistics are a constant challenge; communication is poor; maintenance of health and access to clean water can be problematic...”

Conversely, the built environment and physical infrastructure can actively support insurgent activities. Douglas (2008) and Traugott (2010) discuss the use of street barricades as tool of insurgency and in Douglas’ research in particular, how the width of Paris streets facilitated and enabled the successful use of barricades. Douglas also notes that in the rebuilding of Paris and George-Eugene Haussmann’s famous urban restructuring, the roads were widened into boulevards and open spaces in an effort to “not only alleviate the social pressures which produced unrest, but also to make the construction and defense of barricades impossible” (Douglas 2008: 32-33). Harrison (1988) examines crowd behavior in 19th century England and discovers that the symbolism inherent to crowd events is largely derived from the built environment or physical space that the crowds actively choose to congregate in, not only in terms of space that would physically host the crowd density, but more importantly the image and symbolism invoked by the physical surroundings (e.g., the Occupy Wall street Movement selects the space outside wall street and financial strongholds; federal law protestors congregate outside the Supreme Court, etc.). Other research has examined the use of sacred space, particularly within an urban setting, (e.g., shrines, mosques, temples, synagogues, churches, etc.) in insurgency and counter insurgency and found that insurgents often seek out sacred spaces as “the exploitation of sacred spaces confers on insurgents a patina of religious sanction, provides access to ready recruits who visit such spaces, affords insurgents secure logistical bases, permits secure venues for weapons accumulation and other fortifications, and offers sanctuaries for the groups’ leadership and cadres” (Fair and Ganguly 2008:4).

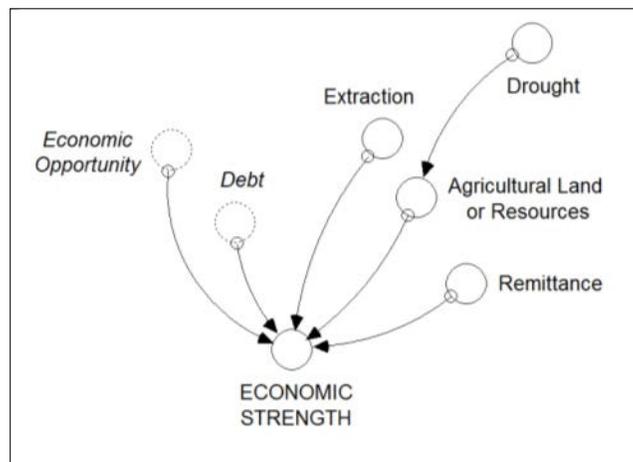
The built environment can play another role in under-governed or ungoverned space and its connection to insurgency in the form of “Letterbox

Sovereignty.” As Clapham (1996: 20) states: “in practice, the international community tacitly adopted the rule that the government of a state consisted of that group of people who controlled the most important buildings in the national capital. This may be described as 'letterbox sovereignty', in the sense that whoever opened the letters in the presidential palace received the invitation to represent the state concerned in the United Nations and other international bodies.” Hence, the built environment itself can become the objective of insurgency in an effort to gain legitimacy and control.

Economic strength

Economic strength emerged as a factor of actor capacity that captures the control of physical and financial economic resources. As such, economic opportunity, debt, extraction, drought, agricultural land or resources, and remittance all shape economic strength (Figure D11).

Figure D11. Factors contributing to economic strength.



Literature more specifically identifies these as sources of money needed to make operations possible. Common examples are the Nigerian insurgencies that draw financial strength from the Niger Delta oil fields (Akinola 2011; Obi 2010), and the diamond fields funding the growth of guerrilla movements in Angola (Buhaug and Rod 2006; Malaquias 2001). The natural resources agriculture, oil, and diamonds; remittance payments; and direct coercion are the primary financial sources for African insurgencies. An important characteristic of these sources, pointed out by Clapham (1990), is that these sources rarely directly touch any of the central elements on which state power relies. Save a few exceptions, the sources do not threaten the national capital, or the interests of groups dependent on

state employment; they do not threaten the export economy; nor do they threaten the essential trading links with the outside world. The reason—insurgency is pre-occupied with political control. The principles and policies that they pursue may all be seen as mechanisms intended to reinforce their own control over their subject populations. As such, economic policies are much more readily understandable as attempts to increase their capacities than attempts to increase productivity (Cilliers 2001; Smith 2004; Clapham 1990). Clapham (1990) exemplifies the peasant—farmers in impoverished societies whose economic (and perhaps physical) survival depends on the decisions that they make. Insurgencies will mobilize the peasants' wisdom, aspirations, and sense of self-preservation, as a means to gain control over the population and coincidentally take a cut of their profits. This understanding places economic opportunity and debt as supporting factors and contributed to the elimination of industry as a contributing factor (Reno 2001; Reno 2002; Bond 2003; Mbabazi, MacLean and Shaw 2002; Walton and Ragin 1990).

Tied to natural resources is a vulnerability to drought and other disasters. General literature is abundant referring to climate change, natural disasters, and ecosystem health as degrading economic strength. However, the systematic literature sweep found gaps in connecting these concepts to insurgency in Africa. Drought is the single factor well documented in connection to African insurgencies. (Blaikie 1994; Bell and Keys 2011; Couttenier and Soubeyran 2010; Hendrix and Glaser 2007; Onda 2009; Pham 2011; Purkitt 2009; Webersik 2008).

Economic strength is additionally often derived from external assistance rather than from the successful management of domestic production. Three elements of this assistance—armaments, food, and external remittances—have been especially important to the African context. Armaments are a critical part of the political economy where both state and insurgent movements are able to utilize means of coercion vastly beyond their local economies. This concept is similarly supported in the Military Investment (Herbst 2000; Fjelde and deSoysa 2009; Luckham 1994; Cilliers and Cornwell 1999; Howe 1998), Power Relations (Kandeh 1996; Katerere et al. 2001; Kesby 1996; Lemarchand 2007, Obi 2009; Tull and Mehler 2005), and Access to Weapons (Marsh 2007; Marsh 2012; Braithwaite 2005; Boutwell and Klare 199; Louise 1995) factors where military strength may be acquired with money or the 'right' relationships. Ultimately, the Factor Map embodied this concept in these other factors.

Given the extensive food-deficit areas within Africa, control over imported food is critical. The literature highlights the role of external food supply as a source of political power (Moradi 2004; Clapham 1990; Kasara 2007; Mlambo 2005; Peters and Richards 2011; Richards and Chauveau 2007; Macrae and Zwi 1992; Wall 1993), and generalizes that all governments and insurgent movements are prepared to ‘play politics with food,’ whether by seeking to control food distribution themselves while denying it to their opponents, or in many cases by deliberately destroying food supplies and distribution mechanisms controlled by the other side. Because it is the distribution of food that links it to insurgency, this factor has been rolled up into the Service Delivery factor. The Service Delivery literature notes that the food supply example could be extrapolated to the supply of any service, and in fact, examples of other services do exist (Pirie 1993).

The remittance economy derives from the large numbers of exiles from insurgent regions who have found employment abroad—notably Eritreans working in Europe and North America, and Isaaq Somalis working in the Gulf (Clapham 1990). In addition to amounts that they send home to relatives, these exiles are regularly taxed by the insurgent movements. Informal sources suggest that this taxation runs about two month’s salary a year. Literature documents the estimated amounts of money remitted to African insurgencies and governments (Ayodele 2008; Jenkins et al. 2011; Menkhaus 2009; Omeje 2007).

Annex A: Concept Contribution Statement

Table D2. Potential factors and their hypothesized contribution to the creation and maintenance of insurgency.

Concept/ Potential Factor	Contributes to the production and maintenance of insurgency in the following manner:
access to capital	affects access to goods and services, and freedom
access to weapons	proportional to risk of insurgency
agriculture	covered in food system + industry
built environment	related to identification with place, sense of belonging. Affects access to goods and services. If disparities exist between government and insurgent control of/access to built environment, may confer advantage. Also may be part of livelihood, culture, tradition
civil liberties	more civ. liberties could be proportional to risk of insurgency by allowing individuals freedom to inform, promote, participate. could be inversely proportional to risk of insurgency because individuals who want more civ. lib. may participate in insurgency
civil society	may be source for mobilization, shape behavior, prevent service delivery gaps
climate change	can (+ or -) change land use potential which can result in friction regarding natural resources, changes in agricultural productivity, movement of disease vectors and people
communication	propaganda, symbolism, speeches, strikes - all may contribute to increase or decrease n risk of insurgency. Also, see infrastructure, essential services.
consent of governed	proportional to risk of [participation in] insurgency
corruption	shapes public perception of government, issues of fairness, grievances; affects flow/use of (\$) resources
culture	combine w/tradition
debt	may limit government access to capital, ability to recruit support (consider "structural adjustment" by World Bank)
diaspora	remittances can be used to support ins and/or government. Creates global flow of info.
disparities	perceived disparities induce mistrust, conflict between social groups, which could lead to participation in insurgency
distribution of resources	contributes to perception of equity/justice
econ development	inversely prop to risk of insurgency due to ROI (return on investment) in tax \$, etc.
economic class	affects access to goods and services, and freedom
economic opportunity	facilitates econ. mobility and reduces hopelessness; inv. prop. to insurgency risk
education	proportional to risk of recruitment (insurgency). Could align with government intent. Source of opportunity.
effectiveness of military	inv prop to risk of insurgency
elite approval	?
energy	ins. access to energy prop to risk of ins. For civilian pop. and government energy is represented under many other categories (industry, ag, basic materials, ...)
ethnicity	may drive identity with government, insurgency. May drive power rel'ps
exposure to information	shapes public perceptions
external actors	may add resources to either side, influence?

Concept/ Potential Factor	Contributes to the production and maintenance of insurgency in the following manner:
extraction	ag and extraction are associated with massive movements of seasonal workers. Other aspects covered in industry + natural environment
food system	affects reliance upon global economy,
freedom of choice and action	drives extent to which behavior reflects preference
government accountability	provides governed with leverage regarding government behavior, and prop to public perception of/trust for government
government capacity/incapacity	capacity parameters apply to governments ability to act in every way, including insurgency situations; inversely prop to risk of insurgency
government partnerships	formal or informal obligations could drive or constrain behavior, strengthening or weakening government position
government transparency	inversely prop to corruption levels, prop to public perception of/trust for government
grievances	proportional to risk of insurgency
healthcare system	see services
history	may drive grievances and identity, and shape opportunities
ideology	competing ideologies may shape relationships between people; influence choices regarding whom to support and how and how much
individual in charge	leader's personality affects quantity and direction of influence on population
industry	shapes econ opportunity, may create power hierarchies (local to international). Influences government and maybe insurgent access to capital.
influence	patterns of location/distribution of influence may be associated with greater or lesser risk of insurgency
infrastructure	see services, also
inter-group relationships	part of social ties, at a different scale
internal actors	may add resources to either side, influence?
military investment	inv prop to risk of insurgency
natural disaster	subset of sys shock
natural environment	level of ecosystem health -> ecosystem goods and services available. If disparities between government and insurgent control of/access to nat env, may confer advantage. Also may be part of livelihood, culture, tradition
natural resources	contribute to material and economic well-being
opposing forces	quantity and strength of forces opposing established government are proportional to risk of insurgency
opposition	same as opposing forces
perception of equity	see disparities
physical security/personal safety	inversely proportional to risk of insurgency
physical spaces	under-governed spaces may allow insurgents to maneuver
policy	influences rel'p between governed and government
political boundaries	may be contested, may impose rules on behavior (esp if arbitrary)
population	quantity of individuals available to actively support government, insurgency
power relations	already covered under specific relationships
privilege	see social class, econ class
public approval	public approval of government is inversely proportional to approval of insurgency. Approval [of either] contributes to participation in that activity.
public goods	can be [illegally] leveraged by any party. Could be utilized as an economic

Concept/ Potential Factor	Contributes to the production and maintenance of insurgency in the following manner:
	resource by government, and this could be a source of contention/discontent for citizens
public health	health status of population and degree of health disparity affects satisfaction with government, and productivity (access to basic materials for a good life and economic status). also see service delivery.
public services	inversely prop. with approval of government, also affects individual capacity to participate (government or insurgency) and individual outlook, which may shape behavior
regime type	different regime types may be associated with different levels of risk for insurgency
religion	Extent to which belief system is persecuted by the government is prop. to insurgency Risk. Other effects on ins risk are covered by ideology and tradition.
rule of law	influences perception of fairness, which influences decision to support government vs insurgents Also, type of legal system may be correlated with risk of insurgency
sanitation	contributes to material life conditions (see service delivery)
service delivery	deliverer of services gains approval, support (e.g., hezbollah vs elected government)
size of military	inv prop to risk of insurgency
social class	may constrain opportunities
social cohesion	proportional to likelihood that large #s of people will act in concert (for or against insurgency)
social services	deliverer of services gains approval, support (e.g., hezbollah vs elected government). Populations that don't receive social services or that perceive unfair distribution are more likely to participate in insurgency
social ties, interactions	contribute to recruitment patterns (government or insurgency); may facilitate assessment/leverage power distribution, contributes to flow of information
strength of government institutions	inversely prop. to risk of insurgency
TCOs	may provide resources to insurgents or government
technology	Could confer advantage if one side has greater access, skill, or usage than the other
terrorism	can shape public opinion re government, can induce fear which could affect individual's choices regarding active support of government, insurgents
tradition	may be a source of emotional appeal for insurgents or government, predispose individuals to certain behaviors and beliefs, and to follow individuals of similar tradition. May be high-inertia, slow and difficult to change
transportation	affects access to goods and services, and freedom to move
VEOs	may provide local opportunity for participation, may provide information to encourage insurgency, may leverage local insurgency for their own means
water	contribute to material well-being (potable, food production, industry)

Annex B: Initial Factor Reorganization

The purpose of this step was to apply our systematic literature review to identify factors that mechanistically directly and indirectly contributed to insurgency in Africa. Seven of the original concepts were found to represent something other than this. Many of the remaining concepts were reorganized (e.g., narrowed, split, merged, or renamed) to better capture the key modes by which they were found to factor in insurgency. Table D3 and Figures D12 and D13 detail this reorganization.

Table D3. Eliminated potential factors.

Eliminated Concept	Reason for Elimination
External Actors	Actors are removed from the Factor Map. The Factor Map is actor-centric—showing “things” or “situations” that are factors in insurgency. Actors are implicit in the model, and not represented as things. Instead, we understand that they are the agents of action. Actors respond to or change the factors.
Industry	Is not strong enough to be a pertinent factor for the African case study. No literature linked industry to the creation/maintenance of insurgency. Industry was only documented through economics and physical space. Thus, it was determined irrelevant to look narrowly at industry.
Internal Actors	(same as External Actors)
Opposing Forces	Is an emergent property A key issue with this concept in the literature is that definitions of strength vary. The description seems to understand strength as size or quantity, though tactics, training and resources are other aspects (Notably, these concepts were divided on the government side into military size, effectiveness, and expenditures). Most work on this issue is limited because data is not available, not because rebel strength (however it is conceptualized) is seen as unimportant by experts. Classic concepts of “balance of power” and relative capability suggest that rebel strength is only important as it relates to government strength. As mentioned below, rebel goals and tactics should also be included otherwise the concept of “rebel strength” is irrelevant.
Opposition	Is an actor—same agreement as External Actors
Social Cohesion	The sociological concept of "Social cohesion" may have yielded few direct results, which does not render the concept irrelevant or meaningless, it just means theories of social cohesion have not yet been applied in the context of understanding the production, maintenance, and dissolution of insurgency - clearly and oversight on the part of academia. A gap in understanding that should be explored! Furthermore, there has actually BEEN a lot of work on the link between "social cohesion" and societal resilience/vulnerability - which makes societies easy marks for destructive influences such as those exerted by violent extremists, or insurgents. This work would not likely have been found in a 1 hour google search (although that was our chosen methodology).
Terrorism	Terrorism is a tactic used in achieving a certain end. It is not a factor contributing to the creation or maintenance of insurgency.

Figure D12. Summary of reorganization of potential factors.

access to capital	education	inter-group relationships	recruitment
access to weapons	effectiveness of military	internal actors	regime type
agriculture	elite approval	mass consent	religion
agriculture land & resources	energy	military investment	rule of law
built environment	ethnicity	natural disaster	sanitation
charismatic leadership	exposure to information	natural environment	service delivery
civil liberties	external actors	natural resources	size of military
civil society	extraction	opposing forces	social class
climate change	food system	opposition	social cohesion
communication	freedom of choice & action	perception of equity	social interactions
consent of governed	government accountability	physical security/personal safety	social services
corruption	government capacity	physical spaces	social ties / interactions
culture	government partnerships	policy	socio-economic class
debt	government transparency	political boundaries	strength of government institutions
diaspora	grievances	population	TCOs
disparities	healthcare system	power relations	technology
displacement	history	privilege	terrorism
distribution of resources	ideology	public approval	tradition
drought	individual in charge	public goods	transportation
economic development	industry	public health	VEOs
economic class	influence	public services	water
economic opportunity	infrastructure		

LEGEND

Eliminated from this effort Reorganized into an existing concept Concepts receiving reorganized concept
 New-named/formed concepts Concepts remaining as originally defined

Annex C: Initial Factor Contribution Statement (v1)

Table D4. Factors and their contribution to the creation and maintenance of insurgency, initial attempt.

Factor	Contributes to the production and maintenance of insurgency in the following manner:
access to weapons	Arms transfers may be considered "positive predictors of increased probability of war" (Craft 2002), and the mode of arms acquisition can affect the type of insurgency that ensues. (Marsh 2007; Marsh 2012) The availability of arms may have a significant effect on both the frequency and type of conflict (Brobeck 2010), as well as the intensity. (Louise 1995)
built environment	Tied closely with physical security, political boundaries, physical spaces, and population (Buhaug and Rod 2006; Fearon and Laitin 2003; Raleigh and Hegre 2009).
charismatic leadership	Leaders draw from their personal experiences during political decisionmaking (Dyson et al 2006). Leadership characteristics such as personal rule, absence of separation between the public and private realms, patron-client administrative networks, veneration of the ruler, massive corruption, ethnic/sectional-based support, and repression of opposition and violation of human rights can describe individual leaders as decisionmakers (Ikpe 2000; Goemans et al. 2009). As a result, there is utility in using leadership to analyze insurgency. Insurgency is a direct product of leadership (LeVine 1980; Lindberg 2003).
civil liberties (grievance)	Civil freedoms have strong and robust negative effects on insurgency support when freedoms eliminate/reduce population grievances (Krueger and Maleckova 2003; Krueger and Laitin 2003; Fearon 2003; MacCulloch 2010). Generally, grievances manifest when civil liberties are abused. Fearon (2003) notes that it is highly unlikely that a government can defeat or minimize an insurgency without committing significant abuses of civil liberties and human rights. These will include changes that give the state powers of detention and investigation that go well beyond what is necessary to counter ordinary crime. In this situation, a constraint in freedoms may reduce grievances.
civil liberties (mass consent, strength of government institutions)	Abuses of civil liberties by state forces help insurgencies by increasing public support for insurgents while undermining support for the government (Krueger and Maleckova 2003; Krueger and Laitin 2003; Fearon 2003; MacCulloch 2010). Greater economic growth can buy off part of the increase in support when freedoms are constrained by government forces (MacCulloch 2010). Fearon (2003) also notes that it is highly unlikely that a government can defeat or minimize an insurgency without committing significant abuses of civil liberties and human rights. These will include changes that give the state powers of detention and investigation that go well beyond what is necessary to counter ordinary crime. In this inverse proposition, civil liberties are determined through mass consent.
control of agricultural land/resources	Conflict may be triggered when maldistribution of land contributes to income inequality (Muller and Seligson 1987), by disparities in access to land, labor, or capital, or by changes in the institutional regulation of land access and control. (Richards and Chauveau 2007) Many African governments at war rely on commercial agriculture as an economic base (Clapham 1990), and such wars may include a struggle to control both the production and distribution of food (Potgier 2000), and both aspects can be factors in government stability/instability. (Abrahams 2010) Agriculture can also contribute to situations of violence or insurgency via political effects related to taxation. (Kasara 2007) Within a country, rebel groups are more likely to locate in regions with cash crop processing industries (Moradi 2004), and international capital may also be a factor in land-centric conflicts. (Peters and Richards 2011)
corruption	Corruption was found to be widespread among government and insurgent agencies. It was generally found to have a deleterious effect on government performance and transparency/accountability, both of which contribute to the loss of public support and social stability, providing entry points for insurgency (or at the least, grievances that may erupt into conflict). (Bratton, Michael and Chang, Eric 2006; Rotberg, R 2003)
culture	Cultural factors affect the circulation of discourses and ideologies in Africa, which affect the maintenance and production of insurgency. Depending on the different causal processes, the impact of cultural factors on insurgent groups are as varied and diverse as culture itself (Richards 2011). To note only a few examples, some cultural factors affecting insurgency are cultural notions of revenge and honor (Hussain 2008); the emergence of an imagined community of rebels who all share the same cultural background (Abdullah 2002); cultural notions of victory positively influencing how people view coups d'etat (Henderson 1998); and racial stratification as a cultural construct helping configure the patterns of violence when insurgency takes place (Besteman 1996).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
debt (economic strength)	Debt can affect an organization's economic capacity by either reducing its ability to capture financial resources (negative impact) or as a means to gain control over a population and coincidentally take a cut of their profits (positive impact) (Cilliers 2001; Smith 2004; Clapham 1990).
debt (strength of government institutions)	Foreign debt can affect a government's stability and strength by either supporting that government against competitors to the point where that government can prey on its weaker unstable neighbors (Reno 2001; Reno 2002), or it can weaken a government if the austerity policies that are the preconditions to foreign debt loans from the IMF and the World Bank provoke anti-state protests in debtor countries (Bond 2003; Mbabazi, MacLean and Shaw 2002; Walton and Ragin 1990). Foreign debt can also pull a country out of dire economic straits and, though an economic practice directly linked to the economy of debtor nations, debt is inextricably linked with politics as evidenced by the collapse of the South African economy post-apartheid (Lowenberg 1997) or when debt relief actually strengthened a country's security forces rather than its economy (Howe 1998).
displacement	Violent evictions of local communities have contributed to famine and civil war in Sudan. Population relocations and restrictions on movement on trade have also contributed to the spread of famine in many other African countries such as Somalia that ultimately resulted in the eruption of insurgencies fueled by these terrible grievances (Abrahams 2010; Verhoeven 2011; Wall 1993). Another grievance that affects the displacement of people from their land in Africa has to do with struggles over scarce arable land and the forced displacement of those who cannot remain and make a living, in this way creating an army of mobile youth (Chaveau and Richards 2008; Peters and Richards 2011; Richards and Chauveau 2007). People who are displaced abroad as part of a general African diaspora can continue to be associated with insurgent movements through remittances and the spreading and maintenance of insurgent ideologies in migrant communities overseas (Ayodele 2008; Omeje 2007).
distribution of resources	Conflict may arise from perception of competition, relative deprivation, or unmet expectations related to economic goods (Nafziger 2002), or from fear of exploitation or desire to protect interests (Lake 1996). Income inequality, especially, is associated with an increased risk of violent conflict (Fjelde 2010, Nafziger 2002, Muller 1987) as is relative scarcity. (Thiesen 2008) Pressure from international partners may constrain redistributive mechanisms, further contributing to grievances. (Nafziger 2002)
drought	The narrower category of drought formed out of climate change. Drought is the single factor well documented in connection to African insurgencies. (Blaikie 1994; Bell and Keys 2011; Couttenier and Soubeyran 2010; Hendrix and Glaser 2007; Onda 2009; Pham 2011; Purkitt 2009; Webersik 2008). Drought specifically degrades economic strength of a region. It may also create an opportunity for insurgencies to take advantage of vulnerable populations.
economic development	Lack of economic development in Africa, linked to class exploitation, precipitates a relative deprivation or perception thereof, which contributes to insurgency and to other violent conflicts such as terrorism (Boswell and Dixon 1993; Nafziger 2002; Piazza 2006). African countries seek development and democracy, and attempt to achieve these in part through control of insurgency that also increases regional security measures (Francis 2006; Hills 1996). In sub-saharan Africa, "civil war is less likely with increased economic development" and increased international trade (Bayly 2008; Krause and Suzuki 2005). TCO activities undermine socioeconomic development because they diminish the credibility of the state as an institution that guarantees security of both people and business and development investments (Mazzitelli 2007).
economic opportunity (economic strength)	Violent conflict can have both a negative and a positive effect on capital. Economic opportunity is significantly correlated with economic strength of either insurgent groups or the state that can be influenced by capital flight (Azlant 2008) or by the creation of new economic opportunities for rebel alliances or for state-supporting groups (Ylonen 2005). In fact, this contradicts the notion that war zones are zones of capital deficiency, rather, conflict can increase social capital dramatically as new economic opportunities arise through the exploitation of natural resources such as oil and mining and their integration into a transnational system that supports warfare (Azam 2001; Cilliers 2001; Deng 2010).
economic opportunity (grievance)	An individual's economic opportunity based on his or her level of education, occupation and local economic conditions affects the rebel or insurgent recruitment marketplace. Individual's with little or no economic opportunities accessible to them will be more likely to join an insurgent movement to make a living or to express their grievances (McIntyre 2005; Weinstein 2003; Ylonen 2005).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
economic opportunity (mass consent, strength of government institutions)	Economic opportunity is connected to violence which is in turn associated with the process of state collapse in Africa. Access to capital by individuals can contribute to weakening a state either through a political distribution of spoils in a time of war (Allen 1999) or through utilizing international intervention opportunities to pit political actors against each other (Johnston 2007). At the national level, economic opportunity predominantly affects insurgent population's political grievances against the state (Sambanis 2001), and the creation of new versions of state authority that in turn create new economic opportunities for individuals who participate in conflict (Reno 2009).
economic strength	The PIAF establishes actor motivation as a primary factor in insurgency. As with recruitment, "economic strength" emerged as a major category of actor capacity that captures key factors related to control of physical and financial economic resources.
effectiveness of military	The degree of effectiveness of a country's military can determine how quickly insurgency can be prevented, stopped or even started. An insurgent threat can be exacerbated by a country's size and by whether said rebellion is internal or external, where small countries with internal insurgents have a greater chance of sparking and maintaining this conflict (Herbst 2004). An insurgency can be terminated through security but could easily devolve into repression thus fomenting insurgency (Colaresi and Carey 2008). Military effectiveness is important to control insurgent movements throughout Africa, as this is a continent where more than half of its states have at some time or another been governed by the military (Decalo 1989). The level of education and training of the military can also affect its effectiveness and role in maintaining or creating insurgency. Low rank soldiers (called the "militariat" by some authors) can cause social collapses when they fail to control a population (Kandeh 1996) or when the ethnic differences between soldiers and those higher in the army hierarchy create conflict within the military itself, dramatically reducing its effectiveness (Jenkins and Kposowa 1992).
elite approval	The literature on privilege in Africa argues that a sense of privilege, or a sense of an increased social status can foster insurgency and violent actions against excluded or marginalized populations such as in the case of the Hutus in Rwanda (Jackson 2004). Privilege affects the balance of existing power relations either through the acquisition or accumulation of wealth, strategic political alliances including clientelism, and traditional forms of patronage (Malaquias 2001; Reno 1997; Tomlison 2008). [Add literature on elite approval here.]
ethnicity	Ethnicity is not the most important factor that causes insurgency. More important causes are poverty (financially weak states), political instability, rough terrain and large populations (Fearon and Laitin 2003; Reno 2002). Nevertheless, ethnic mobilization is an important factor in political indoctrination and motivation of insurgents (Herbst 2000). In fact, ethnic identity and citizenship (such as in the cases of Congo-Kinshasa, Rwanda and Burundi) can trigger violent insurgencies through international pressures for democratization (Young 2006). Further, bargaining based on a group's ethnic identity is an important mechanism to facilitate peace/end insurgency (Keita 1998; Rothchild 1995).
exposure to information (elite approval, power relations)	Perception of momentum may drive support for insurgency. (Ford 2005) Whether from foreign or local sources, the type of information to which a populace is exposed contributes to the audience's attitude toward and support for related causes. (Eikmeier 2005) Propaganda delivered to the populace by insurgents can increase the amount of aid and support that reaches the insurgents. (Jackson 2004, Innes 2004)
exposure to information (mass consent, strength of government institutions)	Perception of momentum may drive support for insurgency. (Ford 2005) Whether from foreign or local sources, the type of information to which a populace is exposed contributes to the audience's attitude toward and support for related causes. (Eikmeier 2005) Propaganda delivered to the populace by insurgents can increase the amount of aid and support that reaches the insurgents. (Jackson 2004, Innes 2004)
extraction	Scholars have hypothesized that there is a relationship between natural resource extraction and violence that leads to insurgency through the distribution of wealth that can bolster a society's economic strength. Authors point out examples from the Niger Delta that is rich in oil and how this resource affected insurgency in Nigeria (Akinola 2011; Obi 2010), or how the presence of diamond fields actually funds and promotes the growth of guerrilla movements in Angola (Buhaug and Rod 2006; Malaquias 2001). The resource wars resulting from these conflicts can also be transnational and exacerbate an already delicate situation either promoting or discouraging regime durability (Cilliers 2001; Smith 2004).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
government accountability	Accountability in the African context is usually applied to taking responsibility for past government actions, such as the Truth and Reconciliation Commissions in South Africa, a phenomenon that <i>may</i> not be immediately relevant to our areas of interest. (Clement Eme Adibe 2010). (Keefer, Philip 2008) notes the declining importance of political parties in the Central African Republic (CAR). It argues that the problematic attitude of elites who are fluctuating between violent and peaceful behavior in order to further their own careers is jeopardizing both peace and democracy. The author hypothesizes that both political parties and rebel movements are failing to adequately represent (ethnoregional) interests, but that parties are suffering more in the course of the enduring war and the peace process.
government partnerships	A state by itself is often not able to control an insurgency to the point where it stops it or successfully implements it. Oftentimes, a government administration is compelled to form partnerships. Often these take the form of power-sharing agreements with oppositional forces to prevent insurgency (Tull and Mehler 2005). Partnerships between the military and civilian state administration can also contribute to the making of successful insurgencies (Young 1996). In Africa's case where governments are weak in many of the nations in this continent, state-civil society partnerships have worked to keep insurgencies at bay by strengthening the state and helping disadvantaged communities (Brikerhoff 1999; Miraftab 2004). Lastly, a weak or failing state can also form partnerships with patronage networks when state resources decline, thus reducing the chances of insurgency by increasing economic viability (Reno 1997).
government transparency	Transparency is used normatively as a condition for continued funding by external aid partners or by outside monitoring agencies (such as Transparency International. Little attention is paid to measuring transparency in African countries, as the unspoken consensus is that such transparency does not exist.
grievances	Grievance can lead directly to the creation and maintenance of insurgency (Keita 1998, Mokuwa 2011, Metz 1993).
history (culture, ideology)	Africa's colonial history is directly related to how the citizens from different African nations today respond to insurgency or participate in insurgent movements. Historic characteristics of the colonial administrations that ruled these nations can affect insurgent movements today including policies of ruthless extraction (Young 1997); legacies of ethnic stratification (Blanton, Mason and Athow 2001); virulent racism that distanced rulers from subjects and created ethnic and class rifts (Clapham 2002; Mkandawire 2002; Young 1997), and generational rivalry in African resistance as the younger generations look upon older Africans who accommodated to the colonial rulers as traitors (Carton 2000). The history of resistance to colonial authority strongly affects or feeds into the ideology deployed by insurgent leaders to mobilize different groups to resort to violence.
history (grievances)	Africa's colonial history is directly related to how the citizens from different African nations today respond to insurgency or participate in insurgent movements. Historic characteristics of the colonial administrations that ruled these nations can affect current insurgent movements including policies of ruthless extraction (Young 1997); legacies of ethnic stratification and struggle over borders (Blanton, Mason and Athow 2001; Starr and Most 2001); virulent racism that distanced rulers from subjects and created ethnic and class rifts (Clapham 2002; Mkandawire 2002; Young 1997), and generational rivalry in African resistance as the younger generations look upon older Africans who accommodated to the colonial rulers as traitors (Carton 2000). In short, the colonial legacy is used by a majority of African rebels as justification for insurgency through perceived grievances.
ideology	A primary motivation for insurgent leaders in Africa is ideological. Ex: Afghanistan, and the different insurgent leaders who wanted an extremist Islamist government (Jones 2008), or the conflict between the fundamentalist war theology and the imported democratic ideology in Zimbabwe (Chitiyo 2008). Individual ideological commitments and collective interactions with the state and international organizations account for the majority of support for radical insurgent Islamism and its dissemination in civil society (Githens-Mazer 2008; Gray and Stockham 2008; Kilcullen 2005; Thomas 2004). Political ideology is vital in formulating effective counterinsurgency. Ex. Rhodesia and the political victory for the insurgent guerrilla movement (Evans 2007), or Rwanda's Hutu extremist genocidal insurgency (Orth 2001).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
mass consent	Government strength is dependant on public trust in the regime and it's ability to mediate between the demands of competing groups within society (Hutchison et al. 2011). There is a vast range of sources of support and motives for support (Christopher 2010; Davis et al. 2009). In example, using public opinion data, satisfactory delievery of services leads to popular perceptions that the government upholds the constitution (Bratton 2006; Weinstein 2005). Thereby mass consent promotes/undermines governmental strength.
military investment	Research on military expenditures, effectiveness and overall size are typically not distinct in the literature. If a piece covers military expenditures, it typically also discusses size and effectiveness and so on. There is some overlap with the "arms" concept. Whether spending/effectiveness/size lead to war/peace or the other way around is an uncertain in the literature and the actual relationship is undoubtedly a little of both. In addition, effectiveness and size seem to follow a number of other factors (economic strength, history, regime). (Herbert M. Howe 2001).
physical security/personal safety	Very few scholars study this directly, mostly due to difficulty in collecting information on repression. Instead, studies tie safety/security to regime qualities (democracy/authoritarianism) that make physical repression more or less likely. (Allen, Chris 2012) Also see rule of law.
physical spaces	Tied closely with physical security, political boundaries, and population (Fearon and Laitin 2003; Raleigh and Hegre 2009); geographical factors play a critical role in determining how insurgencies are fought (Buhaug and Gates 2002). Spatial analysis of conflict find–beyond physical security, political boundaries, and populations–that rough terrain and noncontiguous territory contribute to insurgency (Hendrix 2011; Buhaug and Rod 2006; Buhaug and Gates 2002; Lohman and Flint 2010; Buhaug 2005; Raleigh 2007).
political boundaries	Literature focuses heavily on geographic elements and the fact that weak states cannot control their borders thus leading to conflict or possible insurgency. Discussion includes poverty—which marks financially and bureaucratically weak states and also favors rebel recruitment—political instability, rough terrain, and large populations. (Fearon, James and Laitin, David 2003). Discusses how non-secure borders have a disastrous effect on national security. Fighters and arms can spill over into other zones. Article touches the primary theme for the political boundaries literature, namely that control of territory is a key element for a successful state. The government must be able to police what enters and exits its domain of influence. (Cilliers, Jakkie 2000).
population	Tied closely with physical security, political boundaries, and physical spaces (Fearon and Laitin 2003; Raleigh and Hegre 2009); the size and location of population groups play a critical rol in contributing to insurgencies (Goldstone 2002). The hypotheses are based on population mass and concentrations (density), distances, and some residual state-level characteristics. Raleigh and Hegre show that the risk of conflict vents increases with local population size (2009). They also find conflict events cluster particularly strongly in larger population concentrations that are distant from the capital. Burckner estimates, from 37 Sub-Saharan countries, that a 5% increase in population size raises the risk of civil conflict by 6% (2010).
power relations	Power relations in the African continent affect the bonds between its generally weak civil societies and different governments. Power struggles on the African continent are influenced by the conquest of state power by violent means, or through mechanisms of power sharing between the government and civil society—including the claiming of state atributes by insurgent groups (Clapham 1998; Makumbe 1998; Tull and Mehler 2005). Transnational and international power structures also affect how power relations operate in Africa to counteract or encourage insurgency; foreign aid and development programs can become a government source of power particularly in the management of natural resources such as oil and mining (Katerere, Hill and Moyo 2001; Wall 1997).
power relations (grievances)	In plural societies, a divisive civil society and a weak democracy promote insurgency because different groups will have different grievances with the central government. The capacity for violence and terror by individuals who have been or continue to be marginalized in Africa has placed power on armed groups to the point where this is a new mark of elitism (Ikelegbe 2001; Ismail 2008). Further, clientelism can also play a role in the determination of power and state relations as those groups who are unhappy with this type of relationship can easily turn their grievances into disruptive or insurgent actions , particularly when claim to specific natural resources that cross national boundaries is also a claim to power as in the case of oil, water or arable land (Collier 2008; Kandeh 1996; Obi 2009).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
recruitment	The broader category of actor motivation is noted in the PIAF to play a crucial role in insurgency; "recruitment" emerged as a major category of actor motivation based on several key factors which fit within this category. (The writeups for those factors should describe how and why each fits here).
regime type	Very much a direct link although the literature is all over the place. (Goldstone, Jack; Bates, Robert; Epstein, David and et al. 2010; Stockener, Daniel 2010) Democracies have lower probabilities of experiencing intrastate fighting.; (Goldsmith, A. 2010) Argues that the differences in violence stems from a difference between authoritarian and democratic regimes.
religion	Religion plays a primary role in the creation of ideologies that affect how violence is accounted for in conflicts in Africa. Religious networks and religious peace initiatives can help ameliorate the effects of violence and some argue that being religious can reduce the incentive to join insurgencies (Basedau, Strüver and Vüller 2011; MacCulloch and Pezzini 2010). However, religious ideas are a major force that has helped pattern postcolonial development and the experience of violence in Africa, and weakened states and the rise of insurgency are typically traced to religious and ethnic competition (Haynes 2007; Jones 2001).
remittance	Control and distribution of economic resources and remittances are significant factors in conflict in Africa. (Ayodele 2008) Remittance can fund both states and insurgent groups (Jenkins 2011)
rule of law	Literature shows Safety/security is sometimes a cause of participation in violent unrest and this relationship is not necessarily negative. At times, a greater threat to security can lead people to fight and rebel. There are also specific types of repression that are especially relevant in Africa, such as rape as a weapon on repression and child soldiering. The following author presents a causal explanation in which a high-quality rule of law is considered to dampen ordinary citizens' opportunity and willingness to engage in political violence, protecting democracies from becoming victims of terrorism. Built on a cross-sectional, time-series data analysis of 131 countries during the period from 1984 to 2004, the author finds that, ceteris paribus, maintaining a sound rule of law notably reduces the likelihood of any type of terrorist events. (Seung-Whan Choi 2010). (Rotberg, Robert 2004) does not go into collapsed rule of law as a cause of insurgency, but rather explores the topic in relation to insurgency and discusses it's nature as secondary to a viable security regime.
service delivery (grievances)	The provision of services is likely to undermine or strengthen citizens' quality of life. As such, they are a tool for manipulating grievances (Kevlihan 2009; Flanigan 2008; Bratton 2006). Who delivers the services is a factor of manipulation (Grynkewich 2008; Englebert et al. 2008; Faranak 2004). For example, a poor record of past external efforts to provide services or a belief that the service is best provided by the government can increase grievances regardless of service provision (Englebert et al. 2008). Getmansky (2000) argues service delivery directly supports/reduces insurgencies.
service delivery (mass consent, strength of government institutions)	The provision of services is likely to undermine or strengthen citizens' legitimating beliefs. As such, they are a tool for manipulating mass consent (Kevlihan 2009; Flanigan 2008; Bratton 2006). Who delivers the services is the key factor of manipulation (Grynkewich 2008; Englebert et al. 2008; Faranak 2004). Drawing on field research, Faranak (2004) describes a situation where the government provides municipal waste collection. Mass consent toward the government is altered as the local government begins to treat citizens as customers. Grynkewich (2008) describes a situation where violent non-state groups administer social services and resultingly receive support and sympathy for their cause. Getmansky (2000) argues service delivery directly supports/reduces insurgencies.
service delivery (VEOs, recruitment)	The provision of services is likely to undermine or strengthen citizens' legitimating beliefs. As such, they are a tool VEOs may use for recruitment (Kevlihan 2009; Flanigan 2008; Bratton 2006). Who delivers the services is the key factor of manipulation (Grynkewich 2008; Englebert et al. 2008; Faranak 2004). Grynkewich (2008) describes a situation where violent non-state groups administer social services and resultingly receive support and sympathy for their cause. Getmansky (2000) argues service delivery directly supports/reduces insurgencies.
social ties, interactions (culture, ideology)	Individual interests present an incomplete explanation of the behavior and organization of insurgents. A better explanation is provided by examining social ties and interactions between insurgents and between insurgents and non-combatants. Aside from patronage politics, there are also particular cultural factors that determine the level of grievance and frustration that will lead a population group to carry out insurgent actions in postcolonial unstable situations (Humphreys and Weinstein 2008; Mamdami 2001). Other ways in which specific social and cultural interactions improve our understanding of the causes of violence is in the relation of insurgents to other populations when fighting over scarce resources such as food or health care (Singer 2011) or when indigenous authority and practices support or resist insurgent movements (Obarrio 2010).

Factor	Contributes to the production and maintenance of insurgency in the following manner:
social ties, interactions (power relations)	Individual interests present an incomplete explanation of the behavior and organization of insurgents. A better explanation is provided by examining social ties and interactions between insurgents and between insurgents and non-combatants. A body of literature that explains how these social connections are forged explores the politics of patronage, or where patron-client relationships operate behind the state bureaucracy (Murphy 2003; Polletta and Jasper 2001; Reno 2009; Taylor and Williams 2008). Yet another way in which combatants interact with the civilian population is by asserting power over them and thus transforming existing social networks to meet their needs and keep them in power (Humphreys and Weinstein 2006; Wood 2008).
socioeconomic class	Socioeconomic class and status play a part on how people situate themselves politically and ideologically (either in support of or against insurgency) (Ingelaere 2010; Isaacman 1990; Segal 1996). People's sense of belonging to a socioeconomic class can foster a sense of "unfairness" so a grievance can arise based on economic inequity which can result in insurgency (Bienen and Herbst 1996; Mazur 1991; Miraftab 2004; Stewart, Brown and Lager 2011).
strength of government institutions	In an attempt to postulate a type of effort that would appear to have a reasonable chance of controlling insurgencies, this article identifies and discusses what appear to be the most salient factors derived from 43 post- World War II cases in which the United States or another Western country was involved. Manwaring; (Fishel; 1992 Jogerst; 2005)
TCOs	The role of crime and criminal organizations seems to vary across cases. At times it is a reason for conflict while in other situations, criminals merely co-exist with rebels. The effect of crime on insurgency parallels these two situations. First, crime may exist merely for profit (and war exists for profit as well) or it may serve to fund – directly or indirectly – a larger political purpose. (Makarenko, T. 2002)
terrain	Tied closely with physical spaces (Buhaug and Rod 2006; Buhaug % Gates 2002; Fearon and Laitin 2003; Raleigh and Hegre 2009).
tradition	Tradition plays a role in determining insurgency through cultural practices and the circulation and reinforcement of ideologies. Scholars researching Africa have written on how traditional mechanisms in reconciliation and transitional justice are now increasingly used in peace negotiations after violent conflicts (Abbink 2008; Juma 2005; West and Kloeck-Jenson 1999). Traditional cultural practices are both disrupted and destroyed by war (Zack-Williams 2001) and adapted to foster insurgency in either initiation ceremonies, through claims to ancestral land rights, or using spiritual motivations and complex rituals to mobilize and motivate insurgents (Cline 2003; Richards 2008; Wall 1996).
VEOs	May provide local opportunity for participation, may provide information to encourage insurgency, and may leverage local insurgency for their own means.

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