The Geography of International Terrorism

An Introduction to Spaces and Places of Violent Non-State Groups



Richard M. Medina and George F. Hepner



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Preface

The approach of this book is different from those of other books on terrorism published by geographers and other scholars. First of all, both of us are educated in the science and technology of the geospatial information revolution of the last 20 years. Our research records are founded in the technical geography areas of geographic information science (GISc), especially geospatial statistics and modeling, geographic information systems (GIS), and remote sensing. The result is a book on the traditional geographic aspects of terrorism informed by recent technological and analytical tools and procedures.

We have only scratched the surface on the use of geographic theory, concepts, and tools of analysis in this book. This is a vast, largely underdeveloped area of scholarly investigation. On the practical side, terrorism is a covert undertaking; thus, much relevant information is not readily available. Additionally, much of the geospatial intelligence information, maps, and imagery that could make this a more informative book is classified or "for official use only." We have had to rely on unrestricted, published sources and our own experience, knowledge, and research.

This book has evolved out of the Geography of Terrorism courses that both of us teach at our respective universities. Over the last 6 years of offering this course, the lack of a book that focuses on the explicit geographic contributions to the study of terrorism has become apparent. The course offerings allowed us to hone the topical logic of the book, which we hope is both a contribution to the research domain and a possible text for a similar course. Numerous class discussions informed us of the need to address the multiple geographic scales of terrorism. The vertical linkage between topics at the high-resolution level, such as sense of place and cultural identity of a clan or tribe with regional and global geographic-scale issues, is critical to understanding twenty-first century international terrorist groups.

We wish to thank the university and research organizations that have supported our research and scholarship over the years. These include Oak Ridge National Laboratory, CalTech/JPL, and Lawrence Livermore National Laboratory, along with George Mason University and the University of Utah. On a personal note, many individuals in the field

have been supportive of our efforts, most importantly Nevin Bryant, CalTech/JPL; Wayne McCormack, University of Utah; Bruce Hoffman, Georgetown University; and Rohan Gunaratna, Nanyang Technological University. And, of course, we would like to thank our families for support, inspiration, and understanding throughout the book-writing process.

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George F. Hepner is a professor and chair of the Department of Geography at the University of Utah in Salt Lake City, Utah. His major areas of research involve geographical analysis using remote sensing and geographic information systems (GIS), hazard response and mitigation, and international environmental assessment. His research has received specific attention in the areas of the use of spatial field representation in GIS applied to cross-country movement of vehicles and the vulnerability of humans to hazardous gas plumes, the early use of artificial neural networks for image processing, and the fusion of hyperspectral imagery with other GIS data. Most recently, his research has been in the areas of geospatial analysis to the geographical dimension of international terrorism. Hepner served as president of the American Society for Photogrammetry and Remote Sensing (ASPRS) in 2001–2002.

He has been a research fellow and consultant to the Image Processing Laboratory at the NASA Jet Propulsion Laboratory, California Institute of Technology, and the Risk and Response Management Program at Lawrence Livermore National Laboratory.

The Links between Terrorism and Geography

INTRODUCTION

Much of the research and scholarship on terrorism has focused on the vitally important historical record—political organizational and social psychological perspectives of terrorists and their groups (Crenshaw 1995). These political, social, and psychological perspectives contain implicit recognition and use of geographic theories, concepts, and analytical tools. The terrorist literature uses geographic concepts of region, relative location, distance decay, core periphery, insurgent state, geographic diffusion of ideas, technology and people, and sense of place as an underpinning for political or social explanations of terrorists and terrorist group beliefs and actions. However, these are not explicitly described or recognized as the primary constituents and vehicles for explanation and understanding.

The study of terrorism is often based on the notion of security, defined as military security of the state from a Western point of view—not encompassing economic, social, and environmental security of indigenous cultural people and traditions (Smith 2005). Military security of the state or political theories are not the major concern of tribal groups in the Niger River Delta being destroyed by environmental insecurity, or the Uighur group in Xinjiang, China, being culturally decimated by Han Chinese migrants and governmental policy. This limited view of security and, therefore, terrorism has resulted in much of the scholarship and resulting policy not being done at higher spatial resolutions within a state, where geographic differences in ethnicity, religion, physical landscape features, and resource capacities are critical influences on group dynamics and behavior, including terrorism.

Terrorists operate in various spaces, interact in spaces and at places, and maybe most important, terrorists are typically fighting for control of

territory and the people within that territory (Rock 2006). Motivations for terrorism are geopolitical in nature, focusing on specific regions under the control of a larger, more powerful opponent. Target locations are selected for various reasons, including symbolic value, psychological effects, or potential damages (human and physical), that can be geospatially modeled and mapped. Many instances of terrorism have sociocultural underpinnings that have specific human geographic characteristics. Geographically referenced data (geospatial data) are interpreted to create geospatial information for investigation of spatial patterns from which underlying processes can be inferred, analyzed, and explained within a geographic information system (GIS). In some cases, this information creates knowledge, conveyed as integrated maps, images, spatiotemporal models of change, and predictive assessments. This is the core of geospatial intelligence and the broader geographic perspective.

This book uses the geographic perspective in a more explicit manner than previous treatments of the terrorism topic have done. While it is not believed that geography determines human behavior, the influence of physical and human geography on terrorist motivations, behaviors, options, and activities is a primary consideration in understanding terrorism. Terrorism is a complex phenomenon and is best studied through multidisciplinary approaches. Geography acts as a science of convergence, where many other disciplines intersect in the study of phenomena and processes in a geographic context. Understanding terrorism in a more complete, multidisciplinary fashion using the most current analytical tools is essential to preempting and countering terrorism in the future.

BRIEF ACCOUNT OF GEOGRAPHY OF PRESENT-DAY TERRORISM IN NIGERIA

Nigeria is a nation of great natural resources and many cultural and ethnic differences that have driven conflict and terrorism. In Nigeria, the character of terrorist activity is greatly influenced by relative location of petroleum, tribal groups, and political and economic control. Under British colonial rule in the nineteenth and twentieth centuries, the British sustained control using three governance regions. This regional governance allowed the British to use the existing ethnic and tribal differences to lessen opposition and to ensure control by the tribes of the northern region. This allowed the

British preferential access to the oil-rich Niger River delta and continued control of the oil after independence. Terrorism has manifested very differently in the north and the south and reflects political, economic, and cultural challenges faced in the different areas. Investigation of the human and physical geography of the nation makes evident the important insights into terrorism in Nigeria and the role of geography in terrorism.

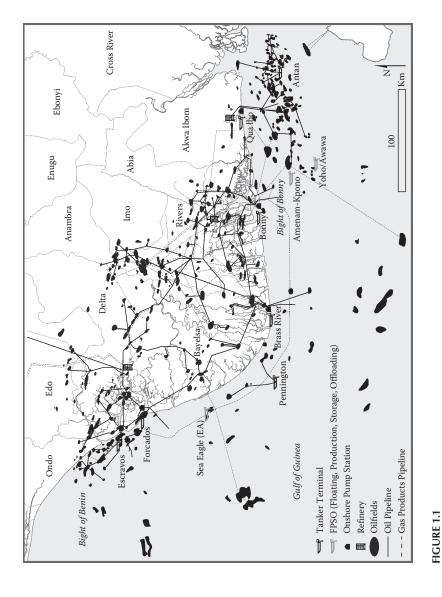
The South

Over half the residents of Nigeria live in poverty (World Bank 2012), while a small percentage enjoy great wealth due to petroleum resources. In southern Nigeria's Niger River Delta, oil is abundant. Nigeria is on the small list of great oil producers in the world and, since 1971, a member of the Organization of the Petroleum Exporting Countries (OPEC). In and around the Niger Delta, there are many on- and offshore oil facilities, including those from multinational corporate giants Chevron, Shell, Agip, and ExxonMobil. The oil infrastructure in the Niger Delta is shown in Figure 1.1.

The extraction of oil in the region by multinational companies has been viewed by Niger Delta residents as exploitation. They see rich foreign companies coming in as oil resources and money leave. Political control of the nation and the southern oil is maintained in the north. In addition, the state is plagued by corruption (Smith 2008). Extraction efforts by Nigerian firms, lacking technical resources and investment capital, would most likely be unfruitful. This has created the reliance on foreign firms. Compensation for oil extraction rarely trickles down to the residents of the south, who have been marginalized from the process.

Many people of the Niger Delta region are dependent on farming and fishing for sustenance. Environmental effects from oil-based activities can render an area hazardous. In December 2011, the largest oil spill in Nigeria since 1998 occurred at the Bonga oil tanker facility run by Royal Dutch Shell (not shown in Figure 1.1) (Reuters 2011).

The result is that the people of the region suffer from air and water contamination and resultant health problems and destruction of their traditional way of life without receiving the benefits of the petroleum production. This discontent has led to the formation of several terrorist groups. The largest and most popular is the Movement for the Emancipation of the Niger Delta (MEND). MEND has been fighting against the foreign development of petroleum extraction for years. Their main goal is to expel all oil companies from the region. In doing this, they hope to bring the



Nigeria Delta oil infrastructure. (Adapted from the Energy Information Administration, 2011.)

money made from oil in the region back to the people, build infrastructure in support of basic services, and save the environment from further degradation. MEND's main target focus is on the oil companies; however, demands in 2006 included participation in local politics and oil-based business decisions, development, and a reduction of military presence in the region (Asuni 2009).

MEND operations typically focus on oil and international oil-company-based targets, including tankers, pipelines, and employees. The MEND organization is well known for taking hostages from local businesses and construction sites, as well as from oil tankers and other related sites. Those that are often targeted work for oil or construction companies. In most cases, ransoms are paid and the hostages are returned unharmed. The organization is also active in bombings and other types of traditional terrorist activities.

One of their popular attack strategies is to attack offshore oil rigs with speedboats, which are small and quick and can outrun and outmaneuver the larger naval boats that chase them along the complex coastline of the Niger Delta. Mobility is always a concern for terrorist organizations and is partially dependent on the environment. Like the exploitation of the Toyota minitruck by the Taliban to react quickly and cover large areas, nationalist terrorists in Nigeria utilize speedboats to attack offshore oil facilities and escape from authorities. The Nigerian terrorists are well armed with AK-47s and RPGs and are better equipped than local authorities. In a 2008 attack, the Bonga oil platform built by Shell was fired upon and, as a response, closed for weeks. The platform was constructed over 100 km offshore and thought to be unreachable by terrorists. The perpetrators attacked this oil platform specifically to send the message that no facility is "untouchable" (Lloyd-Roberts 2009).

The ethnic foundation of the MEND organization is the Ijaw people of the Niger Delta region (National Consortium for the Study of Terrorism and Responses to Terrorism 2012). The Ijaw people comprise one of the largest ethnic groups in the Niger Delta, which is home to approximately 140 ethnic groups. Other ethnic groups that have greatly been affected by oil extraction include the Ogonis, Okrikans, and Elemes. The people of the Niger Delta have fought against the oil companies for decades. Some have estimated the number of violent actors in the region to be as many as 60,000 (Asuni 2009).

Oil extraction by foreign companies has brought further conflict between ethnic groups. Resulting from early colonialism, ethnic conflict exists throughout Nigeria. Various tribes are now experiencing power struggles over ownership of land and resources used for agriculture and oil extraction. These animosities are responsible for the continuation of future violence in the region (Joab-Peterside 2007). On the other hand, many in the Niger Delta region are united against those they consider to be exploiting their homeland. In a region stricken by poverty and cultural strife, relative geographies of resources, cultural identity, and inequities of political power have created an environment ripe for the growth of terrorism. This brief description of terrorist activities in southern Nigeria is simplified greatly, but provides an overview of one situation of terrorism in Nigeria.

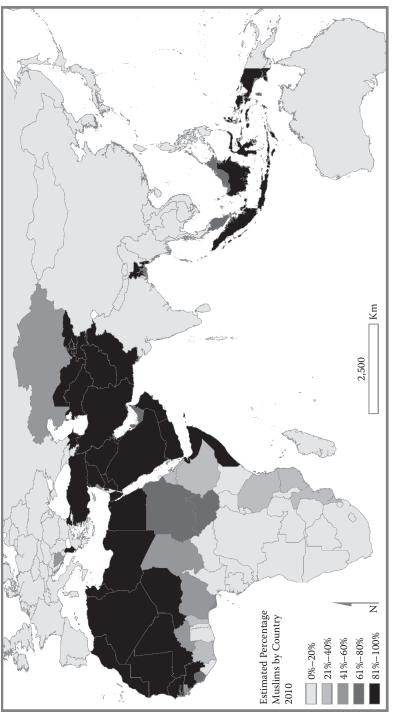
The North

The terrorism and conflict in northern Nigeria are much different from those of the southern part, although the emergence of terrorism stems from the same issues of poverty and marginalization. Oil has not been found in commercial quantities, so the residents are not fighting against foreign companies. The main source of terrorism in the north is based on ethnic and religious conflict. Figure 1.2 shows the relative location of Nigeria with respect to the Muslim world, as defined by percentages of Muslims per country.

While Nigeria's population as a whole is at 41% to 60% Muslim, there is a well-defined split within the country. The northern half of Nigeria is majority Muslim and the southern half is majority Christian and other religions. Figure 1.3 shows that about half the area of the country uses or abides by Sharia law in one form or another (Center for Religious Freedom 2002).* There are several Islamist terrorist organizations in the northern part of the country that are fighting for political and religious change. Presently, the most powerful is Boko Haram, also known as the Nigerian Taliban.

It is widely believed that the name Boko Haram translates into English as "Western education is a sin"; however, the leader of the group in a 2009 interview stated that the name's meaning is "Western civilization

Sharia law is a collection of rules and punishments based on interpretations of Islamic text. It is applied in many aspects of life, including finances, education, and daily routines (Johnson and Vriens 2011). It is based on the Quran, which is interpreted as the word of God, and the Sunna and Hadith, which are the lessons and words of Muhammad and his companions. The rules set forth by Sharia law can be confusing due to differing interpretations of the foundational texts by religious scholars (ulama) (Hunt 2007).



The Muslim world as defined by percentages of Muslims. (Data sources: Pew Research Center, 2011, political boundaries—ESRI, 2011.)



FIGURE 1.3 The Sharia states of Nigeria. (Data sources: Adapted from the Center for Religious Freedom, 2002, political boundaries—ESRI, 2011.)

is forbidden." This is a broader view intended to impose a wider control of fundamental Islamic rule. Members of Boko Haram believe that the Nigerian people have been polluted by Western ideals and ideologies and intend to bring rule by Sharia law to the entire country. The organization has been active since 1995 and violently active since 2000. The connection to the Taliban is self-imposed. In a 2003 attack on police and government in Yobe state, the organization raised the flag of the Taliban and established a base in Yobe named Afghanistan. Boko Haram is responsible for many violent attacks in northern Nigeria on police, government, and religious (Muslim and Christian) targets (Onuoha 2012).

The Muslim/Christian split in Nigeria is not precisely demarcated and there remain Christian minorities in the north and Muslim groups in the south. In 2011, an extremist Christian group named Akhwat Akwop began the fight against Boko Haram and Muslim rule as a whole by threatening to attack nationals of countries that support the Islamist terror organizations' activities in Nigeria. Akhwat Akwop's main grievance is with the

Hausa/Fulani people that are, according to the terrorist group, oppressing the minorities in northern Nigeria. The Hausa/Fulani are a major Islamic ethnic group. They make up approximately 25% to 30% of the country's population, and about 65% of northern Nigeria. They have held political control since Nigeria's independence from British rule in 1960 and have facilitated today's rule by Sharia law in the north.

In the south, few Muslims support the terrorism of Boko Haram. As long as the Muslim ethnic groups of southern Nigeria, especially the Yorubas, continue to deny Boko Haram logistical support in the southern zones, Boko Haram's attempts to strike targets in the south will likely remain isolated, infrequent, and ineffectual. In Nigeria, terrorism has manifested in two completely different ways based on the relative geographies of the physical and human environments.

DEFINING TERRORISM

The intent is not to dwell on the multifaceted and sometimes subjective concepts of terrorism, insurgencies, and criminal acts. These concepts have been analyzed and debated by experts in history and political science. There are many important questions one could ask about terrorism; the first and foremost is "What is terrorism?" With a consistent standard definition of terrorism, acts of violence can then be classified as either terrorist or non-terrorist. Another important question is, "Who are the terrorists?" Both questions here have proven to be difficult to answer and vary based on the political or rhetorical agenda. The intent here is to use these terms in a generally accepted and consistent manner.

There are many definitions of terrorism, which vary from country to country and even within country agencies, such as the Federal Bureau of Investigation, the Department of Homeland Security, and the Department of Defense in the United States. Each of these agencies has its own definition for terrorism (Hoffman 2006a). But among all the definitions some commonalities exist. Generally speaking, definitions of terrorism are composed of similar concepts including violence, fear, and motivation toward change. In its most general form, terrorism can be defined as "the deliberate creation and exploitation of fear through violence or the threat of violence in the pursuit of political change" (Hoffman 2006a, p. 40). Inherent in this definition is the concept that terrorism is a strategy or tactic for violence