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Citation	Nielsen, Richard Alexander. 2013. The Lonely Jihadist: Weak Networks and the Radicalization of Muslim Clerics. Doctoral dissertation, Harvard University.
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(Article begins on next page)

The Lonely Jihadist: Weak Networks and the Radicalization of Muslim Clerics

A dissertation presented by

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to

the Department of Government

in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy
in the subject of Political Science

Harvard University
Cambridge, Massachusetts
May 2013

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The Lonely Jihadist: Weak Networks and the Radicalization of Muslim Clerics

Abstract

This dissertation explores why some Muslim clerics adopt the ideology of militant Jihad while others do not. I argue that clerics strategically adopt or reject Jihadi ideology because of career incentives generated by the structure of cleric educational networks. Well-connected clerics enjoy substantial success at pursuing comfortable careers within state-run religious institutions and they reject Jihadi ideology in exchange for continued material support from the state. Clerics with poor educational networks cannot rely on connections to advance through the state-run institutions, so many pursue careers outside of the system by appealing directly to lay audiences for support. These clerics are more likely to adopt Jihadi ideology because it helps them demonstrate to potential supporters that they have not been theologically coopted by political elites. I provide evidence of these dynamics by collecting and analyzing 27,142 fatwas, articles, and books written by 101 contemporary clerics. Using statistical natural language processing, I measure the extent to which each cleric adopts Jihadi ideology in their writing. I combine this with biographical and network information about each cleric to trace the process by which poorly-connected clerics become more likely to adopt Jihadi ideology.

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Acknowledgments

It is impossible to adequately acknowledge those who have made my research possible. I owe particular thanks to a number of institutional sources of support. The National Science Foundation has supported this project twice: first through a Graduate Research Fellowship that provided me with stipendiary support for three years of graduate school, and again through a Doctoral Dissertation Improvement Grant in the final stages of completion. Without these resources, my time in graduate school would have been substantially more difficult and this project would have been impossible. I am fully cognizant that this represents a substantial investment in my early career by the taxpayers of the United States; I hope that my work is of sufficient importance to merit this trust. I also received funding from the Institute for Quantitative Social Science and the Weatherhead Center for International Affairs, both at Harvard University. My final year was spent as a predoctoral fellow at the Harvard Academy for International and Area Studies, where I deeply enjoyed the intellectual environment and support.

My time in graduate school has been greatly enriched by my graduate student colleagues in the Department of Government at Harvard. Brandon Stewart, Yuri Zhukov, Jeff Friedman, and Iain Osgood were a crucial brain-trust. I benefited immensely from conversations with Jane Vaynman, Chiara Superti, Justin Grimmer, Tyson Belanger, Omar Wasow, Andrew Coe, Matt Blackwell, Maya Sen, Jonathan Bischof, Evann Smith, and Amy Catalinac.

A number of others have commented on iterations of this project. Besides those listed above, I very much appreciate thoughtful engagement by Ashley Anderson, Rob Blair, Lisa Blaydes, Jocelyne Cesari, Jeffery Frieden, Scott Gehlbach, Justin Gest, Noam Gidron, Josh Gubler, Brian Haggerty, Peter Hall, Thomas Hegghammer, Nahomi Ichino, Baber Johansen, Iain Johnston, Gabriel Koehler-Derrick, Danial Lashkari, Peter McMurray, Pascal Minoret, Harris Mylonas, Rebecca Nielsen, David Patel, Molly Roberts, Ari Schriber, Jillian Schwedler, Prerna Singh, Arthur Spirling, Dustin Tingley, Malika Zeghal, and Daniel Ziblatt. William Granara rekindled my passion for Arabic and was a steady supporter of my work. Don Rubin was a fabulous mentor in during my time in the Harvard Statistics Department. To those who I have failed to list, be assured that this is because of my memory rather than my lack of appreciation.

My dissertation committee — Beth Simmons, Gary King, Robert Bates, Tarek Masoud, and Adam Glynn — has been everything that a committee should be. They have enabled me to reach new intellectual heights.

My family has been my biggest source of support throughout the entire process of writing. My children have been patient with my absences. My wife Leslie has made everything possible. It is to her that I dedicate this work.

Chapter 1

Introduction

One of the greatest needs for the Jihad today are Scholars who support the Mujahideen.¹ In an age where the Scholars have abandoned the Mujaahideen and have supported the Tawaagheet,² the need for true Islamic Scholars has risen to a high degree. Many of the evil things that our Scholars are doing today are either due to love of this world or lack of knowledge.

Imagine if Shaykh Usama bin Laden (hafidhullah³) lived in the Arabian Peninsula, received a fixed salary from the Taaghoot,⁴ and told men to abandon the Jihad and its leadership?⁵

These quotations, taken from an English-language document that circulated widely on Jihadist forums in 2007, urge Jihadist readers to consider two possible worlds. The first is the world in which we live, where militant Jihadists such as Usama bin Laden have mounted ever increasing attacks on the United States in an attempt to provoke its ire, culminating in the catastrophically violent and destructive attack by al-Qaeda on the World Trade Center

¹“Mujahideen” is a transliteration of an Arabic word meaning “Jihadist fighters.”

²“Tawaagheet” is a transliteration of an Arabic word meaning “tyrants” or “oppressors.” In this context the authors is referring to the governments of the Middle East, particularly the Saudi government.

³“Hafidhullah” is a transliteration of an Arabic phrase meaning “may God preserve him.”

⁴“Taaghoot” is the singular of “Tawaagheet,” meaning a “tyrant” or “oppressor.”

⁵English-language message board post available at <http://al-qimmah.net/showthread.php?p=3280>, accessed 28 March, 2013. Some transliteration of Arabic words is standardized.

in New York City on September 11, 2001. The alternative is a world in which Usama bin Laden instead cast his lot with the Saudi regime — denoted by the author using the Arabic word for tyrants (Taaghoot, plural Tawaagheet) — and joined the cadre of academically-oriented, state-funded clerics, urging lay Muslims to avoid global Jihadism. This study is about how modern Muslim clerics navigate the choice between these two paths.

The Argument

In the chapters that follow, I address a key but unanswered question about Jihadist terrorism: What factors push some clerics to become radical ideologues that inspire violent activism in the name of Jihad? This question is central to understanding the roots of Jihadist violence worldwide. Existing scholarship on the causes of Jihadi terrorism suggests that clerics play a crucial role in motivating lay Muslims who perpetrate violence (Sageman 2004; Wiktorowicz 2005*b*) and determining the types of violence they choose to perpetrate (Hegghammer 2013).

Although scholars have studied radicalization of lay Muslims, the drivers of *cleric* radicalization are not well understood. Despite the importance of these clerics and a proliferation of research on Jihad, we know very little about the causes of Jihadi extremism among the clerical elite. Unpacking the sources of extremism among clerics is important because these religious elites have disproportionate power to shape the discourses, and ultimately actions, of the extremist organizations that feed on these ideologies. An understanding of why some Muslim clerics support militant Jihad may illuminate how extremists can be persuaded to moderate their views or how new generations of extremist clerics can be neutralized.

Many popular understandings of Muslim clerics by outsiders seem to assume that clerics are monolithic, and perhaps uniformly radical. Paranoid pundits in the West report breathlessly that there is no such thing as a “moderate” Islam or a non-Jihadist Muslim cleric.

These commentators see all clerics as supporters of militant Jihad, and believe that those who claim otherwise are dissembling. People holding these views often argue that Islam is inherently violent, that its core texts affirm the duty of Muslims to fight non-Muslims, and that violent conflict between Western civilization and Islamic civilization is inevitable (Huntington 1993). In this view, the explanation for any variation in the ideologies expressed by clerics is either that non-Jihadist clerics are lying about their true beliefs, or that these clerics do not understand the Jihadist essence of their own religion. This understanding appears to be primarily the product of Islamophobia. It elides important variation in the ideologies of clerics, denies varieties of religious experience within Islam, and is ultimately unhelpful for explaining why some clerics adopt Jihadist ideas while most do not. After all, if all clerics supposedly adopt these ideas, then there is no variation to be explained. I demonstrate that, in fact, substantial variation in support for Jihadi ideology exists among the population of clerics most likely to become Jihadist: conservative clerics in Saudi Arabia and Egypt.

Academic scholarship is less breathless but no more informative about the reasons that clerics adopt and produce Jihadi ideology. Most scholarship of Jihadist clerics takes their commitment to militant Jihad as given and instead tries to describe the features of their worldview. Although there are some works that attempt to explain the radicalization of particular individuals (Musallam 2005), these tend to focus on proximate, idiosyncratic factors. A study that examines only one or a handful of Jihadist clerics generally cannot test the impact of the broad structural forces I identify. Some scholarship has described the dynamics of Jihadist conflict, particularly in Saudi Arabia where conflicts between state-supported clerics and their Jihadist opponents has been quite visible (al-Rasheed 2007; Hegghammer 2013), but these studies have tended to focus more on the dynamics of political contestation

generally, rather than the specific determinants of cleric ideology.

The academic literature on the beliefs and practices of Muslim clerics is in most instances ethnographic and focused on deeply understanding the subjective experiences of clerics and those who interact with them. Many of these works are relatively atheoretical, or to the extent that they embrace theory, the theoretical commitments are not positivist (Hallaq 2009). My purpose here is to offer a theoretical explanation for general patterns of cleric radicalization and to support or reject this theory with an appeal to systematic evidence. These two goals are not necessarily at odds; I draw on existing work in anthropology, history, and legal studies at many stages of my research and I do not claim to reproduce or replace the arguments and findings of the existing literature on Muslim clerics. Rather, my goal is to reveal that students of Islamism and Jihadism lack a systematic explanation for cleric choices to embrace or reject Jihadist ideology. This book is my attempt to offer this explanation.

My core contention is that a cleric's decision to radicalize is rooted in a broader set of career decisions and constraints. Specifically, I argue that future clerics with strong connections to prominent teachers in Islamic academic networks will be able to leverage these connections to improve their prospects on the cleric job market. Clerics with the recommendations and endorsement of influential teachers will be more likely to gain access to academic positions at elite, state-funded Islamic universities. From these academic positions, clerics find opportunities for appointments within government ministries, opportunities for "shariah consulting," and other prestigious and lucrative options. On the other hand, clerics with few connections to teachers will be disadvantaged in the competition for elite cleric jobs. If these clerics fail to successfully enter the academic track, they search for other ways to build a career that uses their human capital investments in the Islamic sciences. There are many options available to these clerics, but with the traditional academic career closed, some clerics

find a move toward radical Jihadi ideology an attractive option. Jihadism is a viable career option for several reasons, but one may be that it allows clerics to draw financial support from constituencies of lay Muslims who distrust the regime-sanctioned clerics. Jihadist clerics are better able to attract the support of these constituents because their Jihadist positions credibly differentiate them from regime-supported clerics. In combination, I argue that the divergence of these two pathways is the key to understanding cleric radicalization.

It is likely that idiosyncratic personality features and life experiences play a role in a cleric's turn to Jihadism, and perhaps most clerics themselves would attribute their choices about ideology to personal conviction. Nevertheless, I find substantial evidence that clerics are influenced by a set of structural factors that arise from the system of cleric education and training in the modern Middle East, especially Saudi Arabia and Egypt.

This argument highlights an under-appreciated aspect of the lives and practices of Muslim Clerics. Western scholarship understands Muslim clerics to be many things — religious leaders, preachers, teachers, writers, militants, extremists and moderates. But very little Western scholarship has recognized that these clerics are academics. This fact, and the fact that not all clerics make it on the academic track, is an untold story in the production and reproduction of modern Jihadi ideology.

Advancing this argument requires me to first define Jihadi ideology, and to explain what I believe adoption of this ideology entails. I undertake the task of describing Jihadi ideology in substantial detail in Chapter 2, but it is worth discussing briefly here. I define Jihadi ideology as a set of ideas motivated by the central claim that Islam should be the organizing principle of human affairs and that violence is an acceptable means for pursuing this goal. The word “Jihadi” itself is a contested term (Hegghammer 2009). I use the term to denote a person, thing, or organization that is in some way a carrier of Jihadi ideology or associated

with it. I use the term “Jihadi” because this is the term that militant Islamists use to refer to themselves, each other, and their own writings, symbols, and organizations. It is convenient that this is also the term of art in most of the academic literature on such individuals and organizations.

The foregoing definition of Jihadi ideology is broad and covers many different types of individuals and movements. Within the sphere of Jihadi ideology, I seek to explain only a part: the adoption of *global* Jihadism. Global Jihadists believe that the legitimate sphere of Jihad extends beyond the classical conception of Jihadi warfare as a well-defined Muslim army arrayed against a well-defined non-Muslim army to contest a particular territory. Instead, global Jihadists have argued that terrorism against the West is a better way to achieve Jihadist aims. It is adoption of this type of Jihadi ideology — a type characterized by, but not exclusive to, al-Qaeda — that is the subject of this study. Throughout, when I refer to Jihadi ideology, I am referring to global Jihadi ideology unless otherwise specified.

More broadly, my research attempts to explain ideology adoption by a set of influential individuals with transnational reach and importance. While there are some unique aspects to Jihadi ideology, I argue that much of my story is generalizable. Although the tenets of Jihadi ideology are extreme, the adoption of this ideology is not radically different from ideology formation in other settings where networks and career options constrain some ideological possibilities and incentivize others. The radicalization of Jihadi clerics is a case of ideology formation among elites, with lessons that are likely to apply elsewhere.

Who are these elites? Which individuals are clerics, which are simply ideologues, and how does this affect my analysis? Clerics wield significant power within Islam, especially the preeminent scholars called the *‘ulamā’*⁶ (literally, “learned ones”) who interpret the

⁶For Arabic terms not common in English (with the exception of names), I use standard Library of Congress transliteration, including “*‘*” for *ayin* (a voiced pharyngeal fricative) and “*ḥ*” for *hamza* (a glottal

Quran and expound Islamic doctrine for lay Muslims. The word ‘*ulamā*’ (singular ‘*ālim*’) can refer to a number of types of individuals, many of whom are not clerics, but this is its predominant meaning in religious contexts and throughout, I use the terms ‘*ulamā*’ and “clerics” synonymously.

This relatively small number of individuals has an enormous effect on what Muslims believe and do. Historical debates among the ‘*ulamā*’ have determined which doctrines are considered acceptable or heretical in Islam. Contemporary pronouncements by clerics can have substantial sway among lay Muslims, defining norms of acceptability and permissibility for the entire range of human action.

Who, then, is a cleric? No uncontested definition of a Muslim cleric exists, and in fact opposing scholars often attempt to delegitimize the claims of their opponents to cleric status. These competing claims to clerical authority are collinear with the dynamics explored in this book: individuals with “clerical” positions within states decry non-state clerics as illegitimate upstarts with no authority, while non-state clerics claim the reverse. The confusion is possible because of the lack of a clear religious hierarchy ordering the religious elites within Sunni Islam. Hierarchies do exist, but there are multiple hierarchies and they operate in parallel and often compete.

My definition of a cleric is based on the behavior of an individual: a cleric is a person who does clerical things. The main work of a cleric is to produce content, so I count as clerics those individuals who produce the types of content produced by clerics: fatwas, Quranic exegesis, biographies, and treatises on religious subjects. My definition is controversial. It means that I include as “clerics” people such as Usama bin Laden and Sayyid Qutb who lack formal training in the traditional Islamic institutions of higher education, but who nevertheless produced documents that they claimed were “fatwas” (bin Laden) and “quranic stop). I do not include these diacritics for proper names of people.

exegesis” (Sayyid Qutb).

Many, perhaps most Muslims do not consider bin Laden’s “fatwas” to be legitimate, in part, because he lacks traditional clerical qualifications. Establishment clerics generally regard Bin Laden negatively, as evidenced by this fatwa from Abd al-Mūḥsin al-ʿIbad:

Question: What is the moderate position on Bin Laden’s death, for there are some who take joy in it and others who say that he was a *mujahid* and judge him to be a martyr.

Answer: How was he a *mujahid*?! Yes, he was a *mujahid* for Satan. Usama bin Laden brought great evil on the Muslims and there is no doubt that his passing brings relief to them.⁷

Bin Laden is certainly not the only target of establishment clerics. An establishment Salafi named Abd al-Malik al-Jazairi criticizes Jihadist Abu Qatada for his lack of credential: “This man, as you know, did not study at the hands of the scholars” (al-Jazairi 2007, 13). Al-Jazairi argues that Abu Qatada “fell into a major error ...claiming there is no need to return to the scholars,” and that the reason for this error is Qatada’s Jihadist views. “When Abu Qatada saw that the scholars opposed his calls to his own concept of Jihad, he began to despise the scholars and curse them.”⁸ Similar attempts to show that Jihadist clerics are poorly trained and unscholarly are common.

For their part, Jihadist clerics also attempt to undermine the clerical credentials of their establishment rivals. In his famous work, *The Religion of Abraham*, Jihadist Abu Muhammad al-Maqdisi is thoroughly critical of the modern academic system, the alliance between clerics and the state, and the fame that follows. He bitterly criticizes the modern Salafi

⁷This fatwa is available at <http://www.sahab.net/forums/index.php?showtopic=120559> (accessed 16 Feb 2013). Numerous anti-bin Laden fatwas are available online via Youtube or Islamic message boards. See, for example, audio of an anti-bin Laden fatwa at <http://www.youtube.com/watch?v=1ZjjLs696TY> (accessed 28 March, 2013), or a collection of text fatwas critical of bin Laden at <http://www.sahab.net/forums/index.php?showtopic=123697> (accessed 28 March, 2013).

⁸<http://www.salafimanhaj.com/pdf/SalafiManhajQataadah.pdf>, page 13, accessed 16 Feb 2013.

establishment who “graduate from ‘The Faculties of Political Sciences and Rights’,” “come and seek the entrance of the Sultan,” and seek “fame and the applause of their followers.” (Al-Maqdisi 1984, 65). Al-Maqdisi’s argument is that these practices are un-Islamic because they were not practiced by the righteous Companions of the Prophet Muhammad. For him, this connection to power is a departure from precedent that undermines the legitimacy of the state clerics. Similarly, Jihadist cleric Abu Yahya al-Libi says of the state clerics, “These muftis have become experts in perverting the source texts and are accustomed to bending them and don’t even see anything wrong with occasionally breaking them if they refuse to be flexible.”⁹

Thus, the definition of a “cleric” is political. Just as establishment clerics attempt to define the word in a way that privileges their training and enhances their own position, bin Laden, Al-Maqdisi, and other Jihadists attempt to include themselves in the ranks of *‘ulamā’* and delegitimize the traditional authorities as corrupt and untrustworthy. Thus, I use my own behavioral definition of “cleric” rather than a definition understood by any particular set of Muslims because competing factions are attempting to define the other side out of my study altogether.

Methodology

A brief word about my methodology is in order. Much of the research that follows is quantitative. I use quantification and statistical inference to summarize and interpret data that are too numerous and complex to feasibly approach in other ways. For example, in Chapter 4, I develop a statistical model that takes complex theological texts written by clerics and numerically evaluates the extent to which each text displays the rhetoric associated with Jihadi ideology. To readers familiar with the nuances of Jihadi writing, this will seem dread-

⁹http://www.youtube.com/watch?v=gMo_DwTuN7k minute 41:48, accessed 10 March, 2012.

fully blunt and possibly problematic. I do not argue that this model necessarily provides insights that could not be had by a well-trained analyst reading the same text. Instead, I move away from close reading of each text simply because I analyze approximately 30,000 texts, with over 14 million words. Close reading of this number of texts is infeasible. My move to quantification for parts of the project is pragmatic.

Some of the research I conducted was ethnographic-style fieldwork, primarily on the internet and at the al-Azhar mosque in Cairo, Egypt. I hesitate to call this work proper ethnography because I lack formal training in ethnography, but my primary mode of learning in these settings was to learn by doing (where possible and ethical) or by observing. Studying Jihadists via fieldwork is difficult. In many ways, there is no “field” to go to because Jihadists have learned not to congregate in physical space in the era of predator drone strikes and government surveillance. Instead, I visited the online “field” of Jihadism; following updates to websites, web-libraries, and message boards. For ethical reasons, my only participation in these settings was to observe and record, never to contribute or interject. I do not claim that this style of research has no impact on my subjects. Silent visitors such as myself — “lurkers” in the internet parlance — still change and shape the environments they enter because Jihadists write online with the assumption that Western governments and researchers are watching. However, by not participating, I minimize the risk of my research having adverse effects in any way.

I learned much by spending approximately four weeks immersed in the life of the mosque at al-Azhar university in Cairo, Egypt. This is arguably the greatest teaching mosque in the Muslim world; I selected it as a site for fieldwork because of the accessibility of Egypt and the prominence of the mosque. While at al-Azhar, I conducted roughly 20 interviews that inform my analysis below. However, the bulk of my time was spent simply visiting

and observing the mosque itself, the rhythms of religious ritual, the comings and goings of teachers and students, and the process of clerical instruction. I spent a substantial amount of this time sitting in the public teaching circles of al-Azhar clerics. I also sat in the study circles of al-Azhar students, talked with students one-on-one, and occasionally interviewed clerics. Where I deemed it appropriate, I participated in religious rituals and practices, including group prayer, Friday worship, and memorization of the Quran.

The ways in which this fieldwork enters my research are subtle and complicated; I do not claim to know all the ways that my experiences on the Jihadi forums and at the al-Azhar mosque have shaped the research here. Most obviously, much of the primary source material in this study comes from texts I encountered online or interviews and conversations from the field. In some places, I have erred on the side of quoting too heavily from primary sources. Block quotations are my attempt to help the reader understand the ideology of Jihadist and non-Jihadist clerics by directly engaging the same sources I have. At the core, this is a textual project, and readers will have to engage texts throughout.

Many of the texts I have used are difficult to adequately cite. Most of the Jihadist material I draw from is available primarily via the Internet, and could be removed at any time. This does not mean that the texts are ephemeral or unimportant; these are the texts that have shaped the face of Islamism, both Jihadist and not. However, it is difficult to point subsequent scholars to stable sources where these works are located, especially as counter-terrorist units in the West work to have them taken out of public circulation. In many cases, if a website is taken offline, the resources may be relocated or disappear entirely. To deal with this, I provide url addresses for all material derived from internet sources. I also download and save each of these sources to storage devices that I control. Scholars who need access to materials that have disappeared are encouraged to contact me to access these

archived versions.

The issue of discipline is related to issues of methodology. I approach the subject of global Jihadism from the perspective of International Relations with influences from other subfields of Political Science, most obviously Comparative Politics. My research may seem far afield from the main concerns of the International Relations (IR) literature, which I take to be the conflictual and cooperative interactions of states in the international system. Nevertheless, I believe my research connects and contributes in important ways. The question I address — why cleric radicalization? — is motivated by the importance of global Jihadism in international relations over last quarter century. My focus on variables and actors traditionally ignored by IR — individuals, their career incentives, and the domestic political structures they face — is a result of the problem-driven nature of my research. It could have been that the key to understanding the rise of Jihadism in the Muslim clerical elite was the confluence of international forces (Huntington 1993) or a backlash against neo-colonialism (Khalidi 2004). My turn away from these types of explanations is a result of empirical evidence. My research suggests that a critically important global phenomenon — the rise of Jihadi ideology — is partly a result of the domestic political economy of religion in a handful of Middle Eastern states.

In describing my work as problem-driven, I should also briefly defend the choice of Jihadi radicalization among clerics as a problem worthy of study. On one hand, I believe that seminal events of international affairs during the past two decades — the September 11th attacks, the wars in Afghanistan and Iraq, and the role of Jihadists in the Arab Spring and Syrian civil war — suggest that the topic is vitally important.

On the other hand, studying Jihadism — particularly violent, global Jihadism — bears great risk of perpetuating some form of neo-Orientalism that typifies some Muslim “other”

as quintessentially exotic, violent, and irrational (Tuastad 2003). I do not believe that my work is Orientalist and I do not reach Orientalist conclusions. Instead, my findings confirm that far from being innate and irrational, Jihadi ideology is at least partially influenced by rational calculations that clerics make within the constraints of an academic system that is essentially recognizable to Western academics.

Similarly, some readers may be concerned that by focusing on violent Jihadism, my research improperly elevates the importance of armed Jihad within the Muslim faith tradition at the expense of alternative understandings that better represent Islam's core principles. I believe this critique would miss the mark with respect to my study. I focus on Jihadism because its importance in global affairs, not because I believe that violence is somehow inherent to Muslim identity. The subjects of my study disagree about the role of Jihad in Islam. The Jihadists argue that violent Jihad *is* an essential part of Islam and represents a "forgotten duty" of all Muslims. Non-Jihadists argue that the only important Jihad in the modern era is the struggle to purify one's soul. My research below does not take a side about the essence of Islam. Instead, I hope to represent the subjects of my study — Jihadists and non-Jihadists alike — with enough fidelity that they might recognize themselves in my description of the social world.

Although it has a motivating problem, my research is also deeply method-driven. "Method-driven research" is a strongly pejorative term in contemporary Political Science, often invoked in the same breath as the adage "when all you have is a hammer, everything begins to look like a nail." As it is commonly deployed, most critics of method-driven research seem to be resisting studies that use statistics, perhaps feeling that statistical methods are being used primarily to demonstrate the skill and erudition of the researcher rather than to explore and explain important political phenomena. Contra this, I argue that setting up problem-driven

and method-driven research as polar opposites is unhelpful. It is my experience that familiarity with new tools tends to allow researchers to ask new questions that were previously unasked. In my work, I was not able to fully formulate the research question “Why do some Muslim clerics become Jihadist?” until after I was aware of methods that would allow me to measure Jihadi ideology quantitatively from a massive corpus of fatwas. On the other hand, the quantitative text analysis would be impoverished if it were deployed in the service of an unimportant question. My hope is that by acknowledging the role of method in inspiring my research, other scholars might also be inspired to think about how both the substance and methods of this book might open up new ways to study currently unimagined questions.

Outline of the Book

The book proceeds as follows. Chapter 2 provides a detailed description of Jihadist ideology and rhetoric, along with evidence that this ideology motivates Jihadist activism by lay Muslims. In Chapter 3, I develop a theoretical argument explaining this variation. I focus on the role of academic career incentives in clerics’ choices and argue that clerics with better academic networks will go on to have traditional academic careers and avoid radicalization, while less networked clerics will be more likely to radicalize. Chapter 4 introduces a method for measuring the degree to which each of these clerics expresses Jihadist ideology from the texts they produce. This measure reveals that there is large variation in cleric adoption of Jihadist ideology. I test the argument in Chapter 5 by measuring cleric networks and career paths for 101 clerics and showing that these predict cleric radicalization more accurately than other factors suggested by alternative theories. Chapter 6 concludes with a discussion of the implications of my research for scholarship and policy.

Chapter 2

Contours of Jihadist Ideology

This chapter serves as an introduction to the ideology of militant global Jihad. The purpose of my study is to understand adoption of this ideology, so it is important to present a description of what the ideology is. This will be crucial later for measuring expression of Jihadist ideology by clerics.¹ There are several excellent book-length treatments of Jihadist ideology² and my purpose in this chapter is not to reproduce those descriptions and arguments. Instead, I offer a description that connects the many facets of Jihadist ideology through a single, central concept: *tawḥīd*, the oneness of God. After providing some very brief historical background on the origins of Jihad in Islam and the Salafi reformist movements from which modern Jihadism emerges, I start with an explanation of the concept of *tawḥīd* and gradually show how virtually all of Jihadist ideology flows from a particular interpretation of this concept. I then move from describing ideology to exploring Jihadist rhetoric using a large corpus of Jihadist writings. I find that a large portion of Jihadist rhetoric relates to

¹However, an understanding of Jihadi ideology is *not* necessary to understand my argument for *why* some clerics become Jihadists. I will argue that social structures and institutions, rather than the inherent appeal of Jihadist ideas, are the primary factors that pull clerics toward Jihadist ideology.

²See Cook (2005), Brachman (2009), Kepel and Milelli (2010), Devji (2005), Khosrokhavar (2011), Lav (2012), Bar (2006), Finn (2012), and Aboul-Enein (2010)

the concept of *tawhīd*. I also identify other important features of Jihadi rhetoric including the prominent use of Islamic legal precedent, discussion of Jihadist’s conflict with the West, justification of suicide operations, and poetry. Throughout, I quote heavily, and sometimes at length, from primary sources written by and familiar to Jihadists. My purpose in doing so is to create a representation of Jihadist ideology that Jihadists themselves might recognize.

2.1 Historical Background

Since the revelation of the Quran, the concept of Jihad has played a prominent and often controversial role in Islamic doctrine and political thought.³ The term *Jihād* (جهاد) comes from the Arabic verb “to struggle” and is often roughly translated into English as “holy war,” although this translation is controversial. The word “Jihad” appears in the Quran, although often with somewhat different connotations than the word carries today (Bonner 2006, 21-22). The concept of Islamic military defense was certainly operative in Muhammad’s lifetime as evidenced by early conflicts between his followers and the other Arabian tribes. However, ideas of Jihad were not fixed at this early date (Mottahedeh and al Sayyid 2001) and they remain contested today.

After the Prophet’s death, the responsibility of interpreting Islamic law fell gradually to the *‘ulamā’* — the scholarly religious elite. Islamic jurisprudence covers virtually all aspects of both private and public life, so Jihad naturally became subject to interpretation by these clerics. Part of the contestation around this term includes a long-standing debate among the clerical elite about the status of the “greater Jihad” — the struggle to spiritually purify oneself — and the “lesser Jihad” of armed struggle for the cause of Islam. In moderate

³It is impossible to survey the literature on Jihad in its entirety. Some recent works include Gerges (2005), Devji (2005), Bonner (2006), Lia (2008), Brachman (2009), Lahoud (2010), Hegghammer (2010a), Moghadam and Fishman (2011), Deol and Kazmi (2012), and Wagemakers (2012).

interpretations of Islam, violent Jihad is relatively unimportant and clerics that defend it in principle are unlikely to advocate for it in practice. Many Muslims understand Jihad primarily as the struggle for personal righteousness and are puzzled by the focus of non-Muslim commentators on violence. I acknowledge that there are many interpretations of the meanings of Jihad, but here I use the term to denote violent struggle for the sake of Islam because the purpose of this book is to explain the adoption and production of violent Jihadist ideology.

The Salafi movement, a conservative Islamist movement founded in the 19th century based on the interpretations of Ibn Taymiyya (1263 C.E. – 1328 C.E.), Muhammad Ibn Abd al-Wahab (1703 C.E. – 1792 C.E.), and Muhammad Rashid Ridda (1865 C.E – 1935 C.E) is the progenitor of modern Jihadi ideology (Wiktorowicz 2005*a*, 2006).⁴ The word “Salafi” itself is instructive about the nature of the movement: it is derived from the Arabic word “*salaf*” translated as either “the predecessors” or “the pious forefathers,” which refers to the companions of the prophet Muhammad and the first generations of Muslims. Salafis seek to purify Islam by adhering to a strict interpretation of the faith that follows the perceived practices of the first generations of Muslims. They believe that Muslims have in many cases adopted an impure, corrupted version of Islam by changing the doctrines and practices from the ways that they were originally understood. Thus, Salafis reject much of the body of Islamic law that has been developed in the intervening centuries, instead advocating a supposedly unmediated and literal interpretation of the original texts of Islam.

Global Jihadism is basically a small offshoot of the broader Salafi movement that couples mainstream Salafi ideas about Islamic doctrine with radical conclusions about the priority and permissibility of violence as a means for social change. In the sections below, I show how Jihadism draws on Salafi thought, taking the importance of proper worship of God as

⁴See Meijer (2009) and Lacroix (2011).

my starting place.

2.2 Jihadi Ideology

This section describes the contours of Jihadi ideology. I begin by introducing the concept of God’s oneness (*tawḥīd*) in Islam and then explain how the key features of Jihadist ideology — a Manichean worldview, a utopian outlook, justification of violence, and rejection of democracy — arise from Jihadist interpretations of *tawḥīd*.

The Imperative of *Tawḥīd*

The fundamental concept in Jihadist ideology is *tawḥīd*, an Arabic word for “oneness” which in the context of Islam refers to the “oneness of God.” An alternative translation might be “monotheism.” This is a concept that is not unique to Jihadists — essentially all interpretations of Islam have a concept of *tawḥīd*. Yet despite the nearly universality of this concept in Islam, the particular way in which Jihadists have interpreted *tawḥīd* makes it the fundamental basis of Jihadist thinking. It is not by accident that the largest Jihadist web-library in existence is called “The Pulpit of *Tawḥīd* and Jihad.”⁵

For Jihadists, the oneness of God is the most important tenet of Islam. The concept of *tawḥīd* reveals the truth about God, his relationship to his creations including humankind, and the way in which he deserves to be worshiped by his creations. God is a unique and self-existing being who must be worshiped as such. This fundamental core of *tawḥīd* is laid out clearly in the Quran, most pithily in *Surah al-Ikhlās*, also referred to as *Surah al-Tawḥīd*.⁶

⁵www.tawhed.ws

⁶Throughout, I use *The Noble Quran in the English Language* translated by Muhammad Taqi-ud-Din al-Halili and Muhammad Muhsin Khan (1996). This translation has been criticized as being “more like a supremacist Muslim, anti-Semitic, anti-Christian polemic than a rendition of the Islamic scripture” (Mo-

In the name of Allah, the Most Gracious, the Most Merciful.

Say (O Muhammad): “He is Allah, (the) One.

“*Allah-us-Samad* [Allah the Self-Sufficient Master, Whom all creatures need, (He niether eats nor drinks)].

“He begets not, nor was He begotten.

“And there is none co-equal or comparable unto Him.”

(*Surah al-Ikhlās*)

Jihadists and others emphasize that *tawḥīd* lies at the heart of Islam and is the essence of the Muslim confession of faith: “There is no god but God. Muhammad is the messenger of God.”

To worship anything other than God or along with God is to commit *shirk*, which in Arabic means to “ascribe partners to God,” and might be translated as “idolatry.” *Shirk* is condemned in Islam, although its interpretation is deeply contested within Islam. The Sufi Muslim practice of reverencing saints is rejected by some other types of Muslims as violating the mandate for *tawḥīd*. Many Muslim scholars and apologists consider Christianity to not be truly Monotheistic because of Trinitarian theology. Some alternative interpretations of Christianity that reject the concept of a Trinity, are viewed as clearly polytheistic.

Jihadists believe that *tawḥīd* mandates that worship be reserved for God alone. At face value, this statement is not controversial and is common to all Muslims. What distinguishes Jihadists from other Muslims is their strict interpretation of what constitutes worship and their belief that it is a duty of individual Muslims to enforce *tawḥīd* by others. For Jihadists, God’s sovereignty is an essential part of *tawḥīd*. God is truly sovereign over the earth, including the affairs of people and nations. Only God has authority to command how his creations ought to live. It is God’s right to be worshiped as he has commanded in his

ammed 2005). However, it is useful because it is the version promoted by the Saudi Salafi authorities — it “comes with a seal of approval from both the University of Medina and the Saudi Dar al-Ifta” (Mohammed 2005) — and it is closest to the Quranic interpretation that Jihadists themselves might give. For a discussion of the importance of choosing appropriate translations of scripture for scholarly work in political science, see Hassner (forthcoming).

revelations to his prophets, ending with the revelation of the Quran to Muhammad. Failure to worship God as he deserves does not actually affect the complete sovereignty of God, but it does condemn humans to punishment.

Righteous political leaders are not in fact sovereign but are instead viceregents to God. Political leaders who do not acknowledge the sovereignty of God are deemed *ṭāghūt*, an Arabic term often translated as “tyrant” or “oppressor.” The Quran lists vividly the misdeeds and excesses of *ṭāghūt* political leaders and societies, including the pharaoh of Egypt, and the peoples of Ad and Thumud mentioned in *Surah al-Fajr* as “those who transgressed in the land and thus increased the corruption in it.” The concept of corruption here has a connection to the broader idea in Islam of “the corrupt of the earth” (*fisād fil-ārd*), which is a condemnable action in the Quran. Interestingly, Jihadist terrorism has been condemned by many other Muslims as falling into the category of “corruption.”

The concept of *tawḥīd* leads Jihadists to a Manichean world view. Everything that acknowledges the oneness of God is good, while everything that opposes His oneness is evil and must be resisted. Jihadists interpret world events from this perspective, believing that they can identify which entities are striving for and against the sovereignty of God.

There are no limits to the *tawḥīdic* worldview of Jihadists — every human action can be interpreted through the lens of *tawḥīd*. For example, cleric Sulayman al-Ulwan, newly released from the Saudi prison system for involvement in Jihadism, ruled in early 2013 that soccer was anti-Islamic. He argued, “There is a serious problem with [soccer] games, which is the refereeing, which follows man-made laws, not Allah’s laws.”⁷ Abu Muhammad al-Maqdisi is equally stringent about the reach of *tawḥīd* into ordinary daily affairs. Citing Sufyan al-Thawri, al-Maqdisi makes the point that, “whoever acquires for them [polytheists]

⁷See a report on the fatwa here: <http://www.memri.org/report/en/print6922.htm> and audio of the full fatwa here: <http://www.youtube.com/watch?v=c45OBkbKQlw>.

even an ink stand or sharpens for them a pencil or hands them a (piece) of paper” is in danger of Hellfire (Al-Maqdisi 1984, 68).

The Jihadist movement also contains a sense of immediacy about enforcing *tawḥīd*. For Jihadis, action is required now. Calls for delay or peaceful reconciliation with the supposed enemies of Islam represent festering stagnation while militant action for the sake of Jihad purifies the soul and advances the cause of justice (Brachman 2009). This comes through in the writing of al-Maqdisi: “The disavowal from the *Tawaghīt* [tyrants] and the gods which are worshipped other than Allah the Powerful, the Majestic, along with the disbelief in them; these are never to be delayed or postponed. Rather, these should be openly shown and declared from the outset” (Al-Maqdisi 1984, 52). For Jihadis, the immediacy and finality of the *tawḥīdic* imperative is expressed in the Quranic story of Abraham, which I now discuss.

The Religion of Abraham

And who turns away from the religion of Abraham except he who befools himself
(*Surah al-Baqarah*, 130)

This verse is on the cover of the famous treatise *Millat Ibrahim (The Religion of Abraham)* by Jihadist cleric Abu Muhammad al-Maqdisi (1984). In this section, I describe how the story of Abraham in Islam has been transformed into a parable with pressing implications for modern-day Jihadis. This title, and the concept of the book, references the story of the Quranic (and Biblical) patriarch Abraham in which he first smashes the idols of the pharaoh for whom his father is a priest, then taunts the pharaoh’s court by asking how this destruction could have taken place if they were in fact gods, and finally is preserved from their wrath by divine intervention. We will see that Al-Maqdisi employs the story of Abraham as an exemplar of the Jihadist reading of the *tawḥīdic* imperative.

In Muslim tradition, the patriarch Abraham gains the special favor of God by boldly denouncing the idolatrous religion of his father.

When he [Abraham] said to his father and his people: “What are these images to which you are devoted?” They said: “We found our fathers worshiping them.” He said: “Indeed, you and your fathers have been in manifest error.” They said: “Have you brought us the truth, or are you one of those that play about?” He said: “Nay, your Lord is the Lord of the heavens and the earth, Who created them and to that I am one of the witnesses. And by Allah, I have got a plan (to destroy) your idols after you have gone away and turned your backs.” So he broke them to pieces, (all) except the biggest of them, that they might turn to it. They said: “Who has done this to our *aliha* (gods)? He must indeed be one of the *Zalimun* (wrong-doers).” They said: “We heard a young man talking against them, who is called Abraham.” They said: “Then bring him before the eyes of the people that they may testify.” They said: “Are you the one who has done this to our gods, O Abraham?” [Abraham] said: “Nay, this one, the biggest of them did it. Ask them, if they can speak!” So they turned to themselves and said: “Verily, you are the *Zalimun* (polytheists and wrong-dooers).” Then they turned to themselves: “Indeed you [Abraham] know well that these (idols) speak not!” [Abraham] said: “Do you then worship besides Allah, things that can neither profit you, nor harm you? Fie upon you, and upon that which you worship besides Allah! Have you then no sense?” They said: “Burn him and help your *alihah* (gods), if you will be doing.” We (Allah) said: “O fire! Be you coolness and safety for Abraham!” And they wanted to harm him, but We made them the worst losers. (Surah al-Anbiya: 52-70)

According to al-Maqdisi, the moral of this story is that a true follower of God must be willing to practice the religion of Abraham, defined as: “sincerity of worship to God, alone, with everything the phrase ‘worship’ implies, and disavowal from Shirk and its people” (Al-Maqdisi 1984, 34-35). Al-Maqdisi supports his assertion that following this “religion of Abraham” is truly at the heart of Islam by citing Ibn Abd al-Wahab, the founder of the Wahabi sect in Saudi Arabia and one of the leading lights of early Salafism. Al-Wahab writes

The roots of Islam and its foundation lie in two matters. The first: The

command to worship God alone with no partners associated with him and encouragement and allegiance to this and the declaration of disbelief (*takfīr*) for whoever leaves it. The second: The warning against *shirk* in the worship of God, being stern in this, having enmity because of it, and declaring the disbelief (*takfīr*) of whoever commits it (Al-Maqdisi 1984, 35).

Al-Maqdisi links this explicitly to the *tawhīd* imperative in the next sentence: “this was the *tawhīd* that the Prophets called for” (Al-Maqdisi 1984, 36). Al-Maqdisi distills the essence of the two aspects of *tawhīd* described by al-Wahab down to the phrase “loyalty and disavowal” (*al-walāʾ wal barʾ*), meaning loyalty to the principles of God’s oneness and disavowal of anything that does not acknowledge His sovereignty.

The idea of loyalty and disavowal is Jihadist’s point of departure from traditional understandings of *tawhīd* (Wagemakers 2009). This is the principle by which Jihadists determine that maintaining ties to earthly corruption is forbidden and that all such ties must be categorically rejected. Jihadists argue that rulers of Muslim lands who do not use Shariah as the law of the land are violating the principle of God’s sovereignty. By establishing laws that are not God’s laws, these rulers are stating that they, not God, know what is best for humankind. Similarly, democracy violates the principle of God’s sovereignty by assuming that people are best governed by the laws that a majority approve rather than by laws approved by God.⁸ Recent rulings by Jihadist clerics have confirmed that in the wake of the Arab spring, Jihadists are not permitted to endorse or participate in democratic elections, even for the purpose of gaining control of the government. In response to a questioner from Egypt, Jihadist cleric Abu Mundhir al-Shanqiti replies, “If you considering getting involved in these parliaments, that is certainly *shirk*. It is not permitted for you to enter them a single time, even to build the victory of Islam and the establishment of *tawhīd*.⁹ Autocratic rulers who

⁸For example, see this lecture by Jihadi cleric Abu Yahya al-Libi entitled “Democracy is Apostasy”: <http://www.youtube.com/watch?v=Veom8WUQCKM>.

⁹From the Minbar al-Tawhid wal-Jihad, http://tawhed.ws/FAQ/display_question?qid=4886&pageqa=

do not govern in accordance with Islamic law are as despised by Jihadis as democrats. Any of these systems of law-making are considered *shirk* by Jihadists.

These rulers are denounced by Jihadists as apostate (*kāfir*), meaning that they not only disobey God, but deny that he should be obeyed. Jihadists consider this worthy of excommunication from Islam. Their penchant for frequent declarations of individuals and groups as apostate has garnered them the name *takfirī* (“excommunicationists”).¹⁰

Jihadists have been critical of every government in the modern Middle East during the last three decades, with the exception of Afghanistan under the Taliban. Regimes viewed as hardline Islamists in the West are not satisfactory for Jihadists. For example, the Saudi regime is viewed by Jihadists as a weak, un-Islamic government that fails to protect and promote the *tawhīdīc* imperative. This is evident in the disdainful description of the Saudi government by Abu Muhammad al-Maqdisi:

And likewise, the *Tawaghit* [tyrants] in every time and place will never show pleasure with Islam, nor will they cease their hostilities (towards it) nor establish conferences for it and spread it in books and magazines or build colleges and universities for it, unless it is a blinded, crippled form of religion, with both wings clipped and cut off, far removed from their current situation. And (they neither have) the allegiance of the believers and the disavowal from the enemies of the religion, and the showing of enmity towards them and that which they worship and their false methodologies. And verily, we witness this clearly in the state called Saudi Arabia.... (Al-Maqdisi 1984, 40).

In a similar vein, Abu Yahya al-Libi released an audio lecture entitled “The *tawhīd* of

1&i=14, accessed 26 Feb, 2013. This view of democracy as an affront to God’s sovereignty is not limited to Jihadists — Salafis in general are conflicted about this issue including those that are most establishment-oriented. For example, see this English-language fatwa on the permissibility of democracy for a summary of the rulings by various establishment Salafi clerics: <http://islamqa.info/en/ref/107166>.

¹⁰Jihadists are not the only *takfirīs*. For example, Abd al-Rahman bin Nasr al-Barak issued a fatwa suggesting that anyone who advocated mixing of the sexes at work or school should be killed. This fatwa raised an uproar and the scholars of Al-Azhar asked him to go back on the fatwa. However, Jihadists are well-known for their relatively frequent use of takfir as a legal weapon to attack opponents and justify violent actions against the state.

Al-Saud ...and the *tawhīd* of Truth,” in which he criticizes the Saudi royalty as tyrants and implies that they worship the United States rather than God. Specifically, he quips that the American White House is “the Qibla of [Saudi] rule,” rather than the sacred Qibla in Mecca, toward which Muslims pray.¹¹

For Abu Muhammad al-Maqdisi, along with most Jihadists, there is no dealing with a ruler who does not meet Jihadist standards of *tawhīd*.

It is not allowed to cozy-up to him or to refrain from being hostile toward him or making him (appear) good or honoring him with titles or to greet him during celebrations and events, or to openly show allegiance to him or to his government. Rather, nothing should be said to him except like what Ibrahim and those who were with him, said to their people: “Verily, we are free from you and from your constitutions and your laws of *Shirk* and your government of *Kufr*. We have rejected you, and it has become openly seen between us and you, hostility and hatred forever, until you return to Allah and submit and follow His law alone” (Al-Maqdisi 1984, 40).

Needless to say, statements such as these have not ingratiated Jihadists to the Saudi authorities. The conflict between Jihadist clerics and the states in the Middle East where they reside is one of key features of modern Jihadism.

Individuals who support rulers and political systems that undermine God’s sovereignty are themselves guilty of *shirk* because they are not exercising loyalty to God’s oneness nor disavowal of those who deny God’s oneness. For Jihadists, the correct course of action is to warn these individuals of their failure to disavow evil and then, for those that do not desist, to label them apostate, along with the governments they support. Al-Maqdisi emphasizes this point using the words of Muhammad ibn Abd al-Wahab, “Disbelieve in the *Tawaghit* (tyrants) and take them as your enemies and hate them and hate those who love them, or

¹¹The lecture is available at <http://www.youtube.com/watch?v=usQ9IuuPOU4> (minute 6:00), accessed 19 March, 2013.

those who argue for them, or those who do not declare their disbelief (Takfir)” (Al-Maqdisi 1984, 70).

The *tawḥidic* imperative reaches further still for Jihadists, outside the bounds of Islam itself and to the inhabitants of the whole world. Here the thought of Sayyid Qutb becomes particularly important for Jihadists. Qutb introduced the crucial idea that the world is collectively in a state of *jahaliya* (ignorance of the divine law). Traditionally, the term *jahaliya* refers to the period of ignorance prior to the revelation of Islam to the earth, but Qutb re-appropriates this term to castigate rulers and societies who are either not Muslim or nominally Muslim but functionally secular.

If we look at the sources and foundations of modern ways of living, it becomes clear that the whole world is steeped in Jahiliyyah, and all the marvelous material comforts and high-level inventions do not diminish this ignorance. This Jahiliyya is based on rebellion against God’s sovereignty on earth. It transfers to man one of the greatest attributes of God, namely sovereignty, and makes some men lords over others (Qutb 2006, 6).

This explanation of *jahaliya* makes clear the direct line from violation of the *tawḥidic* imperative to the illegitimacy of modern political structures and societal organizations.

Qutb argues that Jihadis must oppose and ultimately overthrow the secular governments of Muslim and non-Muslim societies alike. At first blush, this appears to contradict the oft-quoted Quranic injunction that “there is no compulsion in Religion.” But Qutb himself cites this verse approvingly and then contends that he is fully in keeping with its intent. He claims that he is not advocating compulsory conversion to Islam. Rather he is “merely” showing that the *jahili* governments must be removed in order to allow their citizens the free choice to embrace Islam or reject it.

The reasons for Jihad ...are these: to establish God’s authority on the earth; to arrange human affairs according to the true guidance provided by God; to

abolish all the Satanic forces and Satanic systems of life; to end the lordship of one man over others since all men are creatures of God and no one has the authority to make them his servants or to make arbitrary laws for them. These reasons are sufficient for proclaiming Jihad. However, one should always keep in mind that there is no compulsion in religion; that is, once the people are free from the lordship of men, the law governing civil affairs will be purely that of God, while no one will be forced to change his beliefs and accept Islam (Qutb 2006, 54-55).

Without an Islamic government, Jihadists believe, there is not true freedom to embrace Islam because those who might join would be immediately forced to compromise the principles of their new-found faith in order to remain in their native societies.

Jihadists are utopian, in that they believe that the Manichean struggle between the forces that recognize God's sovereignty and those that reject it has an inevitable end in which the forces of righteousness ultimately prevail and God's sovereignty is universally recognized and enforced. In the context of current world politics, Jihadis see themselves as participating in a fundamental struggle between good and evil which justifies violence until the forces of Jihad ultimately vanquish the crusading West. Their vision of the ultimately victorious Islamic state is typically vague, but its defining feature is the protection of the *tawḥīd* ideal.

What is the "Islamic State?" Verily, the showing of the true *tawḥīd* of Allah to the people, and their removal from the darkness of the *Shirk* into the light of *tawḥīd*, is the greatest goal and most important intention (Al-Maqdisi 1984, 72).

If Jihadists are so pessimistic about the current governments in majority Muslim areas, do they believe that there has ever been a time when a Muslim state collectively achieved proper worship of God as he deserves to be worshiped? Jihadists, along with many other Muslims, believe that the generation of the prophet Muhammad and those that immediately followed him lived in accordance with God's divine law and that in the intervening time, Muslim practice has become less pure. Jihadists are thus intricately linked to the Salafi

movement that seeks a return to the unsullied Islam of the Prophet and his Companions. This dictates a preoccupation with the *sunna* (the behavior and actions) of the Prophet and, to a lesser extent, the lives and practices of the Prophet's companions.

Most Salafis are not Jihadis, and there is substantial animosity between the “establishment” Salafi clerics and their Jihadi brethren. Nevertheless, modern global Jihadism can be understood as coupling conservative Salafist ideology with an open avowal of violence as a legitimate tool for political change (Brachman 2009).

2.3 Justifying Jihadi Violence

Thus far, violence has been an afterthought in my discussion of Jihadi ideology. This presentation is faithful to the way in which this ideology is understood by its adherents. Violence is the capstone of Jihadist ideology rather than its foundation; a consequence of reasoned theological arguments, not a cause of them. Rather than an irrational or primordial preoccupation, violence is the conclusion of a theoretical proof constructed by Jihadi thinkers. If one accepts the premises of the proof and the method of inference from step to step, then violent Jihad is the logical conclusion.

This is not to say that individuals within the Jihadi movement are solely or primarily motivated to commit violence by theoretical theological propositions. This is simply how the ideology has been developed and presented. This also does not mean that the Jihadi movements are not fundamentally violent; they are, and once the mandate for violence has been established, the effort of Jihadi theorists turns to the specific issue of how Jihadi violence must be carried out within the framework of Islamic law.

Jihadi clerics work to prove that various violent activities that are typically forbidden in Islam, such as terrorism, suicide bombing, and attacking non-combatants, are actually

permissible or obligatory to counter the perceived Western threat. Jihadi clerics have developed a number of justifications for various types of violence. Summarizing arguments for each of these types of violence is a sizable task; here, I use the work of Abdallah Azzam to provide a sense of the justifications that Jihadist clerics provide.¹² The key feature of all of these justifications is that they are rooted in surprisingly legalistic terms that first categorize the world in terms of good and evil and then explain why killing in a particular situation is permissible because the person to be killed is either evil or is collateral damage necessary to destroy evil.

Jihadists recognize that violence against civilians and (especially) lay Muslims requires extraordinary justification. Abdallah Azzam writes, “The Muslim army is ordinarily prohibited from killing not only Muslims, but also dhimmis (unbelievers living as protected subjects of the Muslim state), as well as old men, women, and children from among the unbelievers” (Azzam 1979, 78).

At the risk of great over-simplification, Jihadists justify violence against other Muslims because these Muslims are either apostate because of their failure to disavow the apostate regimes, or they are righteous, innocent victims who must be sacrificed for the greater good of the Muslim community. In this case, they become martyrs, despite their lack of intention to die for the Jihadi cause. To support of this latter point, Azzam argues that, “if Muslim prisoners of war are being used by the unbelievers [as human shields] then it is not permissible to fire on them except in cases of dire necessity.... In such a case, any Muslims killed as a result will be raised up [in the resurrection] according to their intentions.”

Suicide attacks require particular justification because of the prohibition of suicide in Islam. Jihadists argue that suicide attacks are, in fact, not “suicide attacks” at all, but “martyrdom operations” that bring divine honor upon the perpetrator.

¹²Bar (2006, Chapter 6) provides a more detailed discussion of Jihadist fatwas on the rules of engagement.

The name ‘suicide-operations’ used by some is inaccurate, and in fact this name was chosen by the Jews to discourage people from such endeavors. How great is the difference between the one who commits suicide — because of his unhappiness, lack of patience and weakness or absence of Iman [faith] and has been threatened with Hell-Fire — and between the self-sacrificer who embarks on the operation out of strength of faith and conviction (Azzam 1979, 65).

In addition to providing evidence that Jihadists attempt to distinguish “martyrdom” from “suicide,” the above quote highlights the anti-semitism pervasive in Jihadi writing.

Jihadist ideologues have advanced several lines of justification for suicide attacks, but perhaps the most important set of ideas is represented by Azzam’s writings on the subject. After defending the nobility of “martyrdom,” Azzam engages in a legalistic debate about the permissibility of a Muslim committing suicide for the good of the faith. He particularly discusses the legality of a Muslim fighter intentionally plunging into enemy ranks with no hope of survival for the purpose of killing as many enemies as possible. Azzam justifies the permissibility of plunging into the enemy ranks by invoking several *hadīth* which purportedly give examples where Muhammad approved of particular individuals intentionally giving their lives in battle. For him, this is analogous to a suicide attack. Azzam provides no discussion of civilian casualties at the hands of suicide attacks.

2.4 Debates About Jihadi Ideology

Jihadi ideology is controversial, to say the least, and a number of lines of debate have emerged around it. I cannot do justice to these debates here, but I outline them and provide the interested reader with sources for further reading.

The first set of debates is internal to Jihadi ideology and is about the nature of the movement itself. Prior to the 1980s, global Jihadism did not exist in its current form; militant

Jihad was understood to be a local struggle over particular (domestic) territory. This began to change with the Afghan Jihad to resist the Soviet invasion of Afghanistan and the attendant rise of the Muslim foreign fighter (Hegghammer 2010b). This led to the development of a dialogue among Jihadists about whether Jihad should be locally focused on the “near Jihad” or globally focused on the “far Jihad.” Ultimately, Usama Bin Laden developed and implemented the idea of provoking the United States into war by focusing solely on the far Jihad at the expense of more traditional Jihadi arenas such as Palestine (Gerges 2005). This distinction between the near and far Jihads leads to substantial differences between the ideology of global Jihadism presented here and what might be termed “nationalist” Jihad movements local to Palestine, the Caucuses, Kashmir, and other contested regions.

A second site of debate about Jihadist ideology is within Islam, between Jihadists and their coreligionist detractors. Anti-Jihadists have been poison-tongued when criticizing global Jihadists. Most damningly, Jihadists face the criticism of being modern-day *Kharajites* (extremists), a reference to the *Kharajite* sect in early Islamic history (7th century C.E) that is universally seen by Muslims as having rampantly abused the concept of *takfir* to create violent chaos and confusion. Jihadists for their part return the insult that Jihadist critics are present-day *Murjites*, another early sect that was exceptionally lenient in deferring judgment and criticizing sin. In this rhetorical debate, non-Jihadists often have the upper hand and Jihadists seem genuinely threatened and troubled when others label them *Kharajites* or extremists. In a video lecture, Jihadist cleric Abu Yahya al-Libi complains that “among the greatest methods used in the ideological war is the issuing of fatwas — or rather, the procuring of fatwas — that criminalize Jihad and the Mujahideen and describe them with well-known repulsive legal terms like ‘bandits’ and ‘Kharajites’ and even ‘Qaramites,’ ‘extreme fanatics’ and the like, and paint them with allegations of treachery and treason.”¹³

¹³The video is available at http://www.youtube.com/watch?v=gMo_DwTuN7k (minute 41:48), accessed

However, the same Muslim critics of Jihadism face some rhetorical limits in their criticism. First, Jihad is almost universally accepted within Islam as a true doctrine and principle that cannot be completely denied, even if it can be alternatively defined. Thus, it is difficult for even the most moderate clerics to go on record declaring the illegitimacy of “Jihad,” as many commentators in the West would have them do. Rather, these clerics must attempt to wrest the definition of “Jihad” away from the Jihadists and establish an interpretation that rejects the violence of the Jihadis. Similarly, it is difficult for moderates to cast out the extremists — they cannot simply excommunicate the Jihadists because wanton excommunication is the tactic that they accuse Jihadists of over-using.

Currently, much of the struggle for the “true” definition of Jihad revolves around a distinction between the “greater” Jihad of self-purification and the “lesser” Jihad of armed struggle against the enemies of Islam. Salman al-Awda writes “The great Jihad (or the greater) is the Jihad of the Quran: reciting it, meditating in it, understanding it, doing it, calling others to it, obeying its limits, and being patient with its provisions and wisdom during decisions of the mind and feelings of the soul.”¹⁴ For their part, Jihadists enter the debate about the greater and lesser Jihad with equal vigor. In the forward to the English-language translation Abdallah Azzam’s *The Defense of Muslim Lands*, the publisher writes

In the world today, there are many Muslim scholars, intellectuals, leaders, academics, analysts and spokesmen who comment on the subject of Jihad in Islam. Some of them attempt to explain that Jihad was only existent during the time of the Prophet (SAWS) and now it has been abrogated. Some say that Jihad is only a spiritual struggle against one’s inner desires. Some try to say that Jihad is only in self-defence[sic] and that there is no offensive Jihad. Most propagate the idea that parents’ permission is required before one can participate in Jihad. Others are always seen apologising for Jihad in front[sic] of the disbelievers: in

19 March, 2013.

¹⁴Only the Arabic text is available at <http://islamtoday.net/salman/artshow-28-138026.htm>, paragraph 5, accessed 19 March, 2013.

their books, interviews, articles, and statements. The only thing common to those who make such statements is that the majority of them have never even spent one minute in the battlefield, let alone fight with the Mujahideen, dig trenches with them, sleep in their barracks, share their stale food, be inflicted with injuries or taste the departure of their martyrs. (Azzam 1979, ix)

Outside of Islam, there is some scholarly debate on the sources and meanings of Jihadist ideology. Most of these debates are not relevant for understanding how Jihadists themselves understand their own ideology. Most of the book-length treatments of Jihadi ideology¹⁵ come to similar conclusions about the broad features of Jihadism, although few connect each of the facets of Jihadism so thoroughly to *tawhīd* as I have here. For example, in *Jihadist Ideology: The Anthropological Perspective*, Farhad Khosrokhavar (2011) defines Jihadism as “a contemporary current in the Muslim world” with six major features: (1) a belief that Jihad is the primary solution for the troubles facing Muslims, (2) a Manichean worldview, (3) a utopian vision of a future Caliphate, (4) the prominence of violence, (5) the use of *takfīr*, and (6) a death-centered ideology. Khosrokhavar expands on this definition for some 200 pages, but this list is his assessment of the key elements. Almost all of these features appear in some way in my foregoing discussion, but Khosrokhavar does not link them through the unifying concept of *tawhīd*. For example, in his chapter “The Social Background of Modern Jihadism and the Absolute Rejection of Democracy,” Khosrokhavar first identifies the Jihadi rejection of democracy as being rooted in the geopolitical struggle between the West and Middle East (pages 31-36) and only later indicating that this rejection also links democracy with idolatry.

Scholars also debate whether Jihadi ideology matters. Khosrokhavar writes of the “pivotal role of ideology in Jihadism” and takes as his “fundamental tenet” that “Jihadism is

¹⁵See Brachman (2009), Kepel and Milelli (2010), Devji (2005), Khosrokhavar (2011), Lav (2012), and Aboul-Enein (2010).

a radical ideological movement...in which ideology plays a primordial role...” (Khosrokhavar 2011, 10,12). Others disagree. Joshua Foust writes in an academic blog post (much of the “Jihad studies” community communicates scholarly ideas through blogs) that “at best, ideology is a woefully incomplete explanation for why terrorists chose to commit terror.”¹⁶

2.5 Jihadi Rhetoric

In this section, I introduce and explore the writings of Jihadists that serve as the vehicle for their ideology. This set of writings will feature in the empirical analysis in Chapters 4 and 5. Here, I use these writings to explore the rhetoric that Jihadists use to present and represent themselves.

I describe themes within a corpus of 765 texts contained in a corpus of Jihadi texts that circulates on the Internet under the title “The Jihadists bookbag” (حقيبة المجاهد).¹⁷ As distributed on the Internet, the zipped folder contains 1,029 files, but some of these are unusable either because they are not text documents (the folder contains images, .gif animations, etc) or because the texts are saved in a file format that does not allow extraction of digitized text.¹⁸ Omitting these unusable files leaves 765 usable Jihadist texts; it is safe to assume that these usable texts are representative of the 264 unusable texts because the choice of file format is almost certainly uncorrelated with ideology.

These documents were selected and curated by a participant on the Jihadist web-forums named al-Zubayr al-Ghazi and released in various Jihadist web-forums as a zipped folder. I

¹⁶See <http://jihadology.net/2011/01/19/guest-post-some-inchoate-thoughts-on-ideology/>, accessed 19 March, 2013.

¹⁷One of the forums is here <http://www.i7ur.com/vb/t9736.html> and I accessed the zip file at <http://www.megaupload.com/?d=0DXUXL2N> on 1/27/2011. **Be aware that the zip file appears to contain at least two computer viruses!**

¹⁸These are primarily .pdf files that have not been processed with optical character recognition.

use the second release of this collection (as of this writing, there is now a third release) which was accompanied by a post announcing “The Jihadist’s bookbag 2: more than 2000 Jihadi books indexed and collected into a single file.”¹⁹ The collection includes works by 53 named authors, and an unspecified number of anonymous authors. The authors include current Jihadi theorists (ex., Abu Muhammad al-Maqdisi with 175 texts), foundational Jihadist authors (ex, Sayyid Qutb with 10 works, including his Quranic exegesis, *In the Shade of the Quran*, and operational leaders (ex, Abu Mus’ab al-Zarqawi). Notably absent are the medieval thinkers often quoted and cited by Jihadists: Ibn Taymiyya, Ibn Qayyim, and Abd al-Wahhab. Perhaps these are not included because they are not purely Jihadist, or because the organizer believes that they are too complicated for consumption by most readers.

It is important to note that these 765 documents are not always unique! For example, a fatwa by Hamud al-Shuaybi entitled “The Legality of Martyrdom Operations” which gives a justification for suicide bombings appears at least three times in the corpus, filed away in different sub-directories. I do not remove these apparent duplicates. First, there are apparently minor differences between versions, primarily in the front matter introducing the text. Although these differences appear inconsequential to me, they could be important to Jihadists. Second, it is a Jihadist who chose to include multiple copies of some documents, so to remove the apparent duplicates would change the self-representation of Jihadist ideology. There are many possible reasons why al-Zubayr al-Ghazi might have included some documents multiple times, but I assume that this multiple inclusion conveys information about what Jihadists find important. I do not have an accurate count of the number of unique documents in this 765, but the number is probably around 650-730.

The texts are mostly spiritual instruction and advice, as well as mixed political and religious commentary for Jihadists and their sympathizers, and include classic works of

¹⁹The reported number of documents appears to be an exaggeration.

Jihadist thinking (ex., *The Defense of Muslim Lands*, 1979, Abdallah Azzam) as well as recent contributions by rising stars. Overall, the Jihadist’s bookbag offers a representative corpus of Arabic-language Jihadist texts.²⁰

I use statistical text analysis to explore the rhetoric and ideology of Jihadis. Using Latent Dirichlet allocation (LDA), commonly called topic modeling, I identify clusters of correlated words within the corpus (Blei, Ng and Jordan 2003; Porteous et al. 2008). In many cases, these collections of words correspond to what humans would identify as “topics” within the documents, although it is important to be aware that not every cluster of correlated words is “topical” in a way readers would recognize.

LDA requires the user to specify a fixed number of topics in advance, potentially raising concerns about how to choose the “correct” number of topics for a particular application. My purpose in this analysis is exploratory — I am attempting to discover and summarize important features of this Jihadist corpus rather than measure a particular concept. In such a setting there is probably not an optimal number of topics; looking for five broad topics or 100 smaller topics is likely to reveal different and complimentary features of a corpus. Additionally, not all topics are likely to be substantively interpretable. A feature of topic models is that each collection of correlated words must be interpreted by the researcher; collections of words do not come with labels signifying what they ought to mean. A large part of the inference of LDA occurs at the stage where a researcher looks at a list of correlated words and interprets them substantively as a single concept. Some “topics” generated by LDA may not be amenable to interpretation by humans — the features that make these words correlated are not features that humans associated with meaningful “topic-ness.” Thus, rather than following the political science literature which engages in substantial hand-wringing about the number of topics, I simply estimate multiple LDA models with varying

²⁰For more analysis, see <http://www.jihadica.com/a-mujahids-bookbag/>.

numbers of topics: 5, 10, 25, and 100. I assume that many, but not all, collections of word can be interpreted. In what follows, I find that the 5 topic model is most useful for my purposes, but this is *not* to say that there are somehow five topics in the corpus. Rather, I found that some similar topics emerged across all of these different models and the five-topic model offers a particularly parsimonious summary of broad themes in the Jihadi corpus. I label the five estimated topics as: (1) *Tawhid/Takfir*, (2) *Legal Precedent*, (3) *Conflicts*, (4) *Operations*, and a less informative, catch-all category (5) *Mixed*. Recognizing that affixing substantive labels to topics is both subjective and a substantial part of the inferential process with LDA, I describe my process and rationale for affixing labels to each topic here.

When labeling each topic, I attempt to summarize the most important semantic content of each cluster of words. These clusters are large — every single word in the 765 document corpus is assigned to one of the five clusters — so there is substantial semantic heterogeneity within the clusters. The purpose of affixing a label, and of LDA generally, is dimension reduction. The process of fitting a topic model reduces the dimensionality of the corpus dramatically. In my implementation, word order is discarded, similar words are combined through stemming, and then the five estimated topics are summarized by probability distributions over the vocabulary. However, even this amount of dimension reduction does not render the topic model output intelligible, so analysts typically reduce the dimensionality further by (a) looking only at lists of words that are most “representative” of each topic (usually because these words occur most frequently in a given topic) or (b) by assigning labels to each topic, usually based on lists of most frequent words. When looking at lists, the dimensionality of the corpus is reduced to the length of the list (typically less than 20 words per topic) and with a single label, the dimensionality of the corpus is thus fully reduced to the number of topics. The loss of complexity is obvious. The benefit is that extreme parsi-

mony can allow analysts to see previously hidden trends and roughly describe the contours of a corpus to audiences that are not able to carefully digest each of the texts.

I infer topic labels by first generating lists of words that summarize the content of each topic. Typically, analysts summarize topics from LDA models using the most frequent terms in each topic. However, in practice this often leads to confusing lists of words that seem unrelated because the most frequent words in a topic are not necessarily the words that best distinguish one topic from another. For example, in the five-topic model below, “Allah” is the most frequent term in both the *Legal Precedent* and *Operations* topics, but “Allah” provides little semantic content to distinguish these topics from each other unless the analyst has more context. This is because the word is used for different reasons in these two topics. In the *Legal Precedent* topic, “Allah” is prominent because of frequent usage of legally valid *hadith* which almost always include the phrase “The messenger of Allah said...” In the *Operations* topic, “Allah” is frequent because of the phrase “Jihad in the pathway of Allah.” Recent work by Bischof and Airolidi (N.d.) and Roberts, Stewart and Airolidi (N.d.) suggests that topics can be better summarized by using the exclusivity of words — how exclusive a word is to a particular topic — to infer the best semantic label for each topic. Specifically, I follow Roberts, Stewart and Airolidi (N.d.) by generating three lists of words for each topic: the most frequent words, the most exclusive words, and the words that score highest on the geometric mean of frequency and exclusivity (denoted FREX scores). The score is defined as

$$FREX = \left(\frac{0.5}{ECDF(\beta_k / \sum_{j \in S} \beta_j)} + \frac{0.5}{ECDF(\beta_k)} \right)^{-1}$$

Table 2.1: *Top Words for Five Topics in a Jihadi Corpus.*

Tawhid/Takfir	Legal Precedent	Conflicts	Operations	Mixed
excommunication	said	America	Jihadis	ten
excommunicate	son	American	martyr	had
tyrant	if	Afghanistan	Afghan	appointed
apostate	Prophet	Afghan	Jihad	big
believe	peace be upon him	United	operation	king
loyalty	peace be upon him	region	Russia	mosque
legislation	book	organization	enemy	country
come down	science	movement	Azzam	four
categorized	hadith	government	Russian	was
apostates	command	Pakistan	leader	house/stanza
ignorance	mercy	leader	martyrs	begin
Murjites	Sahih	president	martyrdom	knots
apostates	remember	dollar	Communist	five
prohibitions	theology	leadership	fighter	sir
suspicion	issue	Saudi	invasion	woman
apostate	narrated	Iraq	sword	city
make halal	do	West	kill	thousand
excommunicate	book/volume	front	battles	nights
Polytheism	Imam	politics	battle	law
Khawarij	books	East	horses	news
read	rulings	States	airplane	head
Jahmi	Ahmad	countries	Persians	wife
Most High	leave	peninsula	factions	mosque
faith	good	million	blood	hour
outright disbelief	original	Bin Laden	arms	Communist
tyrants	evidence	brothers	family	return
sovereignty	Taymiyya	center	spite	Emir
democracy	Companions	years	fighters	prison
excused	house	Crusaders	kill	where?
legislation	meaning	decision	invaders	Hajj

This table provides the top thirty words, based on FREX scores, for each of five topics estimated using latent Dirichlet Allocation on the Jihadist’s bookbag corpus. The FREX scores are the harmonic mean of frequency (of the word in a topic) and exclusivity (the extent to which a word is unique to the topic). Each column is a topic; the titles at the top of each column are summary names inferred from the words in the column, not labels provided by the model.

Table 2.2: *Texts that are Representative of Five Topics in Jihadi Rhetoric*

Takfir/Tawhid	<ol style="list-style-type: none"> 1. <i>This is my creed</i>, Abu Basir al-Tartusi 2. <i>Discussion of the saying of Ibn Uthaymeen in which he requires making apostasy permissible instead of following the divine law</i>, Abu Basir al-Tartusi 3. <i>Assorted issues, 601-625</i>, Abu Basir al-Tartusi 4. <i>Ruling about one who defends the Tyrants</i>, Ali Khudayr 5. <i>Discussion of the saying of Ibn Baz</i>, Abu Basir al-Tartusi
Legal Precedent	<ol style="list-style-type: none"> 1. <i>The Methodology of the Early Scholars in the Issue of Tadlis</i>, Nasr al-Fahd 2. <i>The ruling about praying for the dead who are missing</i>, Hamud al-Shuaybi 3. <i>The Response to the Shiites</i>, Nasr al-Fahd 4. <i>The Ruling Upon Alcohol Based Perfumes</i>, Nasr al-Fahd 5. <i>The book of principles for discovering the opposing viewpoints on evidence and practice from the words of the Salafi Imams</i>, Ali Khudayr
Conflicts	<ol style="list-style-type: none"> 1. <i>Informing the Sleepers of the New War Against Islam</i>, Husayn bin Mahmoud 2. <i>America and the Climb into the Pit of Hell</i>, Yusuf al-Urayri 3. <i>The Jews in America</i>, Hamid al-Ali 4. <i>The Presence of the Americans in the Arabian Peninsula: Their Accomplishments and Aims</i>, Yusuf al-Urayri 5. <i>The Opium War</i>, Husayn bin Mahmoud
Operations	<ol style="list-style-type: none"> 1. <i>The Legality of Martyrdom Operations</i>, Hamud al-Shuaybi 2. <i>The Ruling on Martyrdom Operations</i>, Sulayman al-Ulwan 3. <i>Martyrdom Operations: Jihad in the Pathway of God</i>, Palestine Scholars Association 4. <i>The Way to the Battlefield</i>, Yusuf al-Urayri 5. <i>Martyrdom Operations: the Pinnacle of Martyrdom</i>, Abu Sa'd al-Amali
Mixed	<ol style="list-style-type: none"> 1. <i>To My Beloved Mother – Do Not Cry for Me</i> (poem), Abu Muhammad al-Maqdisi 2. <i>The article that made me and most other readers cry concerning Sheikh Yusuf al-Urayri</i> (blog post), Anonymous on al-Islah forum 3. <i>Do You Know My Crimes?</i> (poem), Abu Muhammad al-Maqdisi 4. <i>Papers From the Prisoner's Notebook, 2</i> (prose and poetry), Abu Muhammad al-Maqdisi 5. <i>The Preachers at the Gates of Heaven</i> (poem), Abu Muhammad al-Maqdisi

This table lists the five documents that are most representative of each topic, meaning that they have the highest proportion of words assigned to that topic. In some cases, documents that appear more than once in the corpus were in the top five — when this occurred I skipped repeated documents as the purpose of this list is to give the reader a sense of the topic and new titles are more informative than repeats.

where β_k is the estimated number of occurrences of term k assigned to each topic, $\sum_{j \in S} \beta_j$ is the total number of occurrences of the term in some baseline comparison set S , and ECDF is the empirical CDF function. The first fraction in the equation is the exclusivity calculation and the second is the frequency calculation. In this case, the baseline I use for determining the exclusivity of a word is the total number of appearances of the word in the corpus. An exclusive word is one that has a high proportion of its appearances in a single topic.

In Table 2.1, I show the FREX scores for each of the five topics. In practice, I used all three lists of words to infer topic labels, but I present only the top words according to FREX scores. This is partly because of space, but in general, the FREX scores were the most important list as I inferred topic labels, while the exclusivity and frequency lists were a distant second and third. I used lists of 50 words for each topic, but I only display the top 30 here for space considerations.

I also use information about representative documents to infer the most appropriate labels for each topic. Specifically, I find the five documents that have the largest proportion of words assigned to a particular topic by the LDA topic model and consider the title, author, and the text (limited in most cases to a quick skimming of the first few pages, although I read some shorter documents entirely). The representative titles for each topic are listed in Table 2.2.

Tawhid/Takfir: I label the first topic *Tawhid/Takfir*. It is not hard to see the *takfir* component of this topic in the list of words with the highest FREX scores. The first two words on the list are the Arabic word “*takfir*” which I translate as “excommunication,” and the word “*yukaffir*” which is the verb meaning “to excommunicate.” The remainder of the list includes many terms connected to *tawhīd* that are familiar to the reader from the foregoing discussion of Jihadist ideology: “tyrants,” (referring to oppressive governments that do not

enforce tawhid), “legislation” (the illegitimacy of earthly legislation), “ignorance” (Sayyid Qutb’s concept of Jahiliyya), “*shirk*” (Polytheism), and “democracy,” among others. The list also includes words related to discussions about the use of excommunication by Jihadists — the words “*Murjites*” and “*Khawārij*” are the names of historical groups within Islam connected with opposite positions on the excommunication of supposedly heretical Muslims.

The five titles in the corpus that most represent this topic confirm that this topic is about *tawhīd* and *takfīr*. Four of the works are by the (in)famous Jihadist *takfīrī* Abu Basir al-Tartusi: a treatise on *tawhīd*, a collection of fatwas about *takfīr*, and two criticisms of the positions of prominent establishment scholars on *takfīr*. The final document in the list of five is by Ali Khudayr and is a *takfīrī* fatwa.

It is encouraging that the LDA model corroborates my analysis above and identifies issues of *tawhīd* and *takfīr* as a coherent topic within the Jihadist corpus.

Legal Precedent: The second topic primarily relates to legal precedent within Islamic law. This is not a topic in the sense that the correlated words are not about a specific subject. Rather, these words are the collection of terms that accompanies legalistic reasoning in Islamic law, regardless of content. Thus, this topic represents a trend that might have been overlooked by a human reader, but nevertheless gives insight into the nature of the corpus.

The top five documents are extremely legalistic, and in at least one case, are actually treatises on legal theory. Although it may not be immediately obvious, five of the first six terms in this topic all draw on the science of hadith, by which legal precedent is determined in Islamic law. To see how these terms are about precedent, consider the classic form of an introduction to a *hadith* (called an *isnad*). I have underlined occurrences of the first six words in the selection.

Abu Abdallah son of Sahnun said: Abi Sahnun related to me, by way of Abdallah son of Wahhab, by way of Sufyan al-Thawri, by way of Ilqima son of Marthud (?), by way of Abi Abdalrahman al-Salami (?), by way of Uthman son of Afan — may god be pleased with him — that the prophet of God — peace be upon him — said: ...²¹

Five of the six top words on the list occur in this *isnad*, several repeatedly, demonstrating that these words are intimately linked to the establishment of legal precedence in Islam. Note that the honorific for the Prophet Muhammad — peace be upon him — appears twice in Table 2.1, but these are two distinct parts of the honorific. For semantic clarity, I translate the entire honorific each time.

The other words further down the list corroborate my assessment that this topic is about legal precedent. The topic is related to the science of *hadith* (“hadith”, “science”, “narrated”, the “Companions” of the prophet), collections of prophetic sayings (including *Sahih Muslim*, *Sahih Bukhari*, and the collection of Ibn Taymiyya), and issues of Islamic rulings more generally (“book”, “books”, “rulings”, “book volume”, “evidence”).

Conflicts: I label the third topic *conflicts*, because of its focus on past and present Jihadist political conflicts with the United States, Russia, and Saudi Arabia, with fighting in the theaters of Afghanistan, Pakistan, and Iraq. The top five words for this category all relate to America and the Afghan war. Other political entities are also prominent, including generic terms for political entities (“leader”, “government”, “president”, “leadership”). Al-Qaeda is typically referred to as “the organization of Al-Qaeda” by Jihadists, so the fact that the words “organization” and “Bin Laden” both appear indicates a focus on al-Qaeda and its role in conflicts with the West. The top documents for the topic further suggest that this topic is really about Jihadist conflicts — all five exemplar texts are works explaining the

²¹Taken from page 69 of *Kitab Adab al-Muallimin li Muhammad bin Sahnun*, photocopy provided by William Granara.

evils of the United States and its supposed plans for domination and humiliation of Muslims and their lands.

Operations: The fourth topic is about operations, and the exemplar documents suggest that it may even be more tightly focused on “martyrdom operations,” or suicide attacks. Four of the five exemplar documents are fatwas defending the legality of suicide attacks. The focus on suicide is less clear in the top words of the topic, although words directly related to martyrdom occur in positions 2, 11, and 12 on the list, suggesting that with more accurate stemming to combine these similar words, the term “martyrdom” might in fact define the topic. Regardless, the topic remains clearly centered on violent operations in a variety of contexts.

Mixed: The last topic is difficult to summarize. The list of top words is perplexing, regardless of whether I use word frequency, exclusivity, or the combination FREX scores. The most frequent term in the topic is the Arabic preposition “*ilā*” meaning “to.” The most exclusive words are words for “marriage” and “wife,” but the list quickly turns into a list of verbs with no apparent semantic connection. The list of top words by FREX score does not overlap either the frequency or exclusivity lists, suggesting that this topic has no words that are both frequent and exclusive.

Inspection of the top documents for this topic begins to clarify the puzzle: the top documents are poetry or mixed poetry and prose. Further investigation of the corpus reveals that poetry is a major feature of Jihadist rhetoric. Within the Jihadist’s bookbag, Abu Muhammad al-Maqdisi has an entire subdirectory containing 19 pieces of poetry. Verse and rhyme also appear frequently in other genres, including some of the most foundational texts. For example, al-Maqdisi’s seminal treatise *The Religion of Abraham* opens with a poem by the medieval scholar Ibn al-Qayyim:

I will perform Jihād against Your enemies as long as you keep me (in existence),

And I will make fighting them my occupation

And I will expose them at the heads of the assemblies,

and I will slice their strength with my tongue.

Perish in your rage, for my Lord is well knowing,

Of the secrets you withhold and the evil of your souls

For Allāh will support His Religion and His Book,

And His Messenger along with the knowledge and authority.

And the truth is a pillar, which no one can destroy

Even if the Thaqalān (man and Jinn) united (to do so).

Ibn Al-Qayyim,
(quoted in Al-Maqdisi 1984, 9)

These five topics vary in their prevalence in the corpus, and authors within the corpus vary in the extent to which they write within each topic. Figure 2.1 shows the frequency of each topic in the overall corpus (gray, at top), and in the writings of each of the 22 named authors in the corpus with sufficient written material below. Rather than presenting the authors in haphazard fashion, I group them according to similarity in their topic proportions, using the k-means algorithm (MacQueen 1967; Hastie, Tibshirani and Friedman 2009). Authors in Figure 2.1 who are shown in the same row (and color) have similar topic proportions.

I find that the *Tawhid/Takfir* topic is prevalent in the corpus. Approximately a third of the words in the overall corpus are assigned to this topic, and virtually every author has at least some of this topic in their writings. This suggests the plausibility of my argument that *tawḥīd* can be viewed as the fundamental tenet of Jihadism, from which other doctrines emerge. Several authors in the corpus have a particularly strong emphasis on *tawḥīd* and *takfir* in their writings, notably al-Tartusi, al-Khalidi, Abd al-Latif, and al-Maqdisi.

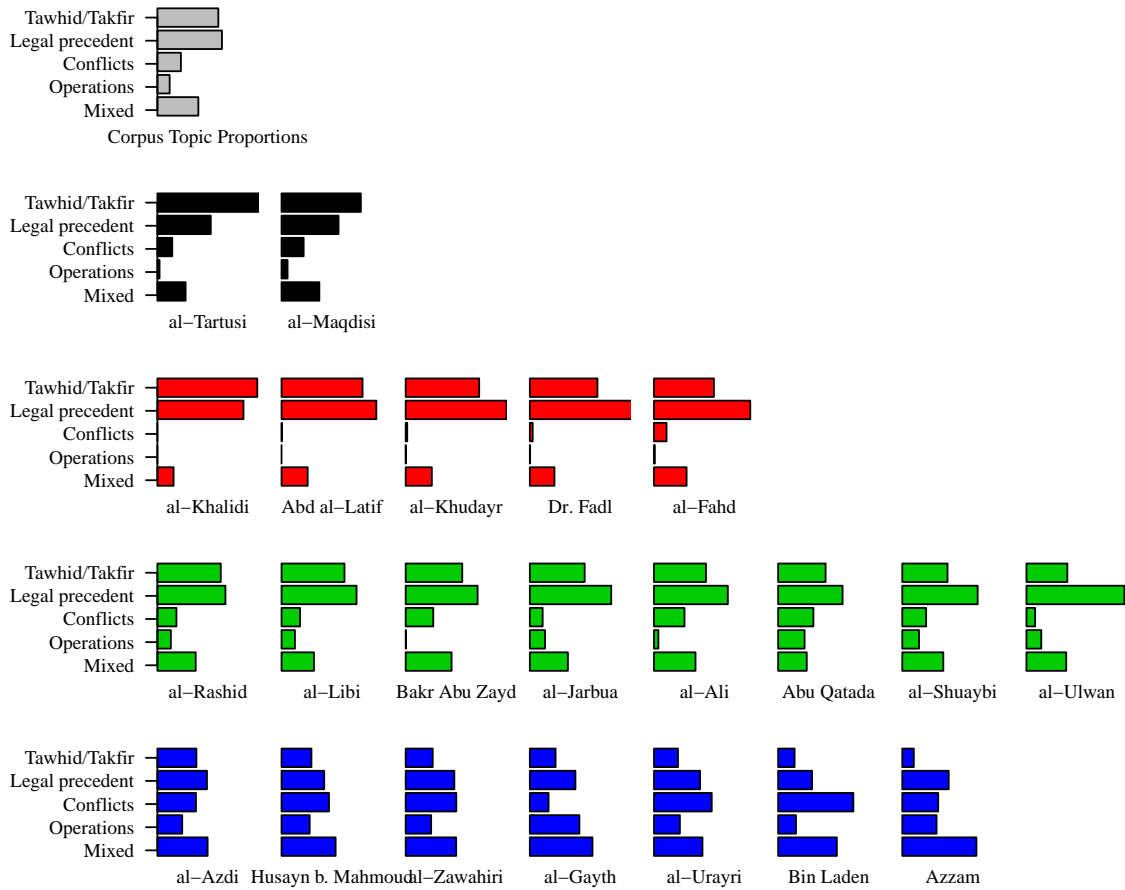


Figure 2.1: *Proportions of Topic Use in a Jihadi Corpus by Author*

This figure shows the proportions of each topic (discussed above) in a Jihadi corpus. The top panel (in gray) shows the overall topic proportions. The remaining panels show the topic proportions of each of the 22 named authors with sufficient text for analysis. I group the authors together (in rows and colors) based on the similarity of their topic proportions — authors in the same row and color tend to write about similar things.

The k-means clustering algorithm groups al-Tartusi and al-Maqdisi together because of their dominant use of the *tawhīd* topic, in conjunction with their relatively light use of legal precedent compared to the group of authors shown in the third row of Figure 2.1. This third group of five authors tends to write dominantly in the language of Islamic legal precedent, with a focus on *tawhīd* and almost no attention to the other two substantively well-defined

categories of *Conflicts* and *Operations*. Together, this cadre of seven scholars in rows two and three could be thought of as the intellectuals and legal apologists for the Jihadi movement. Their writings tend to be more esoteric, rooted in formal structures of Islamic law, and focused on the concept of Jihad as a pathway to monotheism.

The eight authors in the fourth row of Figure 2.1 fall somewhere in the middle of the spectrum between theoretical and practical figures in the firmament of Jihadi ideologues. These authors still focus heavily on rhetoric of legal precedent and *tawhīd* but they generally also write about the contemporary conflicts facing Jihadists and address issues like the justification and means for carrying out violent operations.

The seven authors in the fifth row are quite different from the others in their choice of topics. These authors are clearly more focused on violent operations against the West and on the broad political conflicts facing the Jihadis. These authors tend to write polemic works urging Jihad from a practical perspective with fewer citations to legal precedent or the finer points of Jihadist theology. It is not surprising that the past and current leaders of al-Qaida fall into this last group; although they write in clerical styles, their topical content is more immediate, concerned with politics, and focused on the practicalities of violent operations and global struggles.

2.6 Does Cleric Ideology Matter?

Clerics that support transnational Jihad have been of particular concern to counter-terrorism experts because these ideologies are thought to directly motivate Jihadi terrorist attacks (McCants 2006). The influence of Jihadi clerics is so great that extremist cleric Anwar al-Ulaqi was called the “most dangerous man in the world” by a New York Police Department

counterterror official in November 2010.²²

In this section, I provide evidence that the ideology of clerics influences the actions of lay Muslims. The study of cleric ideology is interesting in its own right, but it becomes substantially more important if the rhetoric of Jihadi ideologues affects the actions of lay Muslims.

Evidence from *The Guantanamo Docket*

In November of 2009, the *New York Times* released *The Guantanamo Docket*, an interactive online database of documents relating to the 779 individuals that have been held at the military prison in Guantanamo Bay, Cuba, since 2002. During this time, the prison held individuals that were deemed to be enemy combatants — militant Jihadists — in the United States’ war against al-Qaeda, the Taliban, and affiliated groups. The *Times* acquired a substantial amount of classified material from the Guantanamo Joint Task Force (JTF) from an anonymous source. This cache of documents includes background on each of the detainees and assessments of their threat to the United States. The documents are maintained by the *Times* and National Public Radio and are available online.²³

The “Background Information” section of each JTF-GTMO Detainee Assessment document typically includes a section entitled “Detainee’s Account of Events.” This section is introduced with the disclaimer: “The following section is based, unless otherwise indicated, on detainee’s own account. These statements are included without consideration of veracity, accuracy, or reliability.” Although they are not in the detainee’s own words, these narratives summarize detainee’s descriptions of how they came to be in US Government custody. In many cases the narratives are not credible — the JTF documents offer assessments of these

²²<http://abcnews.go.com/Blotter/awlaki-dangerous-man-world/story?id=12109217>

²³<http://projects.nytimes.com/guantanamo>.

narratives and note when US military personnel believe that a detainee is lying about their past based on other evidence. However, some of the narratives appear to be genuine; the most credible are those that acknowledge detainee participation in Jihadist activities. This subset of narratives by admitted Jihadists provides evidence that Jihadi clerics and their fatwas are an important motivator of radical activism by lay Muslims.

A careful reading of detainee accounts revealed numerous instances in which a relatively credible detainee cites the importance of clerics and their fatwas in their decision to participate in militant Jihad. These accounts are revealing enough that I reproduce two of them below. In the first narrative, detainee Abdul Aziz Saad al Khaldi (a 33-year-old Saudi believed to be part of Usama Bin Laden's 55th brigade in Afghanistan) claims that he was initially opposed to the 9/11 attacks but that he ultimately joined the war in Afghanistan because of clerical fatwas.

Detainee was still in Saudia Arabia when the 11 September 2001 attacks occurred. Detainee believed the attacks violated Islamic ethics because the Koran states it is wrong to kill innocent people. Detainee was not personally recruited, but heard from friends about fatawa (religious decrees) urging young men to fight abroad. Detainee also overheard other Saudis talking about the conflicts in Chechnya and Afghanistan, and read newspaper articles detailing the suffering of Muslims in those countries? Detainee read Shaykh Hamoud Bin Uqla al-Shuaibi's fatwa calling for people to "defend the Muslims and Islamic nations" against the Northern Alliance (NA) troops of Massoud and Dostum. In November 2001, detainee decided to travel to Afghanistan to find his brother and to fight the jihad.²⁴

A second example comes from Fahd Salih Sulayman al Jutayli, a 29-year-old Saudi who was assessed to be a low-level member of al-Qaeda. Al-Jutayli also mentions the importance of fatwas and states that he specifically sought out Jihadist cleric Hamud al-Shuaybi for

²⁴Available at <http://projects.nytimes.com/guantanamo/detainees/112/documents/11>, accessed 9 March, 2013.

information on how to participate in Jihad.

After Sheikh Al-Wounayan (assessed to mean Sheikh Suleiman Alaloan) and Sheikh Suliman Al Awda (assessed to mean Sheikh Salman bin Fahd) issued fatwas for jihad, detainee volunteered for military training in Afghanistan in August 2001. Detainee asked Sheikh Uqla, (assessed to mean Sheikh Hamud bin Al Aqla Al Shuaibi, who is deceased) a teacher at Imam Muhammad bin Saudi College in Burayda, SA, (a university and area considered a hotbed of Wahhabism, the radical Saudi form of Islam) for contact information and instructions that would allow him to travel to Afghanistan and receive training at an Al-Qaida run terrorist training camp.²⁵

To get a sense of how prevalent clerics and fatwas are in the narratives of captured Jihadi fighters, I sample 50 of the 779 detainees and read their narratives, coding whether they mentioned specific clerics or fatwas in the same style as the two narratives quoted above. I found that seven out of 50 narratives, or 14%, included specific references to clerics and fatwas, with Hamud al-Shuaybi mentioned by name in 6 of the narratives. Other clerics are mentioned in these narratives as well, but none as consistently. This number is quite large — it implies that approximately 100 of the 779 detainees specifically mention the influences of clerics. A 95 percent confidence interval suggests that the true number lies between 45 and 210.²⁶ If anything, these numbers understate the true influence of clerics because a fairly large portion of the narratives appear to be at least partially fabricated cover stories and fabrications, which have no likelihood of mentioning cleric-motivated Jihadism.

Evidence from *Dots on the Letters*

In 2007, two years after his escape from Bagram prison in Afghanistan, Jihadist cleric Abu Yahya al-Libi released a 1.5 hour video lecture entitled *Dots on the Letters: A Second Meeting*

²⁵Available at <http://projects.nytimes.com/guantanamo/detainees/177/documents/11>, accessed 9 March, 2013.

²⁶The confidence interval for the proportion is (.06, .26).

of *Al-Sahab* with Sheikh Abu Yahya al-Libi.²⁷ The lecture takes the format of an interview, with short questions by an off-scene interviewer and long, detailed responses in Arabic by al-Libi who appears seated on the ground against a gray cloth backdrop. The video includes English subtitles which I quote below.

About 30 minutes into the video, the interview turns to the issue of the “war of ideas” between al-Qaeda and the United States and at minute 35:40, the interviewer asks al-Libi, “What are the methods which the Crusaders might use to achieve this goal [of discrediting al-Qaeda]?” Al-Libi’s response is long and illuminating. He lists six specific actions that the United States might undertake that would defeat al-Qaeda, three of which emphasize the role of cleric ideology on both sides of the conflict.

Al-Libi’s first “suggestion” is that the United States ought to be “announcing the backtracking of some of the Mujahideen’s leaders in prison, their deeming themselves mistaken in what they used to believe and do and their advising their brothers to abandon the path which they are on.” At face value, this suggests that when Jihadi ideologues renounce Jihad, they have substantial impact on the ideological commitment of lay Jihadists.

When they cannot be convinced or forced to recant, al-Libi suggests that the West focus on

killing, capturing, incapacitating or defaming the guiding Jihadi symbols, isolating them and preventing their voice from reaching the people, and emptying the arena of them or restricting them as much as possible, after which the Mujahideen will be without an authority in which they can put full confidence and which will direct and guide them, allay their misconceptions, and regulate their march with knowledge, understanding, and wisdom, which in turn will lead to the intervention of some of those who have not fully matured on this path or are hostile to them in the first place, to spread whatever ideas and opinions they want to cause disarray and darkness in the proper outlook which every Mujahid must have. (44:50)

²⁷http://www.youtube.com/watch?v=gMo_DwTuN7k.

This suggests that al-Libi believes clerics to be crucial for sustaining the global Jihadi movement.

2.7 Conclusion

This chapter describes some of the key features of Jihadi ideology and then explores aspects of Jihadi rhetoric in a representative corpus of Jihadi texts. I begin with a brief history of the Islamist movements from which modern Jihadi ideology arises. I then provide a detailed description of Jihadi ideology centered around the argument that virtually all tenets of this ideology flow from Jihadists interpretation of *tawḥīd*, the absolute oneness of God. For Jihadists, this oneness means that God is sovereign over the earth and all of his creations. He deserves to be worshiped in the ways he demands, and according to his laws. Individuals and societies who deny the efficacy or supremacy of God's law are actively rejecting God and this places them at odds with Jihadists who see the enforcement of *tawḥīd* as their sacred duty. This explains Jihadists rejection of democracy and political pluralism, and creates the groundwork for their justifications of violence. I describe some of these justifications for violence as they appear in the writings of Abdallah Azzam.

Next, I analyze and explore a large corpus of Jihadi material. I use a latent Dirichlet Allocation model to identify five broad topics in the corpus: *Tawhid/Takfir*, *Legal Precedent*, *Conflicts*, *Operations*, and a catch-all category of poetry and prose I label *Mixed*. I find that the *Tawhid/Takfir* topic is prevalent in the corpus, with approximately one-third of all words in the corpus being assigned to this topic by the LDA model. This offers evidence for my argument that *tawḥīd* is the unifying tenet of Jihadist thinking. I find variation in the expression of these five topics by clerics. This allows me to classify some Jihadist writers as theologians focusing on *tawḥīd* and issues of Islamic law, and others as practical writers

primarily concerned about Jihadist military conflicts and operations.

Finally, I provide evidence that the rhetoric of Jihadist clerics may cause some lay Muslims to radicalize. First, I show suggestive evidence from the narrative accounts of foreign fighters detained at Guantanamo Bay that cleric fatwas encouraging Jihadi fighting may account for a substantial number of fighters' choices to travel for Jihad. I also show evidence that at least one Jihadist cleric — Abu Yahya al-Libi — believes that cleric ideology is important for sustaining the Jihadi movement.

Chapter 3

Networks, Career Paths, and Cleric Radicalization

Transnational militant Jihad is one of the most important features of the international system in the post-Cold War era. Since the September 11, 2001 attacks by Jihadists on American soil, the United States has initiated two wars as a direct or indirect result of militant Jihadists, and security from Jihadi terrorism has become one of the most important issues in national and international security for a large number of countries in the West and beyond.

Jihadi ideology is often perceived to be the result of immutable, irreconcilable conflicts between fundamentalist Islamism and Western society. The rise of militant Jihadi ideology has been attributed to a fundamental “clash of civilizations” between Islam and the West (Huntington 1993). Irreconcilable religious differences are thought to motivate the transnational Jihadists that perpetrate acts of terror against civilians in Western countries. Jamal (2012) argues that the clientelistic relationship between the United States and the Arab regimes of the Middle East has driven anti-Americanism in the region and increased the

popular appetite for violence against the West.

Actors in the conflict also commonly espouse the view that the conflict between Jihadists and the West is about irreconcilable international forces. Commentators in the West claim that Jihadi ideology is popular in the Middle East because of a fundamental hatred for the Western way of life. Jihadists view their struggle to force Western military forces out of the Middle East and to force secular governments out of power as a continuation of the 10th and 11th century Crusades against encroaching Christianity.

This chapter argues that a fundamentally different set of factors are the primary cause of Jihadi radicalization among Muslim clerics. I argue that the rise of militant Jihadist ideology is mostly the result of domestic, rather than international processes. Specifically, I find that clerics adopt radical Jihadi ideology because of the structure of their educational networks and the differing career paths that these networks imply. Clerics are far more likely to become Jihadist when they lack a dense, well-connected educational network. These poorly connected clerics face severe disadvantages on the cleric job market, which push them toward outsider career paths and ideological extremism. In contrast, well-connected clerics are more likely than their poorly-networked counterparts to obtain government sinecures within the state-run religious institutions common across the countries in the modern Middle East. Clerics following these government-funded career paths are unlikely to endorse the militant Jihadist ideology that opposes the state that pays them.

This theory has important implications for our understanding of militant Jihadist ideology and the role of Jihad in modern world politics. While the dominant explanations for the rise of the modern Jihadist movement rely on long-standing hatreds, immutable identities, and sweeping international forces, I argue that radical Jihadism is actually a product of the domestic political economy of religion in a handful of Middle Eastern countries, primarily

Saudi Arabia and Egypt. International actors and events surely provide context and content for Jihadists, but I argue that Jihadist clerics are primarily responding individually to a set of incentives that reward some clerics who endorse Jihadist ideology with a chance to build a career, a following, and a legacy. That this ideology has changed the course of international affairs is important to the clerics that promote it, but I argue that these clerics did not set out to change the world by developing the most potent ideology to oppose the West since the fall of the Soviet Union. Instead, they each responded to individual incentives structured by their educational networking opportunities and the subsequent career paths that they found opened or closed to them.

If my argument is correct, it suggests that the current Jihadist movement is primarily responsive to domestic political forces in Egypt, Saudi Arabia, and elsewhere, rather than to international forces. This means that the current prominence of radical Jihadism in international affairs is likely to change as the domestic political economy of religion in these countries changes. In fact, there are hints that changes caused by the Arab spring of 2011 have already started to influence the Jihadist movement, possibly in ways that make Jihadist less globally relevant than before. This suggests that rather than evidence of a long-standing clash of civilizations, the rise of modern Jihadism simply represents a “Jihadi moment” that is the result of historically contingent factors and is likely to pass once the domestic drivers of extremism change.¹

The chapter proceeds as follows. I first sketch the historical factors that have created the modern “Jihadi moment.” I show how these historical factors led to particular norms in Islamic education and power relationships between clerics and political elites that ultimately drive the adoption of Jihadi ideology by some clerics but not others. I then trace the central

¹Other scholars have predicted the demise of global Jihadist ideology, but for different reasons (Lahoud 2010).

role of educational networks in defining the range of career possibilities open to a Muslim cleric. I show how network structure influences the career paths of clerics and explain why clerics with government sinecures are unlikely to become Jihadist while clerics with career paths outside of state control are pushed toward Jihadist ideology.

3.1 The Historical Sources of the “Jihadi Moment”

Although it may seem inevitable in retrospect, the rise of the modern Jihadist movement was highly contingent on a number of historical factors which produced the exact structure of the political economy of religion in the modern Middle East.

Despite its claims of timelessness, the global Jihadist movement is a recent phenomenon. Thomas Hegghammer (2010*a*) dates the start of the movement to 1979 in Saudi Arabia, and traces three major phases of the modern Jihadist movement: (1) the Saudi Jihadists who began fighting in a number of local fronts — Afghanistan, Bosnia, and Chechnya — in the mid-1980s to mid-1990s, (2) the rise of a more radical, global Jihad from 1995 to 2001, and (3) the establishment of al-Qaida in the Arabian Peninsula in 2002. Thus, the phenomenon of militant Jihad against the West in its current form is a rather recent development. To understand its rise, however, it is necessary to go back further and understand the establishment of the current relationships between clerics and political elites in the Middle East.

In the 19th and 20th centuries, the Arab countries of the Middle East underwent modernization. As part of this process, venerable religious institutions were coopted by political elites and brought under the aegis of the state (Crecelius 1967; Zeghal 1996; Fabbe 2012). In Egypt, for example, this meant that the famous and previously independent University of Al-Azhar became a state institution. Rather than being supported by an independent

financial endowment, it was re-funded under the government ministry of endowments. Most clerics became government employees. They still led mosques, taught in schools, and issued advice and fatwas, but rather than drawing support from independent financial sources such as *waqfs* (Islamic endowments), they were paid from government coffers, often through the newly created Ministry of Waqfs. Career advancement and appointments were now regulated by the state rather than being the sole purview of the community of *‘ulamā’*.

There were several interrelated reasons for state attempts to dominate religious institutions. Perhaps foremost, regimes throughout the Middle East sought to establish their legitimacy through connections to the clerical elite. Since the early days of Islam, clerics have often served in advisory roles for political elites and the modernizing regimes of Egypt and Saudi Arabia the 19th and 20th centuries found that allying with clerics or coopting them provided religious cover for the contested politics of modernization. The importance of this religious legitimacy continues for these states today, and when political expediency dictates, the state will lean on its clerics to rule in favor of its latest political project. Even the most respected and prestigious clerics have conceded to the demands of the state in order to maintain their careers within the state-dominated system of religious institutions. For example, Abd al-Aziz bin Baz was widely viewed as one of the most important living clerics before his death in 1999. Despite his importance and the wide respect afforded him as the Grand Mufti of Saudi Arabia from 1993 to 1999, he was widely seen as compromising Islamic legal principles for political expediency when he issued a fatwa authorizing the basing of US warplanes on Saudi soil during the 1991 Gulf War (Masud, Messick and Powers 1996).

Often, the religious elites were not particularly pleased with these arrangements. Several scholarly works have traced how the move to state domination of religious institutions effectively sidelined the previously powerful clerical elite. This is because the second effect of state

dominance of religious institutions was to defang clerics as a class and remove their ability to dramatically influence politics (Fabbe 2012). Political elites recognized the potential for sustained cleric opposition to their policies. By taking control of the previously independent financial endowments for all of the most important religious institutions, regimes in Egypt, Saudi Arabia, and elsewhere in the Middle East gained the ability to effectively blackmail the clerical class by threatening to cut off funding.

Thus clerics have faced a paradox: their political power as a class has decreased even as their involvement in politics has increased. Nevertheless, individual clerics generally do not have the opportunity or incentives to change the status quo. The state rewards its clerics well, providing them with substantial resources if they side with the state when called upon. States have succeeded in coopting the clerical elite, partly by leaving previously existing clerical structures intact. This means that the most widely recognized and respected clerics rise to the top of the state-dominated hierarchy. New clerics entering the system face the choice of also moving up within this hierarchy or attempting to build a career outside of it. The combination of material rewards, prestige, and following that accrues to state clerics makes it very difficult for clerics to resist this option, even when they are skeptical about forming a cozy partnership with the state.

As we will see in the following sections, state cooptation of the clerical elite is at the heart of the rise of the modern Jihadist movement. State dominance of religious institutions has bifurcated the career paths of clerics — some clerics follow career paths within the orbit of the state, while others fail to get on this career track and build their career in other ways. These differing career paths are partly a result of the educational networks that clerics cultivate during their education and training. Entry into and advancement within the state-dominated hierarchy is hardly meritocratic and well-connected clerics have

a distinct advantage when competing for positions within the state-run system. Thus, cleric educational networks — the connections a student makes with his teachers — have important downstream consequences for whether a student will ultimately work for the state or not. Working for the state profoundly effects ideology. As we will see below, clerics who work for the state are unlikely to endorse or espouse Jihadist ideology while clerics who make their careers outside of the state are far more likely to become radical Jihadists.

3.2 Network Structure, Career Paths, and Radicalization

The cooptation of religious elites by the state in the modern Middle East serves as a backdrop for the individual choices of clerics attempting to further their careers. I argue that these individual choices are the main reason for the rise of Jihadist ideology to international prominence, and, if the “Jihadist moment” ends, the demise of the ideology will also be a result of individual choices by clerics. My argument pulls our attention away from the macro-level variables that have been proposed as possible explanations for the rise of Jihadist ideology. It might be tempting to assume that an outcome as influential as the global Jihadist movement would be best explained by equally large-scale global forces: globalization, Western neo-imperialism, or a clash of civilizations (Huntington 1993; Khalidi 2004). However, this is a case where a series of apparently innocuous micromotives lead to macrobehavior that might not be expected or predicted without close analytical inquiry (Schelling 1978).

In this section, I first outline my theory in its entirety and then explain each part of the argument in greater detail. I argue that cleric ideology is influenced by a process in which future clerics develop either well-connected or poorly-connected educational networks

throughout the course of their Islamic religious training. Students with different types of educational networks face different career options. Well-connected clerics are likely to be successful in obtaining prestigious appointments inside state-dominated religious institutions. Poorly connected clerics are less successful at getting state appointments and are forced to build careers outside of the state-run system. These different career paths push some clerics away from Jihadist ideology while pushing others toward it. Insider clerics are unlikely to become Jihadist because the state will destroy their careers as a consequence. Outsider clerics are more free to become Jihadist, and some are pushed to Jihadist ideology because it sends a costly signal of independence from the state which can be valuable for obtaining financial support from certain classes of lay Muslims.

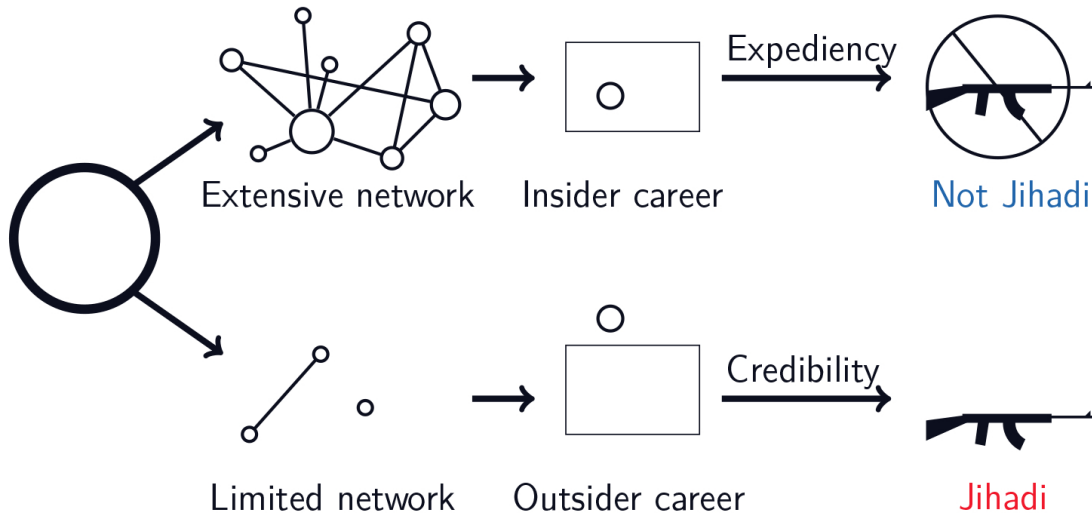


Figure 3.1: *Theory Flowchart.*

A flowchart explaining my theory of Jihadist radicalization of Muslim clerics. The circle at the left represents a future cleric who becomes connected to either an extensive or limited educational network that subsequently leads to either an insider or outsider career path and non-Jihadi or Jihadi ideology.

Figure 3.1 shows my argument graphically. A future cleric, represented by the circle at the left side of the figure, faces two broad possibilities when they go to get their Islamic

education: they may become embedded in an extensive educational network with dense ties to many prominent clerics, or they may become embedded in a limited network with fewer ties to clerics that are themselves less well-connected. This division of clerics into extensive and limited educational networks sets them on course for insider or outsider careers. These career paths in turn influence the ideology expressed by clerics, including support for militant Jihad against the West.

In the following subsections, I explore each element of this argument in greater detail, starting with a discussion of cleric motivations and then exploring the role of educational networks and career paths in shaping the ultimate ideologies expressed by clerics.

3.2.1 Cleric Motivations

To fully develop a theory of Jihadi radicalization based on the political economy of religious institutions in the Middle East, I first examine the micromotivations of clerics. In essence, I consider the factors that enter clerics' utility functions and, while I do not rely on specific assumptions about the weighting of particular motives, my theory relies crucially on my general assumption that clerics fundamentally seek to further their careers.

Muslim clerics have a variety of motives for becoming clerics and continuing to teach, lead prayers, answer questions, issue fatwas, teach the Quran, and perform a number of other cleric duties. These motives are important for understanding cleric identity and behavior. Simplistic assumptions about the inputs to clerics' utility functions are unlikely to be accurate. Clerics may not be purely maximizing economic profits or popular following.

However, economic profits and popular following do accrue to successful clerics and it these may influence the career paths that clerics follow. In terms of material incentives, clerics primarily vie for preaching positions in mosques which pay their salary. A cleric

without a mosque can still preach or issue fatwas, but his influence, income, and societal position are highly constrained. Teaching in a mosque is perhaps the most fundamental and canonical role for a modern Muslim cleric and most of the material, psychological, and social benefits that clerics receive are in some way rooted in this type of position. Clerics enjoy additional material perks, especially at higher levels of the clerical hierarchy. More generally, a number of social norms provide material benefits for the religious class. Nadia Abu-Zahra describes the Egyptian tradition of putting money and jewelry in the donation boxes of the al-Sayyida shrine during a holiday honoring the Muslim saint Al-Sayyida al-Nafisa:

A fixed proportion of the money is distributed to the workers and officials at each mosque... It would be too simplistic to conclude that the Azharite officials of the mosque support the common beliefs in and the traditions of al-Sayyida because of the material benefits this generates, though this may partially reinforce their love (Abu-Zahra 1997, 128).

Many clerics also seem to seek to increase their following and religious influence. This may be from a sincere desire to spread their vision of Islam to a wider audience or from an instrumental desire to leverage their popularity when seeking material rewards such as a position at a prestigious mosque. Either rationale — and they may be complimentary — could motivate clerics to adopt ideological positions that will increase their popularity. Cherribi suggests “success of the imam in the eyes of the public...measured by the number of followers” is an important metric for cleric status (Cherribi 2010, 114). Scholars who collect large numbers of followers are typically perceived to employ well-reasoned arguments and to write clear, pragmatic rulings on relevant issues. Having a weekly program on the Al-Jazeera television network or a popular twitter account helps. Clerics also seek to develop their scholarly reputations, based largely on how the writings and rulings of a cleric are regarded by other clerics. In essence, clerics face a form of informal peer-review. Cherribi

describes it explicitly as such: “the society of the imams acknowledges (or not) the legitimacy of the religious capital of a colleague...[via] peer review” (Cherribi 2010, 114).

These material and immaterial payoffs also bring another, more subtle, payoff: theological independence. A cleric who has high status preaches what he pleases, while a low-status cleric is constrained to the point that Cherribi characterizes him as a “prisoner of the mosque,” required to cater his preaching to the whims of whichever audience is supporting him from day to day (Cherribi 2010, 114-115).

Along with the tangible and intangible benefits — financial support, fame, and prestige — that clerics receive from their careers, they also have other motivations including altruism, a desire to help others, a feeling of deep passion for Islam, and an interest in the scholarly aspects of the Islamic sciences.

Aside from all of these motivations, I argue that clerics are fundamentally motivated to advance their careers. Clerics who progress in their careers make enough money to support themselves and their families, while clerics whose careers fail must find other lines of work. Although the motivations of Muslim clerics may differ in terms of emphasis on material, psychological, and social benefits, they are all fundamentally motivated to reach at least the minimum level of material payoff necessary to support themselves. The incentives generated by these potential benefits usually push clerics in the same direction. The goals of obtaining a prestigious teaching position, gaining some popularity, and developing a reputation for theological excellence push future clerics to study with the best clerics during their years of training.

3.2.2 Educational Networks

Social networks start the chain of events leading some clerics to become radical Jihadists. Social networks are increasingly recognized as having important effects in many aspects of human life and society. Recent research suggest that social networks influence eating habits and weight, smoking, and happiness (Christakis and Fowler 2009). Like all humans, Muslim clerics are embedded in a series of social networks that potentially have both short-range and long-range influences on their behavior. In addition to personal friendship networks and organizational networks of within religious institutions, clerics are connected to other clerics, students, congregants, political officials, and followers through a variety of media including face-to-face contact, phone, email, audio cassettes, television shows, radio broadcasts, facebook, Youtube channels, websites, and twitter feeds.

Although many of these networks are interesting and important, the network that is ultimately most important for determining which clerics become Jihadist is a cleric's educational network. Cleric educational networks are made up of the connections between a cleric and their former teachers under whom they studied while obtaining their education. Theoretically, the network structure I am interested in is the educational network that a cleric can leverage when seeking a job. This generally precludes weak connections or acquaintances, meaning that cleric educational networks should mostly focus on the most important teachers of a particular student and those with whom the student had the most sustained contact.²

Empirically, I define cleric educational networks using information that clerics provide

²This may seem counter-intuitive in light of Granovetter's famous argument that weak ties are more useful for individuals seeking a job, but the result was primarily due to the increased probability that weak ties would have novel information about an open position (Granovetter 1973). In this case, the job search for clerics is structured more like the job search in Western academia — strong recommendations from close advisors are most helpful for getting a job.

in their (auto)biographies — usually written as a long-form CV describing their religious training, appointments, and scholarly works. There is a long tradition of writing in this genre (going back to the biographical dictionaries of early Islam) and clerics have strong incentives to provide biographical information because lay Muslims use this information to evaluate clerics. As a result, these biographies are widely available on clerics' personal websites, Muslim web forums, and Wikipedia.

I collect these biographies, including multiple versions from different sources, and use them to understand and measure the educational networks of clerics. From reading the biographies of clerics, it becomes clear that connections to individual teachers are very important to clerics and having famous teachers appears to endow a sense of prestige and credibility. This creates incentives for clerics to list one or more specific mentors, often in order of importance or quality.

The following selection from the biography of Hamud al-Shuaybi provides a flavor of how clerics actually describe their educational network.

“While in finishing school, the College of Shariah, and other settings, the Sheikh [al-Shuaybi] studied at the hands of the greatest of the Sheikhs, including Sheikh Abd al-Aziz bin Baz, from whom he studied *tawhīd* and *ḥadīth*, Sheikh Abd al-Rahman al-Afriqi (in *ḥadīth* also), Sheikh Abd al-Aziz al-Rashid in *fiqh*,...”

This selection conforms to the prevalent norm of listing the most prestigious clerics first — al-Shuaybi lists Sheikh Abd al-Aziz bin Baz, arguably the most famous Salafi cleric of the past 50 years, before his other teachers, despite the fact that bin Baz was probably not his primary advisor. Building out the empirical educational network of each cleric is a fairly straightforward process of checking their biography for the names of specific advisors and recording those connections. Some complications arise with name disambiguation and with clerics who fail to list a single advisor in their biography. Since the norm of listing advisors

is quite strong and connections to prominent clerics serve as credentials, not listing any is a relatively strong signal that a cleric does not have a good educational network. I therefore assume that omitting reference to any connections is the same as reporting no connections.

I expect that two main features of cleric educational networks are important determinants of ultimate cleric ideology: (1) the structure of the network and (2) ideology flowing along the network from teachers to students. The latter is a traditional case of socialization that while substantively important, is not theoretically surprising. Socialization is the strongest predictor of religious beliefs in a wide variety of settings (Cornwall 1987). For example, children are very likely to hold religious views similar to their parents' views (Okagaki, Hammond and Seamon 1999) and individuals are very likely to express religiosity within the acceptable parameters defined by their society. Just as apprentices in other fields often inherit the ideological bent of their mentors, clerics acquire their beliefs about the legitimacy of militant Jihad from the clerics that train them. This mechanism rings true for individuals familiar with the system. A cleric in the fatwa council at Al-Azhar University in Cairo, Egypt told me students are more likely to adopt, say, a Salafi orientation if they have a friend or teacher who is a Salafi.

I argue that network structure is also an important determinant of cleric ideology, independent of socialization effects within the network. To put it starkly, simply being connected to many teachers can be just as influential on the ideology that students ultimately adopt as the actual ideology that teachers pass on through teaching. This is because clerics with extensive networks are more likely to be competitive for insider career paths that subsequently push them away from radicalization.

This argument was suggested to me by many respondents who highlighted the importance of network structure in its own right, independent of ideology flows within the network. When

asked how to become a cleric, one Al-Azhar University student responded, “It’s really all about trying to study with the prominent sheikhs and getting some kind of *ijaza* [certificate] from them if you can. You just try to get into people’s networks.” Another told me that he had moved from the famous school of al-Qayrawan in Tunisia — considered second only to Al-Azhar University — because “the teachers in al-Qayrawan were good, but the network here [at al-Azhar] is better.” These quotes strongly suggest that independent of ideology in the network, students that have extensive educational networks are more likely to fulfill their career ambitions within the cleric hierarchy.

Given the importance of these networks as the starting point of the pathway to Jihadi radicalization, it is worth understanding the process by which future clerics get sorted into extensive or limited educational networks. The process starts when families choose one of their sons to receive specialized religious training. This training starts in childhood when a future cleric is enrolled in a *kutāb*, a school intended to teach literacy, basic arithmetic, and the Quran. Students in the *kutāb* learn to pronounce and recite the Quran (an Islamic science called *tajwīd*) and some will work to memorize the entire Quran while in the *kutāb*. Memorization of the Quran is a tradition that dates back to Islam’s founding when passages of the Quran were passed from the Prophet Muhammad to his followers via recitation.

Students who show promise proceed through primary and secondary schools, usually in the village or city where they were born, before heading to a religious finishing school in a major city (often Cairo, Riyadh, or Mecca) during their mid-teens. It is at this point that future clerics start mentioning close ties to specific clerics that constitute the beginnings of their educational social networks. Typically, teachers in the finishing schools are not well-known or influential clerics, but my reading of cleric biographies shows that students feel particularly loyal to these less prominent teachers, often noting the affiliation with pride. It

is rare for a cleric to list more than one important teacher in the finishing school however, suggesting that these are not the most important network connections for opening subsequent career opportunities.

After the finishing school, students will typically enroll in an Islamic university. University attendance was not universal for clerics born prior to 1950, but since that time, virtually all clerics have attended a university of some sort. In the past 50 years, the most popular schools for Salafi clerics are Al-Azhar University in Cairo, King Saud University in Riyadh, and the Islamic University of Medina al-Munawara, although clerics have attended a number of other schools and some have degrees from multiple universities. Students are internationally mobile — Al-Azhar university has a large number of students from Indonesia, for example — but Saudi students do tend to study at Saudi schools and Egyptians at Egyptian schools.

Although enrolling in a university is now *de rigueur* for future clerics, attending classes is not. In fact, clerics develop more extensive educational networks by skipping their formal courses to instead sit in the informal study circles (*ḥalaqāt*) of the most prominent clerics in the University's mosque. This is due in part to the inflexibility of traditional Islamic education system which relies heavily on memorization.³ An Azhari student told me directly that “Often the best students don't actually go to class because it is so rigid. The not-so-good students often just do the memorization.” During my time at the mosque of al-Azhar University, I found that the best students did indeed spend substantial amounts of time in informal study circles while appearing to spend very little time on their nominally required studies. Identifying the most ambitious students was not easy, partly because norms of appropriateness dictate that one should not come right out and state one's aspirations of

³The degree to which Islamic education prizes memorization can hardly be overstated. In June of 2011, I sat with a study circle of Al-Azhar students from the College of Shariah and Law as they tested each other on their word-for-word memorization of a 300-page 3rd-year textbook. See also Boyle (2004)

someday becoming an important Sheikh. However, once I identified a few of the most serious students, I found that they spent between 3 and 8 hours of each day at the mosque, rather than in class.

Many of these study circles are public and being part of them does not imply any special connection to the teacher. The teacher's loyal students will likely be in attendance at public study circles, but so will a number of other individuals ranging from curious students at the University to the mosque cleaning staff. The public study circles at Al-Azhar are advertised throughout the week on a series of paper schedules, meaning that simply attending these open study circles does not provide special access to the teacher or constitute a mentoring relationship.

Instead, mentoring relationships are made in private study circles that clerics hold but do not advertise except to their current circle of students. Teachers typically invite students to come to these private sessions once they have assessed the student's quality in other settings. It is these circles that allow students to claim particular clerics as their teachers and advisors. At the end of a particular series of study circles, a teacher might issue an *ijaza* to each of his students — a specialized certificate or letter of reference noting that the student is approved by the teacher in the specific area of study covered in the sessions. These specific credentials from clerics are often more important than the formal university degrees that students receive. Several clerics whose biographies I examine — notably Rida Ahmad Samdi and Muhammad al-Arifi — have entire sections of their CVs devoted to reporting their various certificates.⁴

Extensive networks are sought after by students. The importance of these private study circles is evident in the ways that potential students attempt to curry favor with the most

⁴For example, the third section of al-Arifi's website lists six *ijazas*: <http://arefe.com/PCV.aspx>, accessed 21 March, 2013.

prominent and well-connected clerics. One point of entry is to attend prayers at the mosque during the day and hope that a prominent cleric will lead the prayers. Sometimes this is known in advance, particularly for noon prayers at Al-Azhar where the prayer leader will often lecture for about 20 minutes following the prayer. Afterward, potential students throng the cleric as he seeks to exit the prayer space, kissing him on the hand and then attempting to seek permission to attend a class or ask some perspicacious question. Similarly, students seeking to join the private study circle of a cleric will attend his public study circles, sit on the front row, and be quite vocal during the question-and-answer session at the end of the lecture.

Students prefer the most famous and prominent clerics. A lecture by an unknown visitor will gather only a handful of serious listeners while famous, well-established clerics will have audiences as large as 50 or 100 in their public lectures and they will find themselves recorded by as many as twenty audio recorders (passed up to the front to sit on the Sheikh's lectern) and quite possibly uploaded to the Internet.

3.2.3 Insider and Outsider Career Paths

Clerics face two main career paths for supporting themselves. They can attempt to build an *insider* career path within the state-dominated religious institutions and hierarchy. Or they can attempt to build an *outsider* career. The main difference between these paths is that insider clerics receive their pay from the state, usually filtered through the religious institution where they work. Insider careers are typically stable and lucrative, but clerics give up their theological independence on a few issues of importance to the state, including Jihad. Outsider clerics have to appeal for direct support from lay Muslims, meaning that outsider career paths are generally less stable and lucrative. However, outsider clerics retain

more theological independence than their insider counterparts.

Insider careers are primarily defined by the a persistent occupation of religious positions appointed, controlled, or regulated by the state. Often clerics describe these appointments as such (regularly using the arabic verb “to be appointed” to denote state appointments). In some cases, clerics take special care to note that (for example) the Saudi prince specifically named them to a particular position, intimating that they have some kind of personal connection to political elites.

What do these insider careers look like? In many cases, it is hard to tell establishment clerics from Western academics. For example, the biography on the website of Sheikh Abd al-Rahman bin Nasr al-Barak describes his career in the following terms.

The sheikh worked as a teacher in the finishing school in the city of Riyadh for 3 years from 1379 to 1381H. Then, he moved after that to teach in the College of Shariah of Riyadh. When the College of *Usūl al-Dīn* opened, he moved to it in the Department of *Aqīda* and worked in it until his retirement in 1420H, during which time he advised scores of theses (Masters and Doctorate).

Many insider clerics hold formal academic positions with titles such as “Associate Professor at the University al-Imam, College of Shariah, Department of Fiqh” (Yusuf bin Abdallah al-Ahmad), and “chaired professor” (Rabi bin Hadi al-Madkhali). Sheikh Sa’ad al-Humayd has an academic curriculum vita in English as well as Arabic, linked from his departmental homepage at King Saud University in Riyadh.⁵

Advancement in this career path looks very much like advancement in most academic professions. Clerics who become academics typically attend an Institute (a sort of Sharia

⁵<http://faculty.ksu.edu.sa/homayed/Pages/home.aspx>, accessed 16 Feb 2013.

finishing school), then college, where they tend to be associated with the Colleges of Sharia and related Islamic sciences. Institutional degrees were traditionally not as important in Islamic education as personal recommendations and other forms of certification, but in the modern era, virtually all clerics have at least a Bachelor's degree. Of the 49 clerics in my data set born after 1950, only six (12 percent) do not report having a Bachelors degree (the proportion without degrees rises to 30 percent for clerics born before 1950 in my data set).

After graduating from college, clerics often are appointed as instructors or teaching assistances in the Institutes, and many subsequently or simultaneously enroll in a Master's program in the Islamic sciences. Not all clerics complete a Masters, although the vast majority of clerics who later become insiders do (88 percent of 17 clerics born after 1950 who go on to hold at least two state positions have Masters degrees). As in Western academia, a Masters typically includes 1-3 years of study and coursework, along with the completion of a thesis. Virtually all clerics who later become insiders continue on for doctoral study (14 of the 17 born after 1950 who hold at least to state positions have doctorates). This focus on formal higher education is something of a reversal for insider clerics. Of those in my sample born before 1950, only 50 percent (11 out of 22) of the insiders have Masters degrees and only 22 percent (5/22) hold a doctorate.

Academic appointments may not seem like political appointments, but the governments in the Middle East have worked hard to manage the ideology of faculty at Islamic universities. Universities have a long history of revolutionary thought in both the West and East, so the governments of Egypt and Saudi Arabia attempt to regulate who is on faculty, partly by appointing University presidents who will purge out radical elements.

The academic career becomes a feeder track for the state clerical bureaucracy. Insider clerics often start as academics and end up as state officials — heads of government ministries

and advisors on various government counsels. Some positions that are explicitly controlled by the highest levels of the government are, in fact, academic. The biography of Sheikh Abd al-Muhsin Abd al-Ibad notes that “In 1393H he was appointed vice president of the Islamic University, and he was chosen for this position by his Royal Highness King Faisal.”

Another facet of insider careers is ‘shariah consulting,” in which a cleric serves on the advisory boards of a company and provides opinions on the (Islamic) legality of activities the firm would like to undertake. Although it is theoretically possible for outsider clerics to have these roles, it tends to be insiders — academics — who are invited to serve in an advisory capacity. For example, Sheikh Saud bin Abdallah al-Funaysan reports “serving as Chairman of the Sharia Supervisory Board in Takaful Malaysia (an Islamic insurance company) for three years” as item 13 of his employment history. Clerics may hold several such appointments.

While many clerics make careers within the state-run institutions, some make their careers outside of this system. These clerics eschew advancement through the ranks of state-employed clerics, instead gaining financial support by appealing directly to lay Muslims who are willing to support independent clerics. This includes a very broad range of activities unified primarily by the inability of the state to meaningfully regulate them. Clerics naturally tend to gravitate toward outsider careers that make use of their substantial human capital investments. Many teach in their homes or at mosques, with the key distinction from insider clerics being that they do not hold official positions. Sulayman bin Nasr al-Ulwan begins his career “teaching and mentoring in his house in the year 1410 H, and then in 1411 H moved to mentoring and teaching the mosque. His lessons were throughout the week after dawn, noon, and evening prayers, and sometimes on Friday.” Similarly, the biography of Sheikh Abd al-Rahman al-Dawsary, describes the type of teaching career that some outsider clerics

pursue.

He had classes, lectures, and sermons in most of the mosques of Kuwait, all days of the week, in which he would explain the truths of Islam and urge Muslims toward their religion and people and warn them of innovation, myths, sin, and evil, and call them to grasp the Book and the Sunnah...and also open their eyes to the schemes enemies Islam, and their machinations.

Interestingly, it is revealed three paragraphs later that al-Dawsary is in fact a Jihadist — “he has worked to support the Mujahideen preachers” — and that much of his itinerant teaching is Jihadist in nature: “[he] lectured at colleges and high schools, institutes, and middle schools, revealing for teachers and students the activities of Masonic lodges and their views and their plans and explaining *The Protocols of the Elders of Zion*.”

In addition to teaching locally, there is a well-developed set of national and international Islamic conferences and some outsiders make a career out of public speaking and teaching. Outsider clerics also fund themselves with publishing. Yasir Birhami “participated with the sheikhs of the Salafi School of Alexandria in a number of proselytizing magazines.” In some cases, clerics have day jobs that are unrelated to their religious role, such as the Egyptian cleric Ahmad Hutayba who works as a dentist.

It is possible for clerics to embark on an insider career but then leave. For example, a number of clerics associated with the Salafi Sahwa (Awakening) movement in Saudi Arabia in the 1980s and 1990s were insider clerics who began to adopt radical views on Jihad and other issues, perhaps not realizing the control of the Saudi state over their career trajectories. A number of these scholars were let go from their state sinecures and imprisoned. Three of these clerics — Aid al-Qarni, Safar al-Hawali, and Salman al-Awda — were ultimately brought back into the state fold after renouncing Jihad, probably because they were viewed as influential enough that the Saudi regime found it worthwhile to buy them off.

In spite of the possibility for switching, most clerics remain either insiders or outsiders for the entire career. For example, the CV of Sheikh Ahmed Al-Riyan indicates that upon graduation from Al-Azhar university, he was appointed “teacher of comparative Fiqh at the College of Shariah and Law” in 1975, “Assistant Professor at the College of Shariah and Law” in 1980, and “Professor at the College of Shariah and Law” from 1985-present — a career path that means he has been on the state payroll for his entire working life.

Clerics’ career trajectories are often determined by who they know, and the friendship and endorsement of prominent clerics is extremely valuable. Although it is not an iron rule, clerics are often promoted because they are the successful student of a cleric who is in a position to recommend and endorse their promotion. This means that equally talented and intelligent would-be clerics can face very different career options depending on their access to training with the most famous and well-connected clerics. Individuals who do not have these connections have a lower expectation of successfully making a career within the state-run system and face increased payoffs to making a career outside.

Specifically, I argue that clerics who are well-connected in a particular way have distinct advantages when seeking insider appointments. Simply having many teachers is neither necessary or sufficient for gaining preferential access to career opportunities. Rather, what matters is that a cleric’s teachers are themselves well-connecting, meaning that they can leverage their connections to get jobs for their students. Ideally, a cleric will be well-connected to well-connected teachers, who also had well-connected teachers, and so on.

The importance of connections for clerics trying to move up in the clerical hierarchy is evident when talking to students at al-Azhar University in Cairo. Speaking specifically of how one might go about promoted as a cleric in contemporary Egypt, a student explained:

Being in Ali Gomaa’s crew [the current Grand Mufti of Egypt] is really the

way to move up right now. That's how you get appointed to teach, how you get a position in the *Dar al-Ifta* [Egyptian Fatwa Ministry], which gets you a nice car. He has lots of students, and he'll often favor them in promotions.⁶

The importance of networks also appears in the biographies of clerics as they describe their career trajectories. The biography of Hamud al-Shuaybi describes a series of government appointments, including an appointment to a judgeship that is curiously canceled:

When he graduated from the College of Sharia, he was appointed to be a judge in Wādī al-Dawāsir, but this appointment was subsequently canceled by the intervention of Sheikh Muhammad al-Amin al-Shanqiti as was previously mentioned. He was thus appointed as a teacher in the finishing school for a single year (1375H) and then moved to the College where he taught for forty years...

Reading between the lines, what we learn is that al-Shuaybi was probably not happy with his initial appointment in an outlying province in Saudi Arabia, so he leveraged his connection to a well-connected and influential teacher, Muhammad al-Amin al-Shanqiti, to gain a different appointment that kept him in the city. This suggests that connectedness is very helpful for clerics attempting to optimize their career path.

The importance of connections in landing prime jobs is evident in other cleric biographies. Sheikh Abd al-Muhsin bin Hamd al-Ibad states in his biography that “When the Islamic University of the City of the Prophet was established, and the first College to be established in it was the College of Shariah, the noble Sheikh Muhammad bin Ibrahim Al al-Sheikh chose him to work in it as a teacher.” It is not coincidental that he lists Muhammad bin Ibrahim Al al-Sheikh among his mentors.

Do most potential clerics want a career within the state-run system of religious institutions? This is a difficult question to answer empirically, and much of my argument hangs on

⁶Interview with Jamaal Diwan, September 25, 2011.

the notion that clerics with outsider career tracks would have rather had an insider career, if it had been available. It is unfortunately difficult to trust clerics self-representations about the reasons for which they pursued different career paths; people often build self-justifying narratives in autobiographies and few people like to acknowledge that they pursued a particular career because better options were closed to them. Similarly, it is difficult to get students to admit that they would like to be insider clerics in the future. Admitting this is seen as presumptuous; it was only after many conversations and substantial probing that I was able to extract from one student at Al-Azhar that he had aspirations to be prominent cleric. My impression from talking to him and other students was that most would like an insider job as a state cleric but many considered it unattainable.

There are some clerics who turn down insider careers, so it is not the case that all individuals prefer this track. For example, Abdallah Azzam could have had a comfortable academic career in Jordan but left to participate in the Afghan Jihad.⁷ I believe that these cases are the minority, but have no direct evidence about the goals of students when they enter the educational system.

3.2.4 Career Paths and Ideology

Insider and outsider career paths are linked to the ideological positions expressed by clerics, including endorsement of militant Jihad. This section describes how insider clerics eschew Jihadi ideology out of expediency because adopting this ideology would threaten their careers. Outsider clerics do not necessarily become Jihadist, but some do because endorsing Jihadi ideology sends a credible signal to certain lay audiences that they are independent from the state. This helps outsider clerics by allowing them to attract direct support from lay

⁷Personal communication with Thomas Hegghammer.

Muslims who are distrustful of state clerics and willing to support independent clerics.

For clerics who are state appointees, the state attempts — usually successfully — to ensure that clerics' teachings and writings are acceptable to the state. Clerics that openly endorse Jihadi ideology are acting contrary to the state's wishes and are often relieved of their appointments, arrested, and imprisoned (Lacroix 2011; Brachman 2009). This has the obvious result of discouraging Jihadi ideology among clerics who are trying to make a living while working their way through the ranks of the state system.

Clerics who are government appointees generally avoid commenting on topics that directly oppose the government, including Jihad. For example, as I sat in the study circle of Sheikh Ahmad al-Riyan in the al-Azhar mosque of Cairo, a student asked for his opinion on the controversial visit of Sheikh Ali Gomaa on April 18th, 2012 to the al-Aqsa mosque. Gomaa's visit violated a long-standing practice of not visiting the mosque as long as the territory is held by Israel. Other clerics, particularly Jihadists, had been quite vocal in their condemnation because they viewed the visit as legitimating Israel and undermining the Palestinian Jihad. But Sheikh al-Riyan is a career appointee at al-Azhar where he has taught since 1974 and enjoyed several promotions. In response to this sensitive question, Sheikh al-Riyan chuckled, paused, and replied, "I don't like to speak about politics."⁸

Clerics make careers partially or entirely outside of this system by gaining financial support from lay Muslims who are willing to support independent clerics. Salafi Muslims are perhaps the largest and most readily available group of lay Muslims motivated to support clerics. They form a substantial and growing subpopulation in almost all of the Arab Middle East and tend to be particularly devout and interested in proper clerical interpretation. Clerics appeal to Salafis by adopting the conservative Salafi ideology and practicing the

⁸The lecture, including this exchange, was recorded and is viewable on YouTube: <http://www.youtube.com/watch?v=GgJiCFxBfvA#t=5900s>.

Salafi methodology (*al-manhaj al-salafi*) of favoring a direct interpretation of the Quran and *sunna* (the sayings of Muhammad) over the consensus of later Muslim jurists. In large part, clerics compete to demonstrate their integrity and to persuade others that their rulings represent an accurate interpretation of Islam as intended in the original sources.

This creates a somewhat cramped marketplace of clerics, each attempting to appeal to similar groups of lay Muslims, and each attempting to promote their own credentials. In this setting, clerics try to send credible signals that they are both expert and theologically independent. One such signal is to adopt ideological stances that prove a cleric to be theologically independent because they are costly. Jihadi ideology serves this purpose because it is costly to adopt — clerics may face reprisals from the state — and it is broadly compatible with Salafi ideology.

Thus, some clerics outside the state system face subtle pressures to adopt Jihadi ideology in order to gain popular support and advance their careers. This is not because Jihadi ideology is itself particularly popular with Salafi Muslims; it probably is not. Rather, clerics gain a positive reputation for speaking without equivocation because they have proven that they will speak their mind even when it is costly.

It is not the case that all, or even most outsider clerics will necessarily become Jihadist. Career options for outsider clerics may be more limited than for insiders, but there are options besides Jihadism. In many cases, clerics have non-governmental options to be preachers or teachers in private mosques and schools or as part of private voluntary organizations. According to official reports cited by Gaffney (1994, 47), the ratio of private to state-run mosques in Cairo is large, approaching 6:1 through the 1960s and 1970s. A 1979 report of the Egyptian Ministry of Religious Endowments claimed a total of 34,000 mosques in Egypt, of which only 5,600 were in the orbit of the Ministry's official system. Although these numbers

may have changed since, this indicates that there are certainly alternative clerical positions available besides Jihadism for clerics who miss out on careers with the state. Clerics are also mobile, and some move to other labor markets.

This is potentially problematic for the strongest version of my claims, but is not incompatible with the theory. My point is not that all outsider clerics will become Jihadist, but that the failure to find an insider job nudges clerics in the direction of Jihadism by eliminating the most attractive of the alternative career paths. Thus, a failure to break into the insider career track raises the probability of a cleric becoming Jihadist, but the rates of Jihadism among outsiders may still be low.

My argument raises the question of whether Jihadist clerics or state-coopted clerics actually believe in the extreme positions that they preach. All though my argument clearly suggests that clerics adopt these positions in response to career incentives, I expect that most clerics are true believers in their respective ideologies. It is a long-standing canard that materialist incentives naturally dominate ideational factors or that behaviors motivated by material rewards are not fully sincere in the minds of political actors. Although material motivations may push clerics to a particular type of ideology, humans are remarkably adept at constructing personal narratives explaining such shifts in more palatable terms. Such behavior is ubiquitous in politics. Wealthy Americans vote for fiscally conservative policies that are materially more attractive than the alternatives, but these individuals do not think of themselves as instrumentally conservative. Rather, they are likely to be committed ideological partisans despite the fact that their wealth pushes them to hold conservative views in the first place. Thus, asking whether Jihadists are rational, strategic calculators or fanatical true believers creates a false dichotomy. It is likely that they are both.

3.3 Related Arguments and Alternative Explanations

No previous research has fully outlined this career-based theory of Jihadi ideology, but my arguments are supported by existing historical and ethnographic work.

Al-Rasheed (2007) is perhaps the most related work. Al-Rasheed describes her study as “an ethnography of consent and contestation” among religious and political actors in Saudi Arabia. She focuses on understanding the sites of political contestation in Saudi discourse and spends a great deal of time examining the role of the Saudi ulama. Like me, al-Rasheed describes the possible journeys from official ulama, to Sahwi dissidents, to Jihadist radicals, and back again. Moreover, by focusing on Islam in contemporary Saudi Arabia, al-Rasheed covers half of the clerics in my study and describes many of the features of religious training and authority-making that I discuss above. However, her book tends to provide a description of Saudi clerical contestation and cooptation, along with an understanding of what this means for the participants, rather than advancing a general causal argument about why some clerics become radicals.

Zeghal (1999) hints that the dynamics of state-supported and opposition clerics may be behind expressions of radical Jihadi ideology. Her work traces the effects of the Egyptian regime’s attempts to coopt the clerics of Al-Azhar from the 1950s onward. As more moderate clerics followed the regime’s wishes and denounced violent Jihad, some clerics seem to have endorsed violent Jihad specifically to show that they were not puppet clerics of the state.

Likewise, although the goal of Wiktorowicz (2005*b*) is to explain why lay Muslims choose to be radicalized by clerics, his interview evidence also illustrates the credibility that clerics can generate by adopting radical ideology. Wiktorowicz finds that Omar Bakri Muhammad, leader of the Muhajiroun in London, derives substantial credibility from his reputation for theological independence. It is well-known that Omar is financially independent, a fact which

he uses to criticize clerics who need funds from the Saudi regime to support themselves. It is also clear that his willingness to risk deportation or arrest by endorsing violence gives him added credibility. According to one of Wiktorowicz's respondents, Omar "dares to say things that no one else does. Other religious leaders don't do that. They don't have the guts" (2005*b*, 144-145).

There are no real extant alternative explanations of cleric radicalization because there is very little work on why Muslim clerics choose theological positions or support militant Jihad. What we know about radical Muslim clerics comes from careful ethnographic or historical accounts of the lives of few clerics and ideologues (Wagemakers 2012; Lia 2008; Euben 1999; Musallam 2005; Hegghammer and Lacroix 2011; Jackson 2011) or the history of intellectual movements among the *‘ulamā* (Lacroix 2011; Hegghammer 2010*a*; Brachman 2009; Moghadam and Fishman 2011; Lav 2012). The literature on Jihadi ideology has delved deeply into specific texts to understand the world-view of these clerics and ideologues, but this depth has come at the price of breadth — although the Jihadi cannon has consists of hundreds or thousands of texts,⁹ the current scholarly literature typically only engages one or a few texts, assuming that these are representative of the rest (Kepel and Milelli 2010; Euben and Zaman 2009; Deol and Kazmi 2012; Bergesen 2007). Scholarship on Muslim clerics in domains other than Jihad also tends to focus on a handful of scholars and texts (Masud, Messick and Powers 1996; Graf and Skovgaard-Petersen 2009; Zebiri 1993; Lazarus-Yafeh 1981; Caeiro 2011). These studies have provided rich detail and valuable descriptions, but with no systematic comparison of Jihadi clerics to non-Jihadi clerics, these studies are not able to answer the question of why some clerics adopt Jihadi ideology. Attempting to explain radicalization by looking only at radical clerics is an example of selection on the dependent

⁹An electronic collection of Jihadi indoctrination texts known as the *Mujahid's bookbag* contains 1,029 documents. The Jihadi web-library *Minbar al-Tawhīd wal-Jihād* (<http://tawhed.ws/>) contains 5,433 documents.

variable (King, Keohane and Verba 1994).

There is a more systematic literature on Jihadi radicalization, but it focuses on radicalization of lay Muslims. The clearest account of radicalization among lay Muslims is a general process described by Wiktorowicz (2005*b*) and Sageman (2004). First, relatively non-religious lay Muslims face some type of shock or societal alienation that induces frustration and leads to “cognitive opening” in which individuals seek new frames for understanding the world. During this period, individuals may turn to Islam for answers and support; individuals with social ties to extremists may be pulled toward radical versions of Islam. Once introduced, some individuals become convinced that an extremist cleric or group offers the most authentic and legitimate source of Islamic interpretation. With this credibility established, the extremist indoctrinates individuals to believe that militant Jihad is an essential religious duty that will help them achieve the salvation prioritized by their newly found religious conviction.

Can theories of radicalization among lay Muslims travel to explain cleric radicalization? Here, I consider three factors suggested by Wiktorowicz (2005*b*) and Sageman (2004): alienation, ignorance, and poverty.

Alienation

The initial conditions in this sequence are a combination of psychological and experiential factors that make particular individuals susceptible to radicalization. Sageman (2004) argues that individuals who become culturally and socially isolated seek out groups and organizations that can provide them with camaraderie, friendship, and purpose. At least some alienated individuals will find social support in the company of other individuals under the guidance of a radical or radicalizing spiritual leader, who subsequently prepares and recruits

these individuals for Jihad. Wiktorowicz (2005*b*) also relies on this mechanism to explain the initial conditions that allow for radicalization. For Wiktorowicz, cultural and social isolation are among many possible sources of stress that lead to “cognitive opening”, in which an individual becomes open to new and potentially radical ideas.

Helgren (2011) extends this theory to argue that this social alienation combines with “Western” experience to produce individuals that are likely to blame the West for their problems and thus seek out transnational terror networks such as Al-Qaeda to provide camaraderie and social support. Helgren argues that Western experience makes Jihad against the “far enemy” more attractive than participation in national militant groups that do not attack the West.

Ignorance

Perhaps counter-intuitively, lay Muslims who are less religious are more susceptible to Jihadi radicalization than Muslims who are deeply embedded in their faith. In a comparison of joiners and non-joiners of a Britain-based extremist group, Wiktorowicz (2005*b*) finds that “most al-Muhajiroun activists were irreligious prior to their seeking and involvement in the movement” and “were unlikely to have adopted a religious identity” (102). In comparison, non-joiners “view themselves first and foremost as Muslims” (102-103). This lack of identification with or knowledge about Islam makes individuals susceptible to radicalization for several interrelated reasons. Low levels of religious knowledge mean that individuals are less equipped to discriminate between moderate and extreme versions of Islam. Simultaneously, individuals with little religious knowledge that nevertheless turn to Islam are more easily influenced by religious elites with expert knowledge. When this religious elite espouses radical views, these are likely to be passed on to followers.

At first blush, ignorance does not seem likely as a cause of cleric radicalization because it is hard to imagine that Jihadi clerics are ignorant of Islam given their position as religious elites. However, Jihadi clerics may have less formal training on average, in part because the decentralized nature of religious authority in Islam means that individuals can claim religious authority outside of any existing educational hierarchy. Relatively untrained clerics might espouse Jihadi ideology in a bid to earn respect through their ideological positions rather than their credentials.

Poverty

According to Sageman (2004), relative economic deprivation, discrimination, and the inability to find adequate work are the key sources of the individual frustration that leads to cognitive opening and religious seeking. More generally, there has been substantial debate as to whether poverty and low education are drivers of terrorism of all types (Keefer and Loayza 2008; Krueger 2007; Krueger and Maleckova 2003). The scholarly literature currently grapples with a conundrum – terrorism and political violence arise disproportionately from impoverished states where education levels are very low, but the actual perpetrators of terrorist violence are often relatively educated and well-off. One possible explanation for this is suggested by Bueno de Mesquita (2005), who argues that terrorists will be more educated and wealthy than the average population, even if they are motivated by poverty, because terrorist organizations will only select candidates with high levels of human capital. Some recent evidence supports his argument that economic deprivation may be a source of terrorism, even if terrorists themselves are relatively well educated and well-employed (Benmelech and Berrebi 2007; Benmelech, Berrebi and Klor N.d.), although this finding has also been questioned (Lee 2011).

Poverty may have radicalizing effects on cleric ideologies. Future clerics living as children in poor areas may be more likely to encounter sources of radicalization. Anecdotally, at least a few radical clerics such as Abu Qatada al-Filistini have come out of the Palestinian territories and other exceptionally poor areas, suggesting that poverty may have a radicalizing effect in at least some cases.

3.4 Conclusion

This chapter develops a theory explaining why some Muslim clerics become radical Jihadists while most do not. In a departure from dominant explanations of Jihad focusing on large-scale, international forces, I focus on the micromotives that shape the experiences and career trajectories of individual clerics as they seek to make a living. I explain how seemingly innocuous features of the political economy of religion in the Middle East — strong and weak educational networks, differing access to insider and outsider career paths, and the cooptation of insider clerics by the state — push some clerics toward Jihadi ideology and others away. Finally, I consider similarities between theory and existing scholarship and derive some alternative explanations for cleric radicalization from the literature on the radicalization of lay Muslims.

The next two chapters measure the variables suggested by these arguments for a data set of Muslim clerics and provided empirical evidence that network structure and career paths are crucial to understanding cleric radicalization.

Chapter 4

Measuring Jihadi Ideology

The previous chapter develops a theory explaining why some Muslim clerics become Jihadi radicals while most do not. In this chapter, I begin to test this argument. First, I develop a data set of 101 Muslim clerics. I describe my selection process for including clerics and offer evidence about the representativeness of these clerics to the larger population of Muslim clerics. Next, I develop methods for estimating the degree to which Muslim clerics adopt the ideology of global Jihad. I apply these methods to 27,142 texts produced by the 101 clerics in my data set to estimate ideology scores for each of them. These scores, which I call *Jihad Scores* can be thought of as cleric ideal points on Jihad, estimated from text.

4.1 A Data Set of Clerics

In this section, I describe a novel data set of 101 Muslim clerics. The ideal strategy for selecting clerics would be to randomly sample from the relevant population of clerics who have at least some appreciable chance of becoming Jihadi ideologues. This is not currently feasible. There is no obvious way to determine the population of Muslim clerics, so randomly

sampling clerics for analysis is not a possibility.

Instead, I develop a data set of 101 Muslim clerics through a selection process that was ad hoc. I describe it in some detail here because the sample selection criteria have important implications for the analysis and findings. I collected texts and biographies from a number of clerics and then excluded clerics that did not fit four criteria: (1) Salafi (Sunni) clerics (2) writing in Arabic, (3) who are living or lived in the last century, and (4) who have some kind of web-presence.

Salafi (Sunni): In general, I include only clerics who would qualify as Salafis, broadly defined, meaning that in either their method or doctrine, they seek a fundamentalist return to a “true” Islam as practiced or understood by the Companions of the Prophet. This focuses the analysis on the “most likely” cases: those clerics who have a reasonable chance of actually becoming Jihadist. This means that I offer only an explanation of why Salafi clerics choose to adopt or eschew Jihadist ideology — the evidence cannot speak to the reasons why other types of clerics (say, liberal, American clerics) do not become Jihadist. This specificity does not create a substantial loss of generality because Jihadist clerics are essentially a subset of Salafi clerics.

Arabic: I include only clerics who write in Arabic because cross-language text analysis is quite difficult. This turns out not to be a particularly binding constraint because most Sunni clerics prefer to issue rulings in Arabic and it is well-documented that most of the Jihadi discourse happens in Arabic.

Alive in the last century: Global Jihadi ideology is a relatively recent invention so I focus on clerics who could have produced and adopted this ideology, and in some cases, include the teachers of such clerics as well.

Internet presence: I ruled out clerics without an internet presence for several reasons.

First, I need substantial amounts of information about clerics: both their scholarly output and their biographies. These are substantially easier to obtain for clerics who have a web presence. Also, this means the analysis is focused on clerics who have some degree of influence beyond their local environs.

The actual process of collecting 101 clerics who fit these criteria was less systematic because the data set of clerics evolved over the course of the project. Initially, I collected texts and biographies from the *Islam Way*, which curates a collection of fatwas from modern Salafi clerics.¹ Some of the clerics included on the website do not meet the four criteria above so I excluded them, leaving 54 clerics. I used these 54 clerics to prototype the text analysis methods developed in this chapter. Eight of these 54 clerics had only one or a few fatwas available on the *Islam Way* website so I searched separately for texts from other sources.

The *Islam Way* fatwa page does not contain any clerics that I ultimately classify as Jihadist. Although I did not have a precise measure of Jihadi ideology, I knew intuitively that this source did not have sufficient variation on the outcome to be used in isolation. To include sufficient Jihadists, I collected texts and biographies for a number of Jihadi clerics mentioned in either Brachman (2009) or *The Militant Ideology Atlas* McCants (2006). I was able to obtain writings and biographies for these individuals from a variety of sources, with a majority coming from the Jihadi web-library *Minbar al-Tawhīd wal-Jihād* (www.tawhed.ws). My particular focus on collecting Jihadists at this stage means that my overall collection of 101 clerics is not necessarily representative of a larger population of Muslim clerics. There is no way to verify with existing data, but my suspicion is that the rate of Jihadism is higher in my data set than it would be if I had been able to randomly sample from a defined population of prominent Salafi clerics.

I also included texts and biographies from additional clerics who I identified in various

¹<http://ar.islamway.net/fatawa>

ways without any guesswork about their ideology. Many of these were clerics whose websites I found, either because of links from other clerics' websites, or through internet searches. I included these clerics when their texts were easy to collect, their biographies provided sufficient information, and they satisfied the criteria above.

Taken together, these data collection procedures lead to a data set that is less than ideal for inference about the causes of Jihadi radicalization. An ideal procedure would be to specify a set of criteria for inclusion in my study, identify the population of clerics that meet these criteria, and then sample from that population. I am attempting to do exactly this in future work. However, the data set here is more helpful for exploring the sources of cleric radicalization than any previously existing data source. Readers should treat my findings in later chapters with some caution because of the construction of the data set, but the data are nevertheless informative.

What are the characteristics of the 101 clerics whose information I collect? Practically, my data collection procedures mean that the analysis is focused on clerics primarily from Saudi Arabia (58 percent) and Egypt (22 percent) who are currently living or lived in the last century. These clerics are remarkably mobile and specifying the country where they have spent most of their time is difficult from the biographies they provide. For example, the biography of Rida Ahmand Samdi indicates a substantial amount of travel. In the passage below, I have marked each indication that this cleric has traveled to a new location with bold-face.

“After graduation he was appointed a teacher of religious institute in **Tanta, Zagazig** and then went to **Alexandria**, and continued teaching for three years. Then he flew to **Saudi Arabia** within the Azhar mission for a professor, Faculty of Law, University of Umm Al Qura in 1950. In 1960, Institute of Tanta Azhary appointed him as the director of the Islamic Call. In 1961, the Ministry of Awqaf appointed him as inspector of Sciences. In 1963 returned he returned to **Egypt**

and served as the Director of the Grand Sheikh of Al-Azhar. In 1966, he traveled to **Algeria** as the head of Al-Azhar Mission and remained for seven years. He returned to **Egypt** to serve as the Director of Endowment in Al Gharbia and then an agent for AL-Azhar. In 1970, he was appointed a visiting professor at King Abdulaziz University Faculty of Sharia in **Mecca**, then President of the Department of Graduate Studies at King Abdul Aziz in 1972. In November of 1976 he was appointed minister of endowments and Azhar Affairs , and remained in office until he left the ministry in October 1978. As a minister of endowments was the first to issue a ministerial decision to establish the first Islamic bank in Egypt, the Faisal Islamic Bank. Then he flew to **Saudi Arabia** where he taught at the University of King Abdul Aziz and just one year in 1981.”

How representative are these 101 clerics?

The clerics in my data set are important in their own right — among the most important and influential Salafi clerics of their time. Their individual choices to endorse or reject Jihadist ideology have had ramifications for the entire Muslim world and have profoundly shaped the course of international history. In this sense, my work could be viewed as one of quantitative history — describing the education, careers, and radicalization (or not) of the most important Salafi clerics in the past century. If the 101 clerics under study here are sufficiently important, the analysis has substantial significance whether these clerics represent some broader population or not.

If these 101 are in fact among the most important, then two patterns should emerge when comparing them to lists of the clerics mentioned in the secondary scholarly literature. First, a significant portion of the clerics listed in the secondary literature should appear in my data set (and vice versa). Second, the clerics who appear most often in the secondary literature should have a higher probability of inclusion.

To test these two propositions, I cull a list of cleric names from the indexes of two recent books in the literature on Salafism and Jihadi ideology. The first — *Awakening Islam* by

Stephane Lacroix — is a detailed history of the *sahwa* movement in Saudi Arabia from which many of today’s Jihadists sprang. The list of clerics from this book does have some limitations: it is focused on Saudi Arabia, it does not cover the most recent generation of rising Salafi clerics, and it may not adequately cover Jihadists. The latter problem can be remedied by collecting an additional list of clerics from the edited volume *Contextualizing Jihadi Thought* which focuses on Jihadist thinkers and clerics. This index has limitations as well and appears to be less comprehensive (it has fewer individuals listed despite being similar in length to *Awakening Islam*). With these limitations in mind, the analysis below suggests that my data set does indeed draw from the clerics deemed most important by the secondary literature.

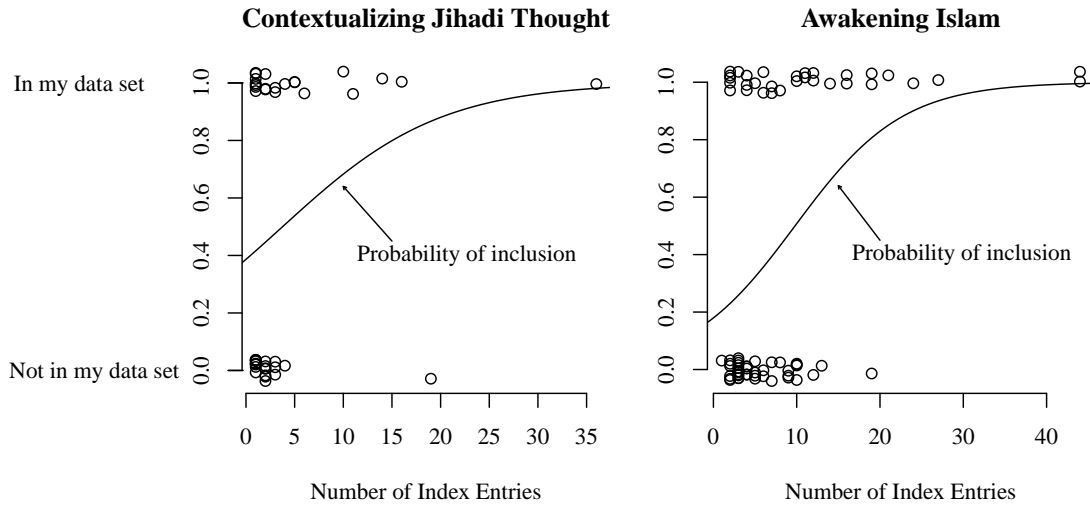


Figure 4.1: *A Comparison with Clerics in the Secondary Literature*

This figure shows the relationship between the number of pages on which each cleric appears in several secondary sources (on the x-axis) and inclusion in my data set (on the y-axis). The predicted probability of cleric inclusion conditional on the count of index entries estimated via logistic regression and plotted. Clerics who appear more frequently in the secondary works are more likely to be included in my data set.

I determine whether each name in the index is a cleric. For each cleric, I collect the

number of pages in the book on which they appear and note whether each cleric is one of the 101 in my study. Figure 4.1 shows the relationship between the number of pages on which each cleric appears (on the x-axis) and inclusion in my data set (on the y-axis) with the predicted probability of cleric inclusion conditional on the count of index entries, estimated via logistic regression. Are a substantial number of indexed clerics also in my dataset? Of the 42 clerics indexed in *Contextualizing Jihadi Ideology*, exactly half also appear in my data set. There are 74 clerics listed in the more comprehensive index in *Awakening Islam*; 42 percent appear in my data set.

This suggests that I am indeed including many of the important clerics in my study but that there are also many important clerics who are left out. In a few of these cases, I have actually attempted to include these clerics but was unable to do so because of missing cleric biographical information or texts. Nevertheless, it suggests that there are more clerics who could be included in my study. I find that prominence in the secondary literature is strongly predictive of inclusion in my data set. Appearing on more pages of either book strongly predicts a higher probability of inclusion — a cleric who appears on more than 4 pages in *Contextualizing Jihadi Ideology* or more than 10 pages in *Awakening Islam* is virtually assured of inclusion in my data set.

Next, I provide some evidence that these 101 clerics are generally representative of a broader set of about 5,000 clerics who have at least a minimum level of prominence. To get some sense of the broader class of clerics from which these 101 come, I attempt to characterize the population of prominent clerics on Wikipedia. After developing a list of Wikipedia entries about clerics, I show that the Wikipedia pages for the 101 clerics in my study are not easy to distinguish from the broader set of Wikipedia clerics. This suggests that the clerics in my data set are in some ways representative of a broader class of clerics.

The challenge is to construct a list of prominent clerics to which I can compare the clerics in my data set. Prominence can mean many things: I mean that a cleric has at least some following and presence beyond local environment in which they live and work. Although it is not a perfect indicator of prominence, I assume that clerics with a Wikipedia page (in Arabic) are sufficiently prominent to meet this definition. Having a Wikipedia page suggests one of the following: (1) the cleric is well-known and someone beside the cleric has written an entry or, (2) the cleric has written their own entry, indicating that they would like to be well-known.

Establishing which entries on Wikipedia are biographies of clerics is difficult. Reading each Wikipedia entry and classifying it by hand is not feasible, and it is not even clear how to manually generate a candidate list of entries to classify. Instead, I use automated methods to construct a list of entries that are likely to be about clerics. Inspired by Gong (N.d.), I implement an automated search through Wikipedia that simultaneously finds candidate entries and classifies whether each entry is the biography of a cleric. I start with a list of approximately 40 clerics from the 101 in my data set who have entries on Wikipedia and implement the following procedure. First, I follow each link and apply a naive Bayes classifier (Hastie, Tibshirani and Friedman 2009) similar to the classifier I use later in this chapter to scale cleric writings. Here, I classify entries as being about a cleric or not. For entries that are classified as clerics, I collect the outgoing links to other Wikipedia entries and follow these links, one by one, repeating the process. I stop when there are no more new links to classify.

The classifier is trained on a training corpus that I generated from the Wikipedia pages clerics in my data set. I went to each of these pages, collected all of the links, and classified 727 outgoing links to other Wikipedia articles by hand as either pointing to an article about

a cleric or not. I use the text of these hand-coded pages as the training set. This has some practical limitations — because the training set is derived from the entries of clerics, it is most accurate when the links it is classifying come from a cleric entry. However, if the classifier mistakenly classifies an entry as a cleric biography when in fact it is not, then the next set of articles that the classifier faces come from a different distribution than the training set, making mis-classification more likely. For example, a primary feature that distinguishes cleric from non-cleric entries in the classifier are markers of biographical entries: names, words about birth, childhood, education, and careers. Upon implementing the search procedure, I found many instances where the classifier mistakenly coded non-cleric entries as being about clerics: entries about singers, television shows, and companions of the Prophet. The reason is clear — these entries also have many names, words about birth, childhood, education, and careers. To improve the classification, I added a step to the classifier in which I compare the title of the wikipedia page to a pre-determined dictionary of words. This ensures that articles with titles including “singer” or “actress” are automatically classified as “non-cleric.” I also automatically omit articles that have no dates after 1900 to avoid articles about classical scholars.

Running this procedure generates a list of 4,946 Wikipedia entries that are likely to belong to clerics. To be sure, not all of them do. The classification has a substantial error rate; it misclassifies 18 percent of clerics and 10 percent of non-clerics in the training set. However, since I know the error rate in the training set, it is safe to assume that at least 4,000 of the entries coded as being about clerics are coded correctly, while there are approximately another 1000 cleric entries that were mis-classified as “non-cleric.” This suggests that there are on the order of thousands of prominent clerics in the Muslim world, but probably not tens of thousands and certainly not hundreds of thousands.

I now show that my data set of 101 is not distinguishable from the 4,946 clerics on Wikipedia. Ideally, I would code the same covariates for each of the 4,946 clerics and compare them to the 101 to show that they are comparable. This is not feasible, given the difficulty of hand-coding 8-10 variables from 4,946 Wikipedia entries by hand. Instead, I show similarity on a more basic level, but looking at the raw Wikipedia entries themselves. I create another classifier for the cleric Wikipedia pages, this time training it to distinguish the full Wikipedia entries for clerics in my data set from those of the clerics not in my data set. Note that this is *not* circular: none of the clerics in my data set were used in the first classifier that classified articles as “cleric” or “non-cleric.” I find that this second classifier does a particularly poor job at correctly identifying the clerics that appear in my data set, *even though classifier is trained on these data*.

The results of these two exercises demonstrate several properties of my data set of clerics. First, I have collected a data set of many of the most important Salafi clerics, but this data set is not exhaustive. There are other Salafi clerics mentioned in the secondary literature for who I have not collected data. Second, these 101 clerics are not clearly differentiable from a broader list of approximately 5,000 clerics who appear on Wikipedia. There may be differences, but they are not detectable based on the frequencies of terms in these clerics’ biographies. This suggests that my data set may represent a broader class of Muslim clerics. Future research could use methods such as these to characterize the population of Muslim clerics and use random sampling to select clerics for analysis rather than the *ad hoc* data selection procedures I use here.

4.2 Texts

To measure the ideology of these 101 clerics, I collect their fatwas (legal rulings), books, articles, and other writings. This section describes these texts and the process by which I collect them.

Fatwas make up the majority of documents in my analysis and deserve particular explanation. In Islam, questions of religious belief are brought by lay Muslims to a member of the *‘ulamā* who answers in the form of a fatwa. A fatwa is a non-binding legal opinion which serves an advisory role for the recipient and possibly for other Muslims as well.² In the West, the term *fatwa* is often misunderstood to be some form of Islamic death sentence. Some fatwas do condemn people to death, and these tend to garner substantial publicity. Perhaps the most infamous is the fatwa issued by Iranian Supreme Leader Ayatollah Khomeini calling for the death of author Salman Rushdie because of perceived blasphemy in Rushdie’s novel *The Satanic Verses*. However, such fatwas are a very rare minority, less than 1 in 1000. Most fatwas are about personal matters of faith, religious practice, proper management of family relations, dietary law, and moral codes. Fatwas generally deal with matters that might seem mundane: whether it is permissible to eat food remnants caught in ones teeth (permissible if removed by the tongue but not if removed with a toothpick because swallowing blood is forbidden),³ whether the angels have seen God (no, they see screens of light),⁴ or the ruling on someone who dies on the toilet (it does not affect their prospects in the afterlife).⁵ The most viewed fatwa on the Islamic website *Islam Way* (www.islamway.com) is entitled “What

²A volume edited by Masud, Messick, and Powers (1996) provides an overview and collects some of the latest work on fatwas in both recent history and the distant past.

³English-language fatwa available at <http://www.islamweb.net/emainpage/index.php?page=showfatwa&Option=FatwaId&Id=199225>, accessed 12 March, 2013.

⁴English-language fatwa available at <http://www.islamweb.net/emainpage/index.php?page=showfatwa&Option=FatwaId&Id=34304>, accessed 12 March, 2013.

⁵English-language fatwa available at <http://www.islamweb.net/emainpage/index.php?page=showfatwa&Option=FatwaId&Id=157823>, accessed 12 March, 2013.

is the advice for someone addicted to pornography?”; it has been viewed over 1.1 million times.⁶

To provide an accurate sense of the topical content of fatwas, I collected roughly 105,000 Arabic-language fatwas issued by the scholars’ council of the website *Islam Web* (www.islamweb.net) from 2001 — the date of the website’s creation — to 2010.⁷ These fatwas are responses to questions posed by users of the website, so the topics are driven by what users ask. There is no evidence that the fatwa council selects particular questions to answer, provided that the questions are posed sincerely. After the questions are posed, the anonymous council of scholars provides a fatwa which is then posted to the website. When the fatwa is posted, the site administrators classify it into one of 25 categories (listed in Figure 4.2). These topics, and the fatwas assigned to them are selected by the site administrators for the purpose of allowing readers to find fatwas using a hierarchical set of indexes and sub-indexes. These categories represent how at least some Muslims think about the content of fatwas.

Figure 4.2 shows the proportion of fatwas (out of 105,000) devoted to each of these topics. The results paint a very different picture of the genre than popular perceptions among Western non-Muslims. Collectively, over half of the fatwas — 55 percent — deal with the three largest topics: worship, family law, and economic transactions. This suggests that when lay Muslims are driving the fatwa process, their primary concerns and uncertainties revolve around very practical matters; how to properly worship, interact with family, and conduct economic exchange. The long tail of topics suggests that fatwas can be about anything, in keeping with the belief of many Muslims that divine law governs all human action.

⁶The fatwa is available at <http://ar.islamway.net/fatwa/3386?ref=p-top>, accessed 12 March, 2013. In this date, it had 1,172,284 page views according to the website counter.

⁷The fatwas are available at <http://islamweb.net/fatwa/index.php>. As of this writing, there are over 200,000 fatwas in Arabic, with a much smaller number in English, Spanish, French, and German.

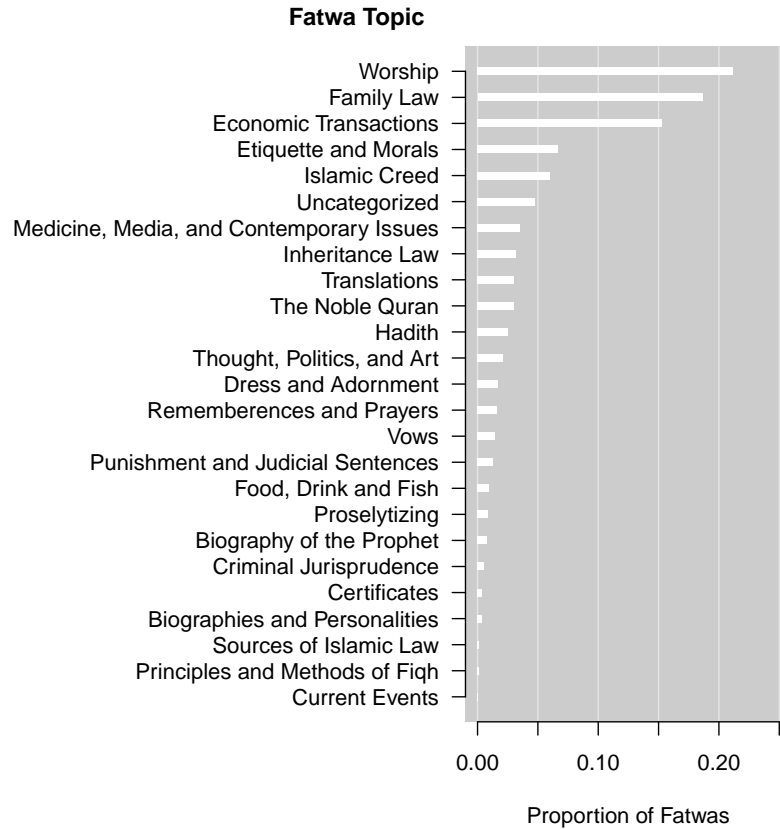


Figure 4.2: *The Topics of a Large Fatwa Corpus*

The broad topics of 105,000 fatwas issued by the scholars' council on the website www.islamweb.net between 2001 and 2010. The topics are defined by the website administrators and each fatwa is assigned to a single category.

Fatwas are ideal for measuring cleric ideology because of the broad range of topics they cover and their law-like status. The range of possible topics means that the genre is broad enough to be informative about ideology. There are cases in which clerics artificially constrain the range of topics in their own output, either by selectively answering questions about a particular topic or by posing questions to themselves that they would like to answer rather than waiting for a follower to ask.⁸ However, in these cases, the constrained range of fatwas

⁸See Masud, Messick and Powers (1996).

for a particular cleric will be quite informative about their ideology. A cleric who repeatedly answers questions about Jihad, for example, is more likely (though not guaranteed) to be Jihadist than a cleric who chooses only to answer questions about business transactions.

However, some clerics do not record their fatwas, or may not issue fatwas at all. The failure to publicly record fatwas is not surprising within the traditions of fatwa-giving in Islam. The vast majority of fatwas are probably never publicly recorded. Rather, most fatwas are issued by a cleric for a specific person, with the expectation that that the fatwa is primarily for personal guidance. (Messick 1996, 311-312). Clerics and lay Muslims note some distinctions between publicly recorded fatwas for general consumption and private fatwas for individuals. For example, the Egyptian *Dar al-Ifta* — literally the “House of Fatwa-giving” — is a government ministry devoted to providing fatwas, and it provides a number of fatwas on its website: <http://www.dar-alifta.org/>. The website features an image of the *mushaykha*, a building in the Mansouria district of Cairo that serves as the office of the head cleric of Egypt. However, getting a personal fatwa from this building is impossible — it is intended for issuing official fatwas meant for Egyptian Muslims generally. Instead, if private citizens would like a fatwa, they travel two buildings down and enter a smaller, unimposing building with only a small waiting area and a single attendant (the *mushaykha* has a large lobby with about 5 guards), where they meet with state cleric who issues a ruling, often writing it on a piece of paper for the recipient. It is actually this building that Egyptians refer to as the government *Dar al-Ifta*, even though it is not represented this way online. Door guards at both of the *mushaykha* and the building where citizens request fatwas did not allow me inside to observe any part of the fatwa-giving process.

Down the street, the clerics at Al-Azhar mosque also issue fatwas in a room near the main entrance to the mosque. The clerics at Al-Azhar were much more willing to allow me

to enter the room where they issued fatwas, observe silently, and speak with a cleric when my turn came. The comparative caginess of the state ministry may be due to suspicion about a foreigner snooping around a government ministry, even one as innocuous as the fatwa office.

The fatwa office at Al-Azhar is a rectangular room, perhaps 18 feet by 14 feet, with four couches set in along the walls of the room and four tables in front of the couches toward the corner. A cleric sits in each corner with a book spread out in front of him at the table, and the fatwa-seeker sits in a folding chair on the other side of the table. When a fatwa-seeker is called, they simply go to the next available cleric (there is no ability to select which cleric to speak to.) The cleric first listens to their question and then issues a ruling, often with some exchange back and forth so that the cleric fully understands the situation and the recipient understands the answer. There is no independent verification of the situation posed by the fatwa-seeker — the fatwa is issued under the assumption that the facts are correct. After the recipient leaves, the cleric writes a very brief description of the fatwa in their ledger. One of the clerics showed me his ledger and explained it briefly, noting that four of the ten entries on the current page related to divorce.

In general, a visit to either of these fatwa offices is fairly brief — perhaps 10 minutes, or 15 if there is a line. At many times there is a constant stream of people in and out. While sitting outside of the Egyptian *Dar al-Ifta*, I recorded 30 distinct groups of people entering (and later exiting) the office over the course of 28 minutes between 12:58pm and 1:26pm on a Saturday. If the office were this busy throughout an eight-hour workday, then it would issue about 500 fatwas per day. I noticed no clear pattern in the demographics of those entering the office. Except for the fact that all the women entering were veiled to at least some extent, the office appeared to serve Egyptian Muslims from a variety of backgrounds, including Salafis (identifiable by their beards) and women wearing a full face veil (*niqab*).

When I asked around, I found few strong opinions about whether it was preferable to seek a fatwa from one of these offices or the other; several respondents assumed that I would get similar fatwas from either.

My impression is that these private fatwas are deemed to be straightforward and prosaic. Traditionally, a cleric was more likely to publish their fatwa or make it public if it required original scholarship, took an original position, addressed a novel question, or weighed in on a controversial issue. This is still probably true in general, but the internet creates new media for fatwa-giving which create a more permanent digital record of the types of ‘mundane fatwas that previously would have been related orally but not recorded. Many of the clerics in my study now issue such fatwas through their websites and these appear in my corpus of texts.

Because fatwas are not publicly available from all clerics, I use books, articles, and sermons to measure cleric ideology where necessary. It is possible that ideology is expressed differently across these genres of clerical writing, so ideally I would collect all of the available writings from each cleric, regardless of genre, and include them in the analysis. I have not done this yet simply because of the substantial time it takes to collect documents. I constructed the current corpus by first collecting fatwas from clerics who had them; it was not until later that I expanded the number of clerics and identified some that did not have any available fatwas. This also induces a correlation between ideology and the dominant genre I use for each cleric because in the earlier stage, I sampled based on whether a particular cleric had an online fatwa site, while in the second stage I sampled based on prominence within the Salafi and Salafi Jihadi spheres. This means that I tend to measure the ideology of Jihadists from their books and other writings, and the ideology of non-Jihadists from their fatwas. This inconsistency in the data collection process is not ideal, but based on the

validation results below, I am not concerned that it biases my inferences about the extent to which clerics express Jihadi ideology. It is not surprising that genre would not bias the text scaling because my training set contains a variety of genres.

Specifically, I use fatwas to measure the ideology of 64 clerics in my data set, while 37 clerics required some combination of other materials. In 35 of those cases, more than 95 percent of the words collected for each cleric came from sources other than fatwas. Figure 4.3 shows this graphically, with the proportion of words I obtained from fatwas for each cleric on the x-axis and the total number of words per cleric on the y-axis. Overall, the number of texts and words is staggering: 14,024,558 words from 27,142 unique texts from 101 clerics. Of the texts, 76 percent of the 27,142 documents are fatwas, meaning that they constitute the largest share of documents. However, fatwas contribute only 25 percent of the total words in the analysis; the average fatwa is 173 words long while the average book is 6,991 words.

In reality, these genre distinctions are not as clear-cut as I have portrayed them. In some cases, fatwas are of book length and are included on a website under the heading of “books” rather than fatwas. In this case, I count them as a book when it is clear that the document is somehow both. An example of this is Abdallah Azzam’s treatise *The Defense of Muslim Lands* which is book-length (and listed as a book online) but describes itself as an extended fatwa. However, these cases are relatively rare and the ambiguity further serves to support my contention that the most important part of measuring cleric ideology is to obtain their clerical writings and analyze them. The specific genre of these writings is not important as long as the writings reveal ideology.

Practices of textual preservation in Islam, coupled with the advent of the Internet, make it possible to obtain texts that represent the ideology of a cleric feasible in most cases.

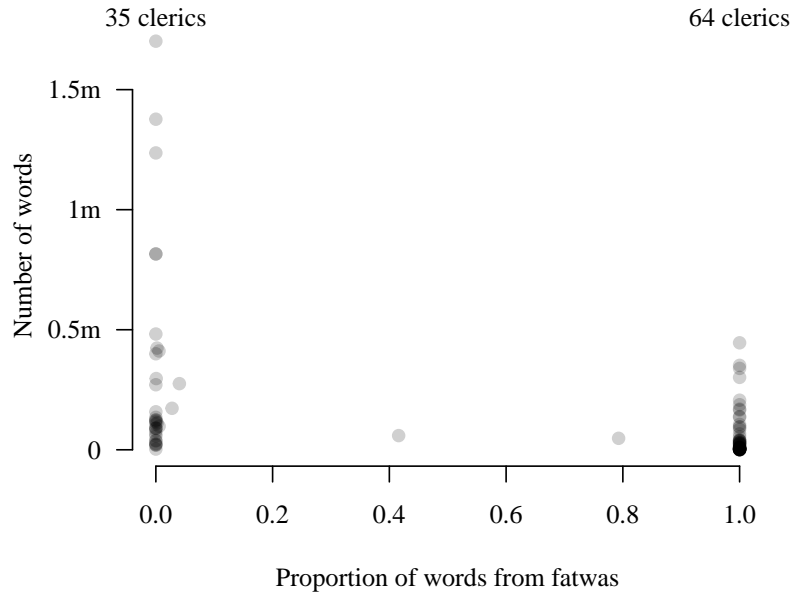


Figure 4.3: *Proportion of Words from Fatwas for each Cleric*

This figure shows the percentage of words in my analysis that come from the genre of fatwas for each cleric (on the x-axis), plotted against the total number of words I have collected from each cleric (y-axis).

Throughout a lifetime of scholarship, clerics generate many writings which they or their followers often organize and release as collections. Increasingly, cleric writings are available online via Internet “fatwa banks” or clerics’ own websites. These collections of writings may not be representative of the entire body of writings produced by a cleric because clerics and their admirers consciously select topics to demonstrate the expertise of the cleric. While non-representative corpuses are often problematic for inference, the selection of texts for distribution does not pose a fundamental problem for measuring cleric ideology. The corpus of texts that clerics or their followers choose to disseminate widely is perhaps the *best* representation of the ideology the cleric would like to portray and the ideology they are perceived to have.

4.3 A Model

It is often easy to identify militant Jihadi ideology from quick inspection of a cleric's writing. For illustration, the quotation below comes from a fatwa issued by extremist cleric Anwar al-Ulaqi in the Winter 2010 issue of *Inspire*, an English-language⁹ Jihadi web magazine.

Muslims are not bound by the covenants of citizenship and visa that exist between them and nations of dar al-harb [the non-Muslim world]. It is the consensus of our scholars that the property of the disbelievers in dar al-harb is halal for the Muslims and is a legitimate target for the mujahidin.¹⁰

Another document, selected randomly from the Jihadist's bookbag (discussed in Chapter 2) is similarly recognizable, especially given the central role of *takfir* and *tawhid* in Jihadist ideology. This fatwa is from Ali al-Khudayr.

Question: Who has the right to declare *takfir* on someone? Is it permitted for an ordinary person to declare *takfir* on someone who is in a state of outright disbelief, especially if the person [declaring *takfir*] is aware of the rulings on *takfir* and their interpreted meanings? Or is it said to him: Do not do this — leave it to a Judge or a Mufti or the world to come? I would like you to clarify because there is a great deal of confusion about this matter.

Answer: As I have discussed: An ordinary individual who is aware of the rulings on *takfir* and their expressed meanings; he can declare *takfir*. It has been working this way since the covenant of the prophet (peace be upon him) until our present time. But to those who do not know, it is not permitted for them because of the *hadith*: (Whoever says to his brother 'O Apostate,' has become

⁹Unless otherwise noted, the texts I use are in Arabic. Here, I use an English source to allow readers access to authentic texts without the intermediate step of translation.

¹⁰ *Inspire*, Winter 2010, p. 56. Accessing this web magazine is slightly difficult because Western governments have tried to censor it. I accessed it through links provided by Christopher Anzalone at <http://occident.blogspot.com/2011/01/4th-issue-of-inspire-magazine-from-al.html>. The term *dar al-harb* literally translates as "house of war" and refers to the non-Muslim world; *halal* means "permissible"; *mujahidin* means "jihadi fighters."

one of them). *Takfir* is not reserved for a Judge or a Mufti or the world to come; this is a mistake.

The vast majority of fatwas are rather different, such as this randomly selected fatwa from Abd al-Azim bin Badawi.

Question: Awatif and Fardus are sisters. Awatif had two children: Muhammad and Maha, and Fardus had Ahmad, Ala, Ragad, Khaled, Sultan, and Gala. Awatif breastfed Sultan and Fardus breastfed Muhammad, and they each did so for an extended period of time. Is Adel, the husband of Awatif considered the father of all of Fardus' children? Is it permitted for the daughters of Fardus to reveal themselves around Adel or not?

Answer: If a woman breastfeeds a child five different times while it is in the years of breastfeeding, he becomes her son, and she becomes his mother, and her husband becomes a father for him. There is no relationship between the husband of the nurse-mother and her sister, so it is not permitted for them to reveal themselves in front of him.¹¹

Another randomly selected example, this time in English from *www.islamweb.net*, is also readily distinguishable as non-Jihadist.¹²

Question (excerpted): ...my problem is that i really love my husbands family, but they interfere very much in my son and almost dont let me to be mom for him...

Answer (excerpted): ...Among the most important Islamic objectives is that affection and love should prevail in the Muslim society; this is even more confirmed among those who are related to each other, like the case of the in-laws. Hence, they should close the doors to the devil so that he would not spoil this relationship. Allaah Says (what means): *{And tell My servants to say that which is best Indeed, Satan induces [dissension] among them. Indeed Satan is ever, to mankind, a clear enemy.}* [Quran 17:53]...[Spelling and grammar mistakes in original]¹³

¹¹The Arabic-language fatwa is available at <http://ar.islamway.net/fatwa/13949?ref=w-new>, accessed 19 March, 2013.

¹²This fatwa was selected effectively randomly — I simply used the most recent fatwa issued in English by *www.islamweb.net* on 7 April, 2011.

¹³Fatwa No. 153879. "Her in-laws interfere with the way she brings up her child." April 7, 2011. Accessed at <http://www.islamweb.net/emainpage/index.php?page=showfatwa&Option=FatwaId&Id=153879> on April 7, 2011.

In principle, identifying Jihadi ideology is often as simple as distinguishing between these two types of texts. However, with 27,142 texts from 101 clerics, close reading of each is infeasible. Instead, I measure cleric ideology by applying supervised learning methods from the statistical machine learning literature (Hastie, Tibshirani and Friedman 2009) to the documents. Most of the previous work on measuring the ideology of political actors has used roll-call votes to estimate actor ideal points (Poole and Rosenthal 1985; Martin and Quinn 2002). This is difficult for Muslim clerics because they do not vote on a common set of proposals, so instead, I directly scale the texts to estimate cleric support for militant Jihadi ideology.

My method uses two sets of training documents, one of which is assumed to be Jihadi and the other of which is assumed to be non-Jihadi. The Jihadi corpus consists of 765 texts of various genres that are available on Jihadi web forums as part of a collection entitled “the Jihadist’s bookbag,” discussed in Chapter 2. By using a set of known Jihadi documents as my training data, I avoid the difficult task of deciding which texts are most authentically “Jihadi.” Instead, I let Jihadis themselves identify the texts that are most representative of Jihadi ideology.

Identifying a set of representative non-Jihadi texts is more difficult. While Jihadi ideology is focused and well defined, there are many types of non-Jihadi ideology, making it difficult to find a single set of texts that is representative of “non-Jihad.” Instead, I use a sample of 1,951 texts from the 101 clerics in the study as the baseline for non-Jihadi cleric writing. In fact, there are Jihadi writers among these 101 clerics, but the center of gravity is decidedly not Jihadi. In practice, I find that using this group of texts as the “opposite” of the Mujahid’s bookbag produces accurate cleric scores.

Treating these two groups of documents as having a known category, either Jihadi or non-Jihadi, I can then use them to classify other documents. Heuristically, my method is to calculate the word frequencies of a new document and then estimate the likelihood that the document is Jihadi by comparing its word frequencies to the training corpus. Documents that have word frequencies similar to Jihadi documents will have higher scores, while documents that have word frequencies less like Jihadi documents will have lower scores.

Specifically, I follow Beauchamp (N.d.) in using a Naive Bayes classifier to calculate Jihad scores for each document.¹⁴ I am interested in estimating the probability that a new document S belongs to the Jihadi class (J), given the words in S . From Bayes' Rule we know that:

$$P(J|S) = \frac{P(S|J)P(J)}{P(S)}$$

Take $P(S|J)$ to be the independent¹⁵ product over all words in the document S and denoting the i -th word in S as w_i , we can write

$$P(S|J) = \prod_i P(w_i|J)$$

$$P(J|S) = \frac{P(J)}{P(S)} \prod_i P(w_i|J)$$

¹⁴The Naive Bayes classifier relies on several assumptions that I violate below. Like most classification models, the Naive Bayes classifier relies on the assumption that the proportions of the classes are the same in the training set and the overall population of documents. This is clearly not satisfied because I am not even able to characterize the total population of texts. Recently developed methods relax this assumption (Hopkins and King 2010; King and Lu 2008) and could offer an alternative solution.

¹⁵This independence assumption is clearly violated because words are correlated within documents (hence the “naive” in Naive Bayes). There are other more complex options, but I find that the Naive Bayes classifier works well in practice.

I use the frequency of word w_i in the combined Jihadi corpus, J as my estimate of $P(w_i|J)$.¹⁶ I assume that a text is either Jihadi or not which allows a symmetrical equation for the probability that a text is not Jihadi.

$$P(J'|S) = \frac{P(J')}{P(S)} \prod_i P(w_i|J')$$

These two quantities can be combined and simplified to produce a logged likelihood ratio which I use as the document-level Jihad score:

$$Jihad\ Score = \sum_i \log \frac{P(w_i|J)^{w_i}}{P(w_i|J')^{w_i}}$$

Figure 4.4 shows which words the classifier is using distinguish between Jihadi and non-Jihadi fatwas by plotting the difference in frequencies of word use in each corpus. Words that are large and toward the left and right edges are strongly predictive of either Jihadi or non-Jihadi ideology. Words in the center of the figure are less predictive of ideology.

Before the model can be trained on the training corpus, I first pre-process the texts. Although this is a standard part of statistical text analysis and in most other applications is textbook, the current application to Arabic-language text has some minor complexities that deserve mention. In general, text analysts have found that a procedure called stemming helps make text analysis more feasible and accurate. Stemming is a process that removes words that are unimportant for the analysis and combines similar words that differ only in unimportant ways. “Importance” depends entirely on the setting; pronouns that appear in a corpus of texts may be unimportant for most analyses but are crucially important for a

¹⁶The maximum likelihood estimate is $P(w_i|J) = \frac{W_i}{\sum_{i' \in J} W_{i'}}$, where W_i is the sum of total occurrences of word w_i in J . This creates problems because terms that do not appear at all in J automatically make $\prod_i P(w_i|J) = 0$. I use the standard solution of Laplace smoothing, so the actual calculation is $P(w_i|J) = \frac{W_i+1}{\sum_{i' \in J} (W_{i'}+1)}$.

of word stems by manipulating prefixes and suffixes, speakers of Arabic also modify the internal syllables of a word. Because of this, stemmers in other languages cannot be simply importated to Arabic. Some approaches to Arabic stemming have attempted to identify the *root* of each word — a three-consonant trilateral upon which most Arabic words are based (AI-Nashashibi, Neagu and Yaghi 2010). However, reducing words to their roots is difficult and often leads to inappropriate conflation of terms because of the use of roots in Arabic to denote opposite concepts. For example, the trilateral *k-f-r* is the root of the prominent Jihadi concepts *takfīr* (to ecommunicate, declare someone apostate) and *kāfir* (an apostate), but it is also the root of the word *kifāra* (religious atonement).

I use an alternative approach to Arabic stemming known as “light” stemming. This approach uses a simple set of rules to trim suffixes and prefixes but does nothing about infixes and does not try extract word roots. Specifically, I use a modified version of the “light10” stemmer, with some alternative rules for suffix removal, and expanded lists of suffixes, prefixes, and stopwords (Larkey, Ballesteros and Connell 2007). In practice, this only reduces some similar words to the same stem — many words that are clearly semantically related remain distinct. This does not hamper my analysis because the purpose of this stemming is to reduce the dimensionality of the classification problem when predicting the ideology of texts. This dimensionality becomes less important as more data are available. I find that the size of my corpus leads to reasonable results without aggressive stemming.

Along with stemming, I also reduce the dimensionality of the text in other ways. Most importantly, I omit words that are too common or too rare across documents to be useful for classification. In many text applications, analysts eliminate the 10 percent most common and least common words by default. In my analysis, this procedure leaves too many stems remaining for feasible computation, so I remove words that occur in less than 10 percent or

more than 40 percent of documents. This retains only the words that are most discriminating — that contain the most information about the meaningful differences between documents. Words that occur in virtually all documents do not provide much information about how a document should be classified. Words that are rare do provide information, but relatively little information. In the extreme case, words that appear in only a single document are perfectly correlated with document labels and are thus not useful for classification. Table 4.1 demonstrates the text pre-processing using the common Jihadi phrase *al-jihād fī sabīl allāh* (the Jihad in the pathway of God) as an example.

Table 4.1: *The Process of Stemming for Text Classification*

Original text	<p>الجهاد في سبيل الله</p> <p>The jihad in the pathway of God</p>
Stemmed text	<p>جهاد سبيل الله</p> <p>jihad pathway God</p>
Reduced to 1500 discriminating stems	<p>جهاد سبيل</p> <p>jihad pathway</p>
Train the classifier	<p>جهاد سبيل</p> <p>jihad pathway</p>

This table shows the process by which an Arabic phrase — “Jihad in the pathway of God” — is processed prior to statistical text analysis. Red words are more indicative of Jihad while blue words are less indicative of Jihad.

After training the model on the stemmed training documents, I use it to produce cleric-level Jihad scores for the 101 prominent clerics described above. To do this, I take the entire collection of documents produced by each cleric and concatenate them into a single document, one per cleric. I then estimate a Jihad score for this new, composite document. Heuristically, this procedure compares the histogram of word frequencies in the entire public body of work

of each cleric and estimates the likelihood that this distribution of word frequencies was generated from the distributions of word frequencies found in each portion of the training corpus. It seems somewhat incongruous to consider the entire body of work of each cleric as if it were a single document, but in practice, this procedure works well. The biggest consequence of this choice is that the estimated scores for each of the clerics are not centered around zero. Because clerics write about things other than Jihad, even the most Jihadist clerics tend to have some writings available online that are not overtly Jihadist and thus help move the estimated ideal points for each of the clerics downward. Thus, the cut-point between Jihadists and non-Jihadists is roughly $-.022$ rather than 0 . This is a trivial discrepancy because the scores are on an arbitrary scale. The only features of the scores that matter are their rank-orderings and the distance between them.

Figure 4.5 shows the distribution of the resulting cleric Jihad scores in a gray histogram. Several prominent Jihadists (Usama Bin Laden, Abdallah Azzam, and Sayyid Qutb) and non-Jihadists (Ibn Baz and Ibn Uthaymeen) are plotted with arrows pointing to their individual scores. To give some sense of the differences in rhetoric across the scale, I show three excerpts from the writings of Ibn Uthaymeen, Sayyid Qutb, and Abdallah Azzam with the scores for the excerpt only (not the entire document) indicated by arrows. Note that the scores of these individual excerpts have greater variance than the cleric-level scores because the cleric scores are based on the concatenation of many documents. To show how the words in each excerpt affect the overall excerpt score, I color words that reduce the Jihad score in darker shades of blue and words that increase the Jihad score with brighter shades of red. Words shown in gray are not included in the classification, either because they are too rare or too common.

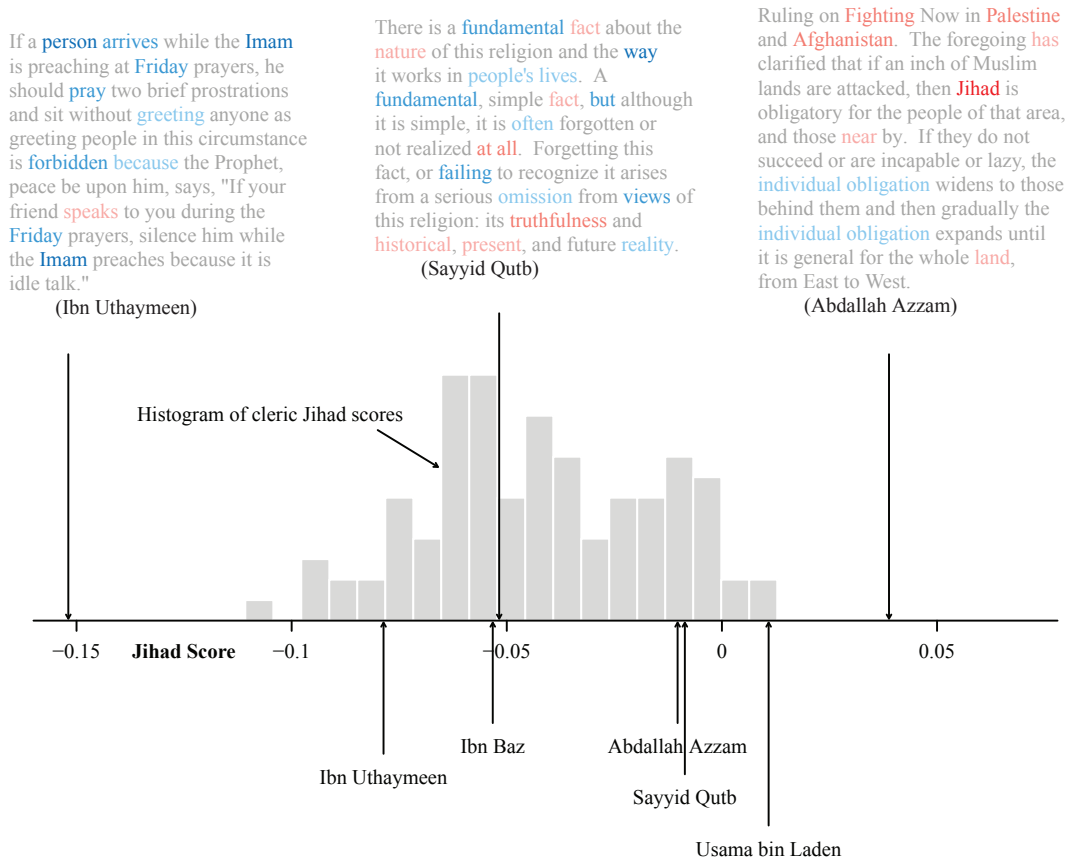


Figure 4.5: *Jihad Scores for Clerics with Benchmarking Texts*

This figure shows a histogram of the distribution of cleric Jihad scores in gray with scores calculated for three excerpts from writings by Ibn Uthaymeen, Sayyid Qutb, and Abdallah Azzam. For each of the three excerpts, the words that actually enter the model are colored (recall that overly rare or common words are omitted), with darker shades of red indicating that a word is used more by Jihadists and darker blue indicating that a word is used more by non-Jihadists.

The color coding shows how the influence of individual words aggregates up to an overall document score. The excerpt with the lowest Jihad score — from Ibn Uthaymeen — has only a single word coded (light) red, meaning that basically all of the words in this excerpt are indicative of non-Jihadi ideology. In contrast, only two terms in Abdallah Azzam's excerpt are blue, indicating that most words are contributing to a higher Jihad score. The quote

by Sayyid Qutb indicates that the model correctly identifies non-Jihadi passages by known Jihadists. This passage is taken from the introduction of Qutb's *This is Religion*.¹⁷

Uncertainty Estimates

These cleric Jihad scores are uncertain. The fundamental source of this uncertainty is that the same cleric, with the same latent ideology, could conceivably have written each document in somewhat different ways, or produced a slightly different collection of writings. The scaling procedure is a measure of the distance between the observed text and the training corpus documents, meaning that there is no error; the score is a deterministic function of the words in the training corpus and the new document. However, it is an estimate of the latent ideal point of the cleric. It is important to account for the uncertainty of these estimates because failure to do so could lead to incorrect conclusions.

I estimate the uncertainty of my Jihad scores using a block bootstrap of each document. In general, bootstrapping procedures estimate uncertainty by treating the observed data as the population, and resampling the data with replacement to get an estimate of the variability inherent in the data (Efron and Tibshirani 1993). In the case of text, Lowe and Benoit (N.d.) find that a block bootstrap — sampling sequences of words together rather than individually — performs well for quantifying the uncertainty of a corpus while retaining the correlations between words that arise because of the structure of written communication. For each cleric, I resample each document in overlapping blocks of length 10, creating 200 bootstrapped versions of each document. I then concatenate these into a single document, as with the original corpus, and calculate new scores for each of the bootstrapped versions. The 2.5th and 97.5th percentiles of these scores provide a 95 percent confidence interval

¹⁷This is a translation of the first paragraph of the first section of *This is Religion*, by Sayyid Qutb, available at <http://www.tawhed.ws/r1?i=3612&x=tsrhxvfc>, accessed 19 March, 2013.

around each cleric Jihad score.

Misclassification

The methods I use for scaling cleric texts make mistakes. Before moving to overall validation about whether my scores match various expert codings, I first consider whether the known types of mistakes are serious enough to raise questions about the validity of my scores.

The most obvious potential for error arises from cases where removing word ordering might lead to serious problems. This seems most likely in the case of a document that criticizes Jihadists or debates Jihad from a non-Jihadist perspective. In the extreme case, two fatwas might appear very similar when viewed as histograms of word frequencies, but the semantic content would be opposite. For example, one fatwa might read “Jihad in the pathway of God is necessary” while the other reads “Jihad in the pathway of God is *not* necessary.”

Fatwas such as this exist in my corpus, but they do not appreciably bias my scores for several reasons. First, Jihadists and anti-Jihadists tend to use different language to talk about the same topics; Jihadists write “martyrdom operations” while anti-Jihadists write “terrorism” to mean the same thing. Second, because I concatenate all of the documents by a cleric, I base my scores on the complete writings of each cleric. Jihadists tend to focus on Jihad much of the time, while anti-Jihadists may write a small number of documents that frequently reference Jihad, but most of their works will be on very different topics. The overall histograms of the concatenated cleric corpuses will be very different in this case, even if a single fatwa by an anti-Jihadist fatwa might mistakenly be classified as Jihadist by the naive Bayes classifier.

For illustration, I find examples of both of these scenarios. In the first case, I find a fatwa

that I might expect to be mis-classified by the naive Bayes classifier because of its frequent use of the word Jihad. The fatwa comes from Abu Bakr al-Jazairi, and reads

Question: Is going out in the pathway of God Almighty to do proselyting for God and spending money and bearing hardship...does this constitute Jihad?

Answer: Going out today in the pathway of God and spending money therein would be equivalent to Jihad if there was Jihad in our day...but today there is no Jihad except for proselyting and preaching because the Muslims do not have an Imam and there is no Islamic state.

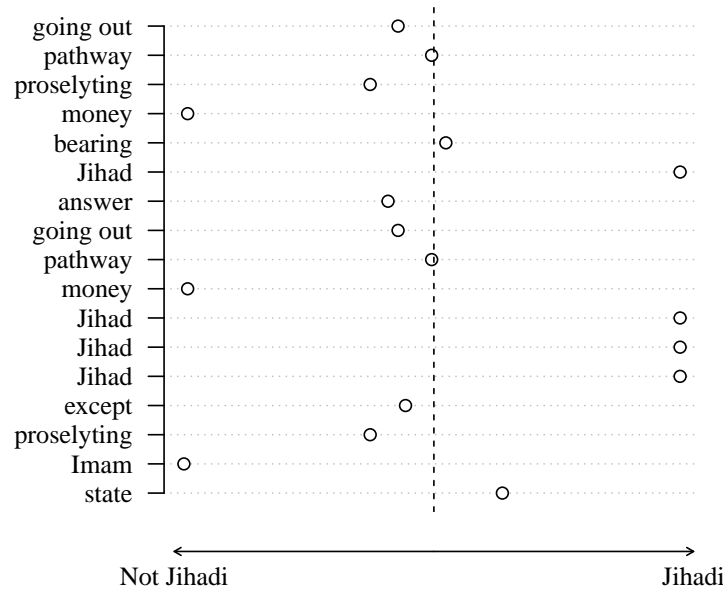


Figure 4.6: *Word Contributions to a Document's Jihad Score*

This figure shows how each word in the above fatwa by Abu Bakr al-Jazairi contributes to the overall Jihad score.

This fatwa has the actual construction that might be problematic — it is a circumstance where the anti-Jihadi nature of the fatwa is most evident to the reader because of the word “no” prior to the word “Jihad.” However, the naive Bayes classifier correctly classifies this text as non-Jihadi, giving it a score of -0.028. Figure 4.6 which shows the contributions of

the individual words in the fatwa to the overall Jihad score. An examination of how each word enters the score calculation reveals that the model does not rely on the placement of the word “no.” Rather, the model identifies that the words “money” and “Imam” are very rare in Jihadi rhetoric. The negative contributions of these words offset the four occurrences of the word “Jihad” and lead to a negative score. The word “no” does not enter the calculation at all, because it was removed during the stemming process. Thus, the model gets the scoring roughly correct, but because of a pattern that a human coder would have found difficult to notice or articulate.

However, there are cases where an individual document that is decidedly not Jihadist is mistakenly classified as Jihadist. Figure 4.7 demonstrates a case where an individual document written by Salman al-Awda receives an erroneously high Jihad score, but that the overall cleric score is not significantly affected because I consider all of a cleric’s documents together. The quoted excerpt from Salman al-Awda is actually anti-Jihadist but has a high estimated Jihad score because of its frequent use of the word Jihad. The score of this individual excerpt is higher than *any* of the scores for individual writings by known Jihadist Abdallah Azzam. However, when all of the texts are considered together, Salman al-Awda (correctly) has much lower estimated score than Abdallah Azzam.

Overall, these examples demonstrate ways in which my method of calculating scores is largely robust to mistakes introduced by the relatively simple technology of the naive Bayes classifier. However, more sophisticated classification approaches might offer minor improvements to the estimation of cleric ideology scores.

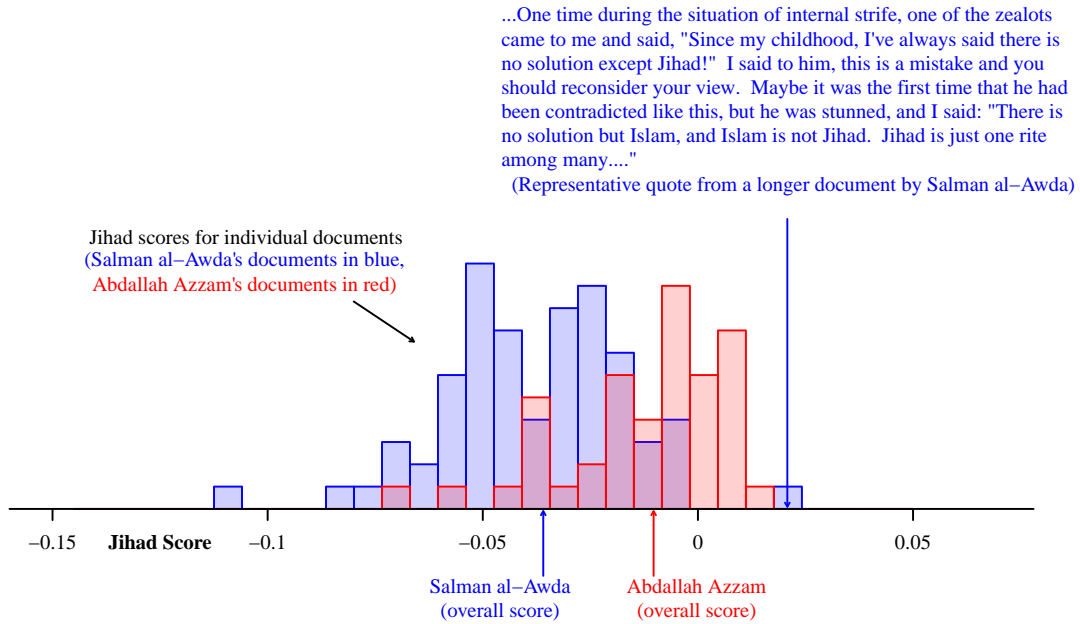


Figure 4.7: *An Example of Classification Error*

This figure demonstrates a case where an individual document written by a cleric receives an erroneously high Jihad score, but that the overall cleric score is not significantly affected because I consider all of a cleric's documents together. The quoted excerpt from Salman al-Awda is not Jihadist but has a high estimated Jihad score because of its frequent use of the word Jihad, higher than *any* of the scores for individual writings by known Jihadist Abdallah Azzam. However, when all of the texts are considered together, Salman al-Awda (correctly) has much lower estimated score than Abdallah Azzam. The full text of Salman al-Awda's document is available at <http://islamtoday.net/salman/artshow-28-138026.htm>, accessed 1 Mar, 2013.

4.4 Validation

The foregoing section introduces a model for estimating the degree to which clerics express Jihadi ideology from the texts they produce. This model is very crude and does not accurately model the process by which the texts were generated. Thus, to be confident that the resulting measure has semantic validity — meaning that the resulting scale corresponds to the concept of “support for Jihadi ideology” — it is necessary to validate the scaling, ideally on expert coding of the same texts (Grimmer and Stewart forthcoming; Lowe and Benoit forthcoming).

In this section, I show that these cleric Jihad scores accurately capture the degree to

which clerics support and produce Jihadist ideology. I demonstrate the validity of the scores by comparing them to several external benchmarks. Each of these benchmarks rely on a coding by some type of human expert. By comparing my scores to the assessments of other experts, I show that it is possible to recover expert judgments about Jihadi ideology via statistical natural language processing. The selection of experts is the key to this validation process. In what follows, I show that my scores recover the expert judgments of Jihadists about other clerics, as well as the expert judgments of several academic experts on Jihad.

4.4.1 Comparison to Jihadist Assessments

Biographical Assessments

First, I show that my scores strongly predict which clerics will be identified as Salafi Jihadi in one or more of their biographies. In some, but not all of the biographies of Jihadists, the author of the biography (typically either the cleric themselves or an admirer) will mention that the subject of the biography is Jihadist. Not all biographies mention the ideological commitments of the subject in this way, so it is not very informative to check whether *all* clerics with high Jihad scores are mentioned as being Jihadist in their biographies. Otherwise, it would be possible to simply identify Jihadis and non-Jihadis by reading their biographies rather than analyzing their writings. Instead, I look for evidence that (1) having a higher score increases the probability that a biography will identify the cleric as Jihadist, and (2) evidence that only clerics with sufficiently high scores are identified as Jihadist in their biographies.

Figure 4.8 shows the results, with the x-axis showing cleric Jihad scores and the y-axis indicating whether each cleric's biography identifies them as Jihadist in some way. The results indicate that my scores correctly separate Jihadists from non-Jihadists; there are no

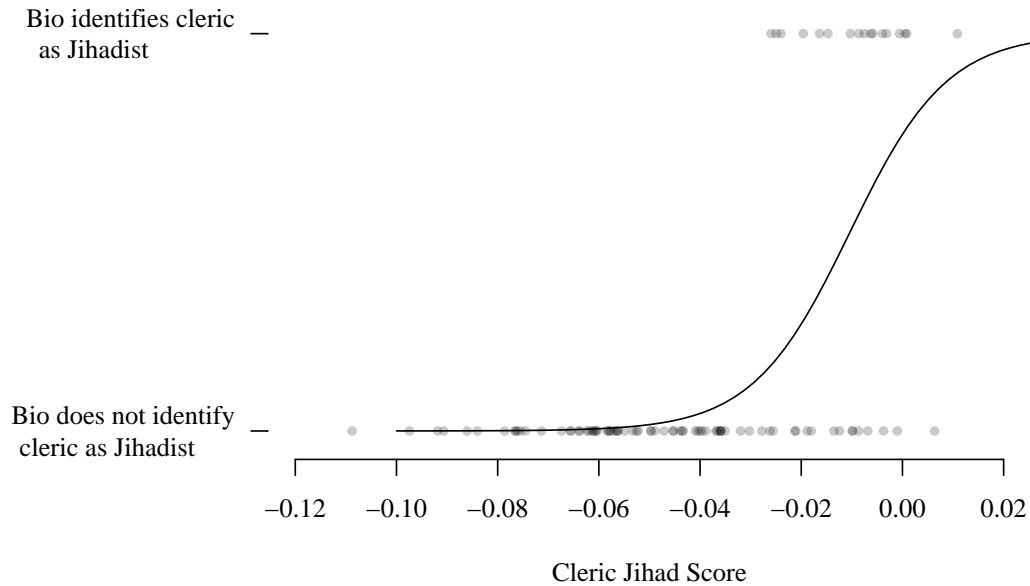


Figure 4.8: *Jihad Scores Predict Biographies that Identify Jihadists*

This figure shows the estimated Jihad score for each cleric on the x-axis with the y-axis indicating whether a biography for that cleric identifies them as a Salafi Jihadist. The curve shows the fit of a logistic regression to these data.

clerics with low scores who are Jihadists according to their biographies. The fit of a logistic regression — with the estimated curve overlaid in Figure 4.8 — shows that higher scores are positively correlated with the probability of a cleric being identified as Jihadist in their biographies.

Ayman al-Zawahiri's *Exoneration*

Would a Jihadist cleric recognize the clerics with high Jihad scores as ideological companions? The answer is a resounding “yes.” In March of 2008, Ayman al-Zawahiri, the longtime spiritual advisor of Usama Bin Laden and now the leader of Al Qaeda, penned a 188-page document entitled *The Exoneration: A Treatise Exonerating the Community of the Pen*

and the Sword from the Debilitating Accusation of Fatigue and Weakness. This work rebuts criticism by a former ally, Abd al-Qadr bin Abd al-Aziz. In *The Exoneration*, Zawahiri lists 19 clerics as supporters of Al Qaeda, five of which appear in my data set: Nasir bin Hamd al-Fahd, Abd al-Qadr bin Abd al-Aziz (interestingly, this is the same cleric the *The Exoneration* is rebutting), Umar Abd al-Rahman, Abu Muhammad al-Maqdisi, and Abu Qatada.

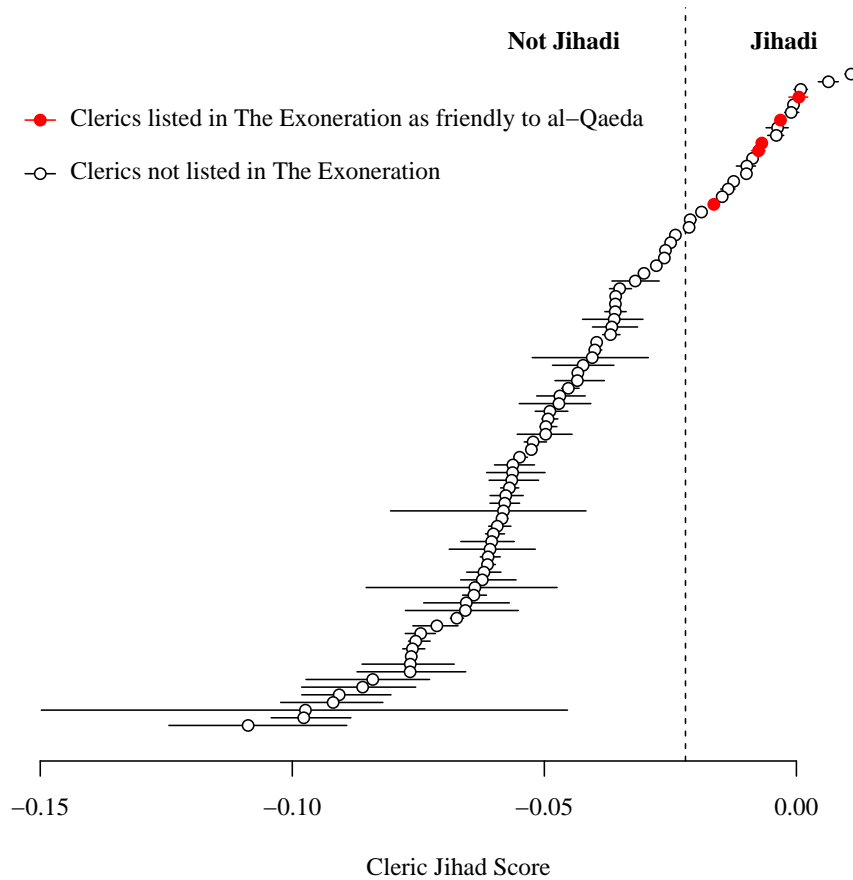


Figure 4.9: *Jihad Scores Predict Inclusion in The Exoneration*

Jihad scores of the 86 clerics who were living in 2008, with the five clerics mentioned in *The Exoneration* as friendly to al-Qaeda shown in red.

Figure 4.9 shows the Jihad scores of the 86 clerics who were living in 2008 (and thus

candidates for mention by al-Zawahiri), with the five clerics mentioned in *The Exoneration* as friendly to al-Qaeda indicated by red, filled disks. These five are all clearly classified as Jihadists by my scores and have scores similar to other Jihadist clerics not mentioned by al-Zawahiri. It is not particularly surprising that al-Zawahiri does not list all of the clerics with high Jihad scores — al-Qaeda is only one of several poles vying for influence among Jihadis and not all Jihadist clerics are aligned with or even friendly to al-Qaeda. The fact that each of the clerics mentioned by al-Zawahiri scores highly suggests that the scores are fundamentally capturing Jihadist ideology.

Minbar al-Tawḥīd wal-Jihād

We can get a second opinion on a broader set of clerics by looking at the inclusion of authors on the largest Jihadist web-library: *Minbar al-Tawḥīd wal-Jihād* (“The Pulpit of Monotheism and Jihad”) at www.tawhed.ws. This web-library contains over 5,000 documents by 219 authors (at the time of this analysis). Its intent is to serve as a comprehensive archive of writings relating to the study and practice of militant Sunni Jihad. The webmaster, Abu Muhammad al-Maqdisi, is one of those named in *The Exoneration* as friendly to al-Qaeda and has been perhaps the most influential Jihadist intellectual of the last decade (McCants 2006; Wagemakers 2012). Not all of the writings that al-Maqdisi chooses to include are Jihadist, but almost all of the important Jihadist writings are included. If my scores are valid, then I expect them to accurately predict whether an author’s writings appear on *Minbar al-Tawḥīd wal-Jihād*.

Conveniently, *Minbar al-Tawḥīd wal-Jihād* has a search function that includes an option to search by author. I gather the list of authors and match it to the list of clerics for whom I estimate scores, creating a variable indicating whether each of the clerics in my study has

writings in the web-library. I then estimate a logistic regression prediction inclusion of each author on the Jihadist web-library as function of their estimated Jihad score.

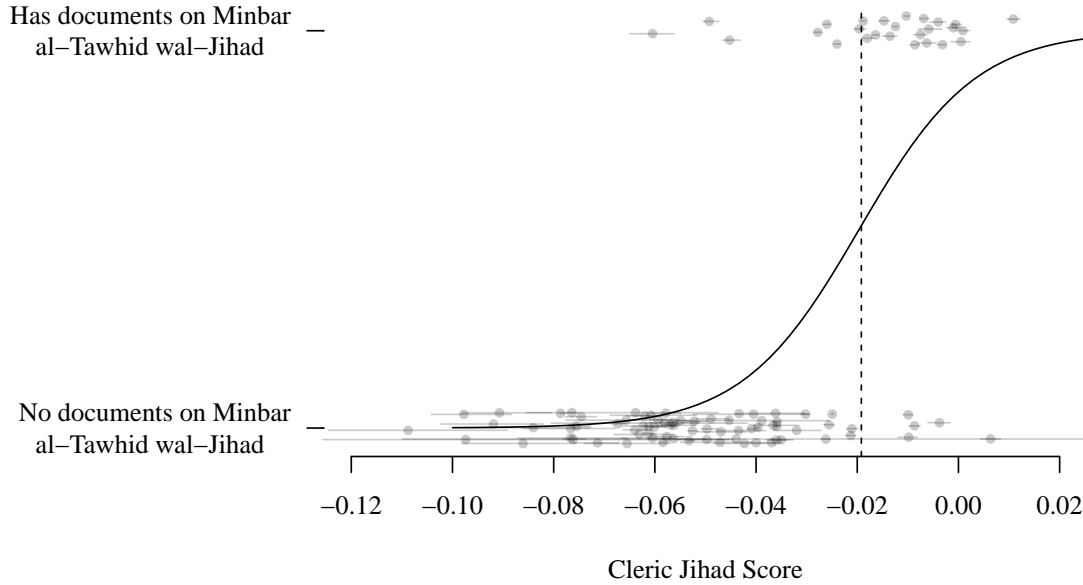


Figure 4.10: *Jihad Scores Predict Inclusion in Minbar al-Tawḥīd wal-Jihād*

Inclusion of authors on the Jihadist web-library *Minbar al-Tawḥīd wal-Jihād* (www.tawhed.ws) as a function of my cleric-level Jihad scores. The solid curve shows the fitted probabilities from a logistic regression predicting inclusion using cleric Jihad scores. The vertical dashed line indicates where these fitted probabilities cross 0.5.

Figure 4.10 shows the Jihad score of each cleric on the x-axis, whether or not each cleric has works on *Minbar al-Tawḥīd wal-Jihād* on the y-axis, and the fitted curve of a logistic regression through the data. The regression indicates that cleric Jihad scores are extremely predictive of whether a cleric will be included on the web-library; only a handful of clerics with scores higher than -0.02 are left out of *Minbar al-Tawḥīd wal-Jihād*'s collection. Some clerics with rather low scores are included, but this is not evidence that these clerics should have higher Jihad scores. The web-library includes a fair amount of material that is not directly Jihadist, so it is not surprising that a few non-Jihadists — Muhammad bin Ibrahim

al-Shaykh, and Hamid bin Abd Allah al-Al are included. However, the low Jihad score of Sulayman bin Nasr al-Alwan is probably a genuine mis-classification by the Jihad score model.

Islamic Thinkers Society

My scores also correctly identify scholars that Jihadists reject as not sympathetic to their cause. To demonstrate this, I use a list of clerics identified as “Scholars of Batil [falsehood]” by the English-language Jihadi website *Islamic Thinkers Society*, run by Salafi-Jihadis apparently based in New York City.¹⁸ These rejected scholars are identified in several ways on the website in ways that make it clear that they are to be avoided because of their anti-Jihadi views. First, the website contains an image with text in English, reproduced in Figure 4.11,¹⁹ encouraging Muslims to click through to hyperlinks informing them about the anti-Jihadi positions of some well-known clerics. The imagery and text is instructive. The faces of 23 clerics are portrayed, along with a numbered list of names up to 26, (the faces corresponding to the last three names are omitted). An image of George W. Bush in papal robes presides over the images of the rejected clerics as if controlling them. The background is an American flag wreathed with flames to remind the viewer of Hellfire. A Quranic injunction reads “‘And believe in what I have sent down, confirming that which is with you, and be not the first to disbelieve there in, and buy not with My Verses a small price, and fear Me and Me Alone.’ -2;41-.” This coupling of image and text suggests to the viewer that the Jihadists of www.islamicthinkers.com view these 26 individuals as preaching a corrupt version of Islam for money and acclaim rather than fearing God.

¹⁸Their “About Us” page mentions that they proselyte in Times Square and Jackson Heights, NYC: http://www.islamicthinkers.com/index/index.php?option=com_content&task=view&id=5&Itemid=57.

¹⁹The figure is available at http://www.islamicthinkers.com/index/index.php?option=com_content&task=blogcategory&id=86&Itemid=74&limit=9&limitstart=27, accessed on 2 March, 2013.



Figure 4.11: Jihadist Image: Scholars of Falsehood

This is an image created by English-speaking Jihadists on the *Islamic Thinkers Society* website providing images of 26 clerics who should be avoided because of their opposition to Jihadists. The Jihad Scores I estimate are able to correctly classify these clerics as not Jihadist.

On the website, the image is interactive, with hyperlinks to pages describing the supposed heresies of these clerics. These are quite revealing about Jihadist attitudes toward non-Jihadi clerics. A castigation of the well-known Saudi cleric Salih al-Fawzan reads:

Saleh Al-Fawzaan is well known for his efforts to solidify the throne of the apostate rulers, for which he openly calls the masses on Saudi television. He also holds the Tawagheet as their wilatul 'Umoor despite the fact that they rule by other than Sharee'ah and have opened Arabia for the Crusaders to invade and kill Muslims in Iraq and Afghanistan. He falsely labels those who stand against

tawagheet and those who defend themselves from the Crusaders as Khawarij, and a people of bida'a who should be crushed and annihilated. He is also engaged in spreading misinformation against them in order to defame the those who are defending the honor of the Muslim Ummah in the eyes of the public and diminish their support. [spelling and punctuation original]²⁰

A conversation in the “guest forum” of the Islamic Thinkers Society website clarifies the reasons that particular individuals are included as “scholars of falsehood.” An anonymous poster asks “you have a huge list of scholars who we should stay away from...WHY we should stay away from those?” to which a site administrator responds,

The scholars which we have listed as to stay away from is either due to 2 factors:

1. They are modernists who are twisting the words of Allah s.w.t. into their own kalaam and making the halal into haraam using the justifications of duress, new reality, maslaha, etc.
2. They are favoring the apostate regimes by speaking on behalf of them, defending them, and going against the global jihad front. (<http://islamicthinkers.com/forum/index.php?showtopic=7211>)

The questioner also asks about two specific clerics who endorsed Jihadi views in the past and are still viewed as more hard-line than many in the Saudi establishment: “Also you also now say to stay away from sheikh safar and salman. Why is that so? ... according to you, when did they also fall off the manhaj?” The response by the site administrator is revealing:

Regarding Safar Hawali and Salman al-Awdah, the time when they fell of the manhaj is when they were tortured by the Sa'udi authorities, gave in to their demands, and started to speak out against the mujahideen and the global jihad front. Whether they are doing this under duress or actually had a change of heart, is not a factor for us to make excuses for them. Based on what is apparent, we advise Muslims to stay away from their advice and fattawa when it comes to addressing the current issues of the Muslim Ummah.

²⁰http://www.islamicthinkers.com/index/index.php?option=com_content&task=view&id=428&Itemid=74, accessed and archived on 7 March 2013.

Of the 26 clerics listed in Figure 4.11, eight are included in my dataset of 101 clerics: Yusuf al-Qaradawi, Aid al-Qarni, Salih al-Luhaydan, Abd al-Aziz Al al-Sheikh, Salih al-Fawzan, Salman al-Awda, Safar al-Hawali, and Rabi al-Madhkali. Another four individuals in my dataset are mentioned positively by www.islamicthinkers.com in the course of criticizing these 26 clerics. The article criticizing Aid al-Qarni mentions that “He is the one who appeared as the presenter on Saudi Television to hassle and question the three Shuyookh: Ali al Khudyr, Nasir al Fahd, Shaykh al-Ulwan, on air” and the article on Rabi al-Madhkali mentions that he unjustly criticized Sayyid Qutb and uses the honorific “may God honor him” in reference to Qutb.

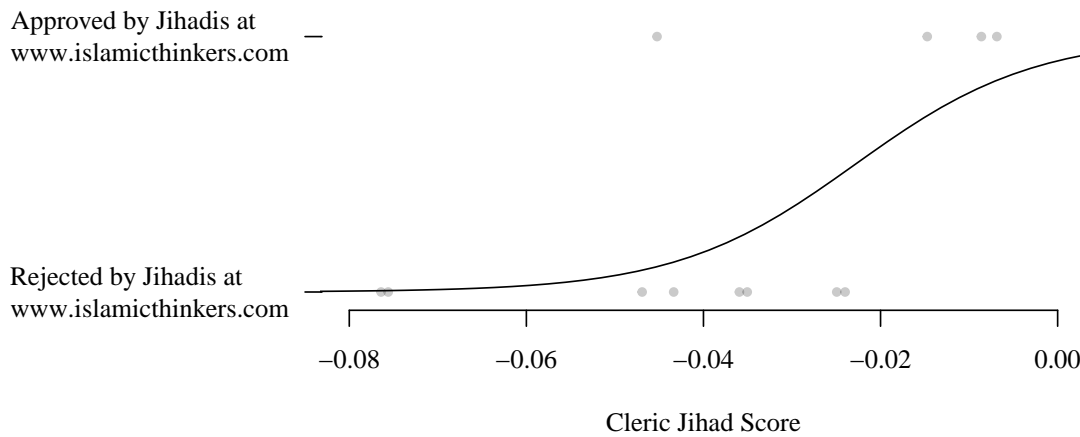


Figure 4.12: *Jihad Scores Predict Cleric Assessments by the Islamic Thinkers Society Website*

This figure shows the estimated Jihad Scores for 12 clerics on the x-axis with their assessment by English-speaking Jihadists at www.islamicthinkers.com on the y-axis. The curve shows the fit of a logistic regression to these data.

My scores accurately separate the rejected clerics from the approved ones. Figure 4.12 shows each of 12 clerics’ Jihad scores on the x-axis with the y-axis showing whether the Jihadists at the Islamic Thinkers Society approve or disapprove of them. Eleven of the twelve observations fit my expectation that clerics with low scores will be disliked by the

Islamic Thinkers Society while clerics with high scores will be approved of. Only one cleric — Sulayman bin Nasr al-Alwan — is clearly scored low by my algorithm relative to his approval by the Islamic Thinkers Society. There is a relatively high degree of uncertainty about this particular test because there are only 12 clerics, but the correlation between scores and approval/disapproval is very strong.

4.4.2 Comparison to Scholarly Assessments

Jarret Brachman's Categorization of Salafis

In his book, *Global Jihadism*, Jarret Brachman unpacks Salafists into eight categories: establishment Salafists, Madkhali Salafists, Albani Salafists, scientific Salafists, Salafist Ikhwan, Sururis, Qutubis, and Global Jihadists (Brachman 2009, pp. 26-41). Brachman draws these categories from an article that has been popular with Salafis written by Dr. Tariq Abdelhaleem and gives an explanation of each category, including examples of adherents to each school of thought. Although the categorization is not comprehensive, and many (perhaps all) of the categories are contested, this typology offers an additional chance to benchmark my scores, in this case against a hybrid coding consisting of typology developed by Salafis and expanded upon by a scholarly expert.

I benchmark my Jihad scores against the Brachman typology by developing a list of each of the clerics mentioned by Brachman as adherents to one of these eight schools. I then identify the subset of these clerics that also appear in my data set and then plot the Jihad scores and classification for each. It is clear that the establishment Salafists are on one end of the Salafi spectrum while global Jihadists are on the other. The ranking of the categories between these is less clear, but from Brachman's description, Madkhali and Albani Salafists occupy similar space as the establishment clerics, scientific Salafists and

Salafist Ikhwan occupy a middle ground, and Sururis and Qutubis tend toward the Jihadist end of the spectrum. This corresponds to the order in which they are listed in Brachman's book, suggesting that he is listing them in rough order from least ideological proximity with Jihadism to greatest.

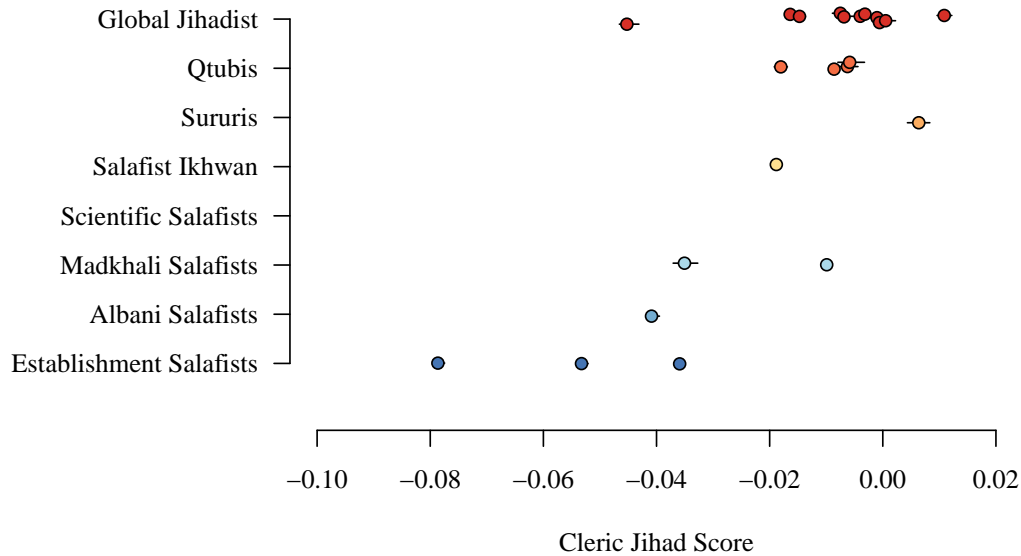


Figure 4.13: *Jihad Scores Predict Brachman's Categorization of Salafis*

A comparison of my cleric-level Jihad scores to an expert coding of clerics by Brachman (2009). Brachman divides Salafi clerics into eight categories which I have ordered roughly from least to most radical.

Figure 4.13 shows the correlation of my scores (on the x-axis) with the Brachman categorization (on the y-axis). Overall, the correlation between the radicalism of each group and the Jihad scores is high. The scores do not perfectly sort individuals within the groups, suggesting that fine distinctions between types of Jihadists may be difficult to detect with my methodology, but the method can rank-order the groups roughly correctly.

The *Militant Ideology Atlas*

I next validate the scores using the *Militant Ideology Atlas - Executive Report* (McCants 2006), Appendix 2, which lists the 56 individuals that Jihadi writers cite most often and indicates whether they are “Jihadi authors” (no coding criteria are given, but this is presumably based on the expert knowledge of the authors of the study). Using the 32 clerics that appear in both *Atlas* list and my own data set, I find that my cleric-level Jihad scores are highly predictive of a “Jihadi” designation in the *Atlas*. To demonstrate, I estimate a logistic regression predicting the *Atlas* coding as a function of my Jihad scores. The resulting logit curve is plotted in Figure 4.14 along with the data. The vertical dashed line at $x = -.023$ is the Jihad score at which the model changes from classifying authors as “not Jihadi” to classifying them as “Jihadi.”

In fact, my scores reveal a possible mistake in the *Atlas* coding: Hamud al-Shuaybi, is coded in the *Atlas* as a non-Jihadi author but his estimated score from my model is high. Based on other authors, this is probably an error in the *Atlas* coding; Jarret Brachman calls al-Shuaybi a “towering Jihadist figure” (2009, p. 36).

4.5 Conclusion

Traditionally, scholars have measured the extent to which clerics adopt Jihadist ideology by carefully reading and assessing a cleric’s writings. This measurement strategy has several serious problems if one attempts to measure the adoption of ideology by many clerics. First, it is inherently time intensive; each text must be read to assess the ideology of the document and any changes to the coding criteria mean that each document must be re-read. This procedure is not easily replicable and in practice leads scholars to base their assessments on

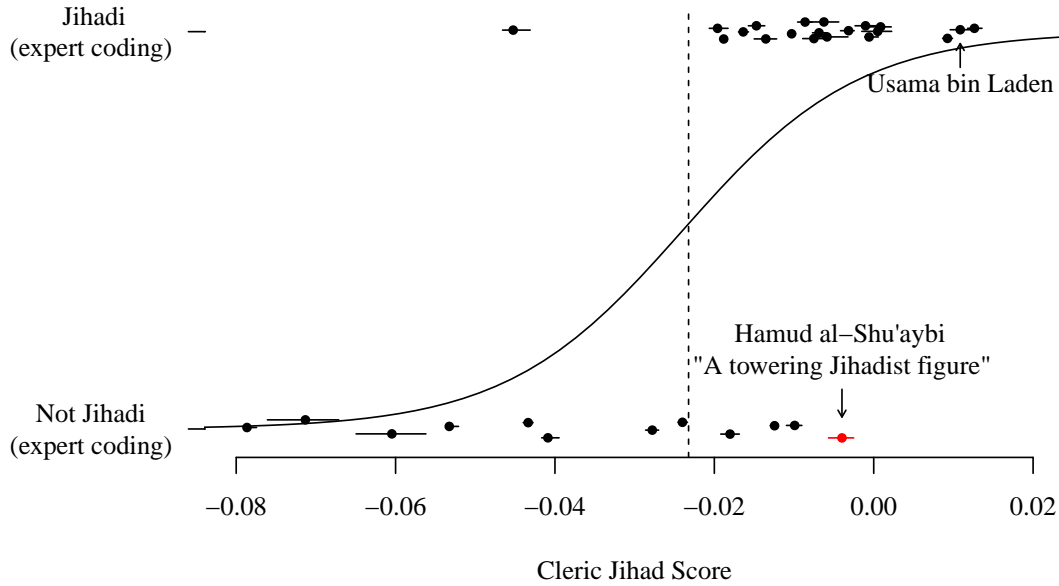


Figure 4.14: *Jihad Scores Predict Expert Codings in the Militant Ideology Atlas*

A comparison of my cleric-level Jihad scores to an expert coding of clerics by McCants (2006). The solid curve shows the fitted probabilities from a logistic regression predicting the *Militant Ideology Atlas* scores using my Jihad scores. The vertical dashed line indicates where these fitted probabilities cross 0.5. The cleric plotted in red is potentially mis-coded in the *Atlas* (see discussion in the text). I also label Usama bin Laden's Jihad score for reference.

a small number of key texts thought to represent a scholar's ideology, rather than examining all known works.

This chapter describes a methodology for measuring Jihadi ideology from extremely large collections of cleric-generated texts with relatively minimal assumptions and few of the problems of coding by close reading. This method uses a naive Bayes classifier to scale documents on a single dimension using a two-part training corpus of documents known to be Jihadist or non-Jihadist. This method is easily replicable, and adjustments are trivially easy and do not require substantial investments of time. The coding of texts could be improved with more sophisticated methods for stemming and processing Arabic text or more accurate models

of text generation that incorporate more structure when estimating cleric scores. However, extensive validation against a wide array of independent sources suggests that the simple methods I use here perform well at correctly estimating cleric ideological scores.

Chapter 5

Testing Theories of Cleric Radicalization

In this chapter, I test the theoretical model of cleric radicalization I developed in the previous chapter by analyzing a data set of 101 clerics. This task requires a substantial amount of information about each cleric, which I obtain from cleric biographies. The first section of this chapter explains the advantages and limitations of these biographies for measuring characteristics of each cleric. I then describe how I measure each of the variables in the analysis from cleric biographies. By combining cleric Jihad scores with biographical information about the clerics, I can test competing explanations for cleric adoption of Jihadi ideology. I show that there are strong correlations between cleric networks, career paths, and ideology as my theory predicts. I use a variety of methods to show that this correlation is robust and suggestive of a causal relationship.

5.1 Cleric Biographies

Prominent clerics typically write short biographies describing their religious training, appointments, and scholarly works. I collect these biographies for the 101 clerics in my study, including multiple versions from different sources, and use them to code biographical information that allows me to test the theory outlined in Chapter 3. Because of the central role that these biographies play in my analysis, the structure, content, comparability, and reliability of this genre deserves interrogation here.

Cleric biographies constitute a genre of Islamic writing that is part of a distinctive tradition of biographical writing in Islam.¹ Cleric biographies are referred to in a number of ways: as an (auto)biography (سيرة ذاتية or ترجمة ذاتية) or an “abstract” or “short description” (نبذة مختصرة). When they appear on cleric websites, these biographies are often linked from a side-bar or header on the front page of the website with the invitation “get to know the Sheikh.” In many, perhaps most cases, the biography is written by the cleric themselves. In some cases, it is written by their students or other admirers.

Many of these biographies resemble curricula vitae common in Western academic settings, a similarity that is not accidental. Clerics who hold academic appointments often explicitly label these biographies as an academic curriculum vitae (CV). Tellingly, some cleric websites store the cleric’s biography at a weblink called “CV” even when the biography is not explicitly labeled as such

Much like the relative standardization of academic CVs, a number of common elements appear in these biographies, and formatting is relatively important. Although some biographies are presented in paragraphs, most follow a more outlined, bullet-point style of a CV

¹See Reynolds (2001) for a discussion of historical biographical writing in Islam. See Khalidi (1973) for an introduction to biographical dictionaries, and Bulliet (1970) for some innovative uses of biographical dictionaries in quantitative history.

with standard categories: lineage, upbringing, education, teachers, employment, scholarly works, students, endorsements by other clerics, and (when relevant) death. There is some variation in the order and emphasis of these categories, but producers and consumers of these biographies appear to agree that these are the important things to know about a cleric.

To give a flavor of these biographies, I reproduce one in its entirety below, translated into English but with the formatting preserved to the extent possible. This biography is for the Saudi cleric Salih bin Fawzan al-Fawzan, and is posted on the website of the Saudi *dar al-ifta* (www.alifta.net) where al-Fawzan holds an appointment as a member of the Fatwa committee.²

Honorable Sheikh, Dr / Salih bin Fawzan bin Abd Allah al-Fawzan

From the Fawzān tribe of the people of al-Shamāsiyya, from the tribe of al-Dawāsir.

Occupation: Member of the Standing Committee and member of the Council of Senior Scholars.

Rank: excellent.

Date of appointment: 15/7/1412 H.

Positions: Associate Professor at the al-Imam Muhammad bin Saud Islamic University.

His upbringing and studies:

He was born in 1363 H and his father died when he was young, so he was nurtured and taught the Holy Quran by his family. He learned the principles of reading and writing at the hand of the Imam of the local mosque, an accomplished *Qārī* (Quranic reciter), Shaykh: Hamud bin Sulayman al-Talal, who eventually became the Judge in the town of Ḍarīa in the Qassim region.

He then attended the government school when it opened in al-Shamāsiyya in 1369 H, and completed his primary education in the al-Faysaliyya school in Burayda in 1371 H. He was appointed as a primary school teacher, then enrolled at the Scientific Institute of Burayda when it opened in 1373 H, and graduated in 1377 H. He enrolled at the College of Shariah in Riyadh and graduated in 1381, and then was awarded a Masters' degree in jurisprudence, and his Doctorate from the college, also in jurisprudence.

His employment:

²Available at <http://www.alifta.net/Search/MoftyDetails.aspx?Type=Mofty§ion=tafseer&ID=7>, accessed 12 March, 2013.

After his graduation from the College of Sharia, he was appointed as a teacher at the Scientific Institute in Riyadh. He transferred to teaching in the College of Sharia, then transferred to teach graduate studies in the College of Theology, then at the Higher Institute for Judges where he was subsequently appointed as Director. He returned to teaching there after the completion of his administration, and then was transferred to be a member of the Standing Committee for Fatwas and Scientific Research where he remains today.

Other activities:

The honorable shiekh is a member of the High Committee of Scholars, a member of the Jurisprudential Council of Mecca, and a member of the committee overseeing preachers during the Hajj. His also a member of the Permanent Committee for Fatwas and Scientific Research, and an Imam, preacher, and teacher at the mosque of Prince Mat'ab bin al-Aziz Al Saud in Malaz. He answers questions on the radio program (Light in the Path) and also participates regularly in scientific journals in the form of research, lessons, treatises, and fatwas, some of which are gathered and printed. He also supervises many theses at the masters and doctoral levels, and he has many students who continue to attend his lectures and lessons.

His teachers:

The honorable shiekh studied at the hands of many of the prominent scholars and jurists, among the most famous of them being Sheikh Abd al-Aziz bin Baz and Sheikh Abdallah bin Humayd, whose lessons he attended at the mosque of Burayda. Also, Sheikh Muhammad al-Amin al-Shanqiti, Sheikh Abd al-Rizaq al-Affifi, Sheikh Salih bin Abd al-Rahman al-Sakiti, Sheikh Salih bin Ibrahim al-Balayhi, Sheikh Muhammad bin Sabeel, Sheikh Abdallah bin Salih al-Khalifi, Sheikh Ibrahim bin Ubayd al-Abd al-Muhsin, Sheikh Hamud bin Uqala, and Sheikh Salih al-Aly al-Nasir.

He also studied under some of the Sheikhs of al-Azhar in Hadith, Tafseer, and Arabic language.

Scholarship:

The honorable Sheikh has many works, the most prominent of which include:

- 1 - *Hypothetical Investigations into the Investigation of Hypotheticals* (in inheritance law), masters thesis, one volume.
- 2- *Rulings on Eating in Islamic Law*, doctoral thesis, one volume.
- 3 - *Guidance to the True Belief*, small volume.
- 4 - *An Explanation of the Doctrine of Wasitiyyah*, small volume.
- 5 - *The Statement in which Some Writers have Sinned*, large volume.
- 6 - *A Collection of Lectures on Creed and Da'wa*, two volumes.
- 7 - *Sermons on Modern Occasions*, in four volumes.
- 8 - *From the Flags of Revival in Islam*.
- 9 - Treatises on various topics
- 10 - *A Collection of Fatwas on Creed and Jurisprudence*, taken from Light in the Path

and divided into four parts.

11 - *Criticism of the Book ‘The Permitted and the Forbidden in Islam’*

12 - *Of Sheikh Muhammad bin Abd al-Wahab - An Explanation of Kitab al-Tawhid*, textbook.

13 - *A Comment on what the Preacher Said Against Sheikh Muhammad Bin Abd al-Wahab*.

14 - *A Summary of Jurisprudence*, two volumes.

15 - *Commentary of the People of Faith on the Lessons of the Month of Ramadan*.

16 - *The Shining Light from the Holy Hadith of Mosques*.

17 - *A Statement of what the Hajj and the Umra do*.

18 - *Book of Tawhid*, two parts used at the secondary level by the Ministry of Education.

19 - *Fatwas and articles published in the Journal of Da‘wa*, published together as *The Book of Da‘wa*, and many books and scientific research and messages, including published and forthcoming works.

“We ask you O God on High to prosper him, and to make our noble Sheikh righteous in judgment as he listens and answers.”

While it is difficult for a single document to fully represent an entire genre, this is indicative of the information and style of presentation common to cleric biographies. A glaring observation is that this is in fact an academic curriculum vita, driving home the point that many clerics are academics. This biography is representative of many others. Clerics typically provide information in the broad categories covered by al-Fawzan: name, date and place of birth, childhood, education, teachers, academic and professional appointments, writings, and other activities. Not all biographies will have all of these elements — and some are exceedingly short indeed — but the ideal cleric biography reports on these elements.

In addition to writings from this genre of biographies, I also rely on biographical writings of other types that circulate on the web. In some cases, transcripts of interviews with clerics are available. In other cases, no public CV seems to exist for a cleric, and the only information available is a sentence or two on the website(s) where their writings are hosted. Some clerics seem to be quite prominent on the internet and yet do not have a biography available.

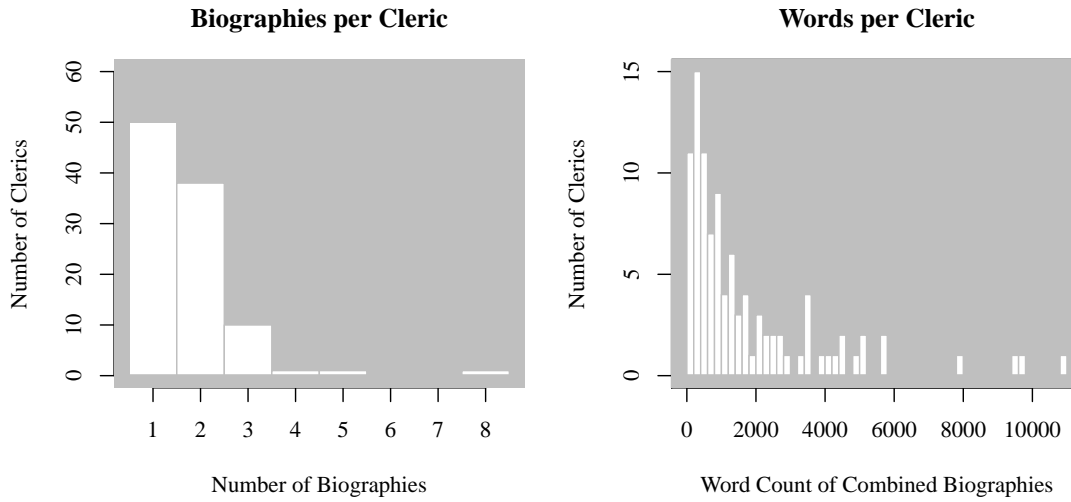


Figure 5.1: *The Amount of Cleric Biographical Information.*

The left panel shows a histogram of the number of biographies per cleric. The right panel shows the total number of biographical words for each cleric.

Collectively, my 101 clerics have 309 biographies posted on the internet. Some of these are repeat postings of the same biography, with little or no new biographical information, so I attempt to eliminate duplicates both for coding purposes and to accurately report the amount of biographical information I have about each cleric. To remove duplicates, I collect these biographies and automatically identify duplicated information by comparing the frequencies of bigrams (pairs of words in sequence) in each pairwise combination of biographies from the same cleric. If one document has more than 30 percent of its bigrams duplicated in another document, I count it as a duplicate. Although 30 percent may seem like an overly stringent cut-off, 30 percent identical agreement is actually quite high given that bigrams are sensitive to formatting changes. Some biographies are shorter excerpts from another biography. Where both biographies have mutual information, I retain the biography with more unique information (fewer identical bigram frequencies). I identify and remove 128

biographies as duplicates, leaving 181 unique biographies for my 101 clerics. A majority of clerics only have one unique biography, but some have more and one cleric has 8 distinct biographical segments (this is Ali al-Halabi who lists his biography in 8 parts on his website, so it is something of an artifact).

The length of these biographies varies substantially, from five to 57,838 words, with a median of 556 words). Figure 5.1 shows both the number of words devoted to each cleric in their combined biographies (only the unique ones) as well as the number of unique biographies per cleric.

5.2 Coding Biographical Information About Clerics

The intended purpose of these biographies is to provide information that lay Muslims use to evaluate clerics. Information about clerics is often requested on Muslim web-forums. For example, a post on the forum *Muntadiyat ya Hussayn* (www.yahosein.com) has the title “Who is Sheikh al-Ghazi” and asks

Through my search for information on the the sheikh, I did not find much, either because of my ignorance about searching on the internet or because I’ve found all that is written about the Sheikh.

I would like to find an answer to the subject and on the place of study of the sheikh. Is his exposition correct? And information on him generally.³

Another post on a different forum — *Forum of the Followers of the Islamic Messengers* (<http://www.ebnmaryam.com>) — asks a similar question.

Who is Sheikh Imran Hussayn? I heard two lectures by him about the false messiah and Gog and Magog. He is a Sunni, of the people of the Community, trained in political and religious culture, from Indian heritage and born in the

³Arabic available at <http://www.yahosein.com/vb/showthread.php?t=141010>, accessed 23 March, 2013.

country of Trinidad and Tobago. Is there any more information or an opinion of the brothers about this sheikh?⁴

This demand for cleric biographies creates strong incentives for clerics to provide biographical information. The availability of biographical information about clerics is crucial to my study; without cleric biographies, it would be extremely difficult to measure any of the factors in clerics' lives that I argue increase the risk of radicalization. However, the demand for cleric biographies also creates incentives for clerics to write their biographies in ways that may make measurement difficult. Cleric biographies have facts, but may also have a slant. Most are written as either positive self-representations by cleric, or positive representations from the perspective of a student or follower, although there are a few cases of negatively toned biographies written by detractors. For example, a detractor of Jihadist Abu Basir al-Tartusi created a "biography" of him that begins

1. He is dull in understanding and hollow in his knowledge.
2. He speaks very boldly despite not being welcomed by the people of Sunna and the Community.
3. He relies on the sayings of Sayyid Qutb, adding to them things dictated to him by the devil.
4. He lies about the scholars and mutilates their texts and distorts and omits some of their words.
5. He has declared *takfir* on the rulers and the ruled without any elaboration.⁵

However, these negative biographies are very rare. In general, the bias of biographies is that they exaggerate and flatter a cleric's accomplishments. As such, there is a certain politics to the writing and circulation of these biographies; it is essential to understand the dynamics governing these writings because the validity of the statistical findings depends crucially on the accuracy of the data derived from the cleric biographies.

⁴Arabic available at <http://www.ebnmaryam.com/vb/t190707.html>, accessed 23 March, 2013.

⁵Arabic available at <http://www.al-shaaba.net/vb/showthread.php?t=11261>, accessed 23 March, 2013.

In particular, clerics sometimes seem to write their biographies in ways that make them appear well-educated, influential, and pious (not dissimilar from CVs in other domains, with the exception of piety). It is not likely that clerics will include outright falsehoods in their biographies — the costs of getting caught with fraudulent credentials is quite high — but clerics may embellish the truth in fairly predictable ways. Where relevant below, I discuss how these incentives to embellish aspects of a cleric’s biography may affect my ability to measure characteristics of clerics. In most cases, my measurements are still accurate because I intentionally focus on characteristics of clerics that they are unlikely to fabricate.

Through close reading of these biographies (at least three readings of each biography), I collect a great deal of information about each cleric. These biographies allow me to measure the causes of cleric radicalization proposed by my theory: cleric *network quality* and *career paths*. I discuss the theoretical importance of each of these variables for the analysis and then describe how I measure each of them from cleric biographies.

Network quality

To assess the extent to which cleric network quality affects the adoption of Jihadi ideology, I use information in the cleric biographies to construct the educational network of the clerics. Connections to individual teachers are very important to clerics and having famous teachers appears to endow a sense of prestige and credibility. This creates incentives for clerics to list one or more specific mentors; of the clerics for whom I have biographies, 72 listed specific teachers, making it possible to construct the educational network of these clerics.

These connections are typically listed in a distinct section of a cleric’s biography, often under the heading “His Sheikhs.” In some cases, the section simply provides a bulleted list of teacher names. In others, the description takes a narrative form. To code network

connections, I simply record each of these teacher-student relationships. Some of the clerics provide information about the nature of their connection to each teacher, such as the subject of study or the time spent, but this practice is not general enough to be useful in my analysis.

Why do only 72 of the 101 clerics list teachers? I argue that it is safe to assume in most instances that failure to list a single academic advisor is an indicator that the cleric had no close academic advisor. It is difficult to verify this directly — it is not generally possible to independently verify most cleric biographies — but this assumption is defensible for several reasons.

First, clerics have every incentive to list advisors if they have them. The perceived quality of a cleric's training depends almost entirely on the perceived quality of their teachers. Teachers, even more than institutions, are the markers of educational prestige in Islamic education. Although there are a number of well-regarded institutions of Islamic higher education — al-Azhar University and the Universities in Saudi Arabia among them — it is widely recognized that these universities process a very large number of students and most are not of clerical quality. Thus, the incentive to list advisors is strong.

I argue that it is not typically the case that Jihadist clerics might be tempted to downplay or hide their connections to prominent teachers. Several facts support this assertion. At least some Jihadist clerics list establishment teachers which would be unlikely if it were harming their “Jihadi credentials.” For example, Hamud al-Shuaybi is a Jihadist (one of the few well-connected Jihadists), and he is not shy about listing his connections to establishment clerics such as Abd al-Aziz bin Baz. The reason that Jihadists will list these clerics as teachers, even when they disagree with the ideology of those clerics, is that having studied with prominent experts in the Islamic sciences endows credibility for the student. Studying *hadith* with Muhammad al-Albani — one of the greatest *hadith* scholars of the last century —

endows enough credibility that Jihadists will mention their studies with him while discussing particular *hadith*, while criticizing him elsewhere for his counter-Jihadi views.

A second reason that a biography does not list connections, despite the cleric being well-connected, is if the biography itself is rather incomplete. In the analysis that follows, I report results using all clerics, as well as only clerics with detailed biographies.

Even when clerics list some connections to teachers, it could be that clerics are strategically under- or over-reporting their connections. Much like academics in the West, Muslim clerics who falsified portions of their CV would face academic consequences. Dramatic overclaiming of connections is unlikely. However, some clerics do apparently feel compelled to “pad” their CVs a little, mentioning connections to famous scholars despite the actual scholarly interaction being brief and inconsequential. For example, Abd al-Rahman bin Abdallah al-Suhaym includes the following item at the end a list of mentors, “I met Abd al-Aziz bin Baz and asked him questions.” Similarly, there is a norm in some biographies of list ones closest advisors first, but other clerics list the most famous clerics first, even when these might not have been their most close advisors. This appears to be another subtle attempt to improve the quality of the CV. My sense from several close readings of each of the biographies is that these attempts to claim tenuous connections with prominent clerics are fairly obvious and generally not consequential for the analysis below.

Figure 5.2 shows the network of teachers and students. Gray arrows point from teachers to students. Colored nodes indicate clerics that have estimated Jihad scores, with darker shades of blue indicating lower scores and brighter shades of red indicating higher scores.

The specific feature of the network that I argue helps potential clerics get ahead is connection — specifically connections that help them obtain academic positions. For newly minted clerics entering the job market, more connections are helpful, but it is particularly

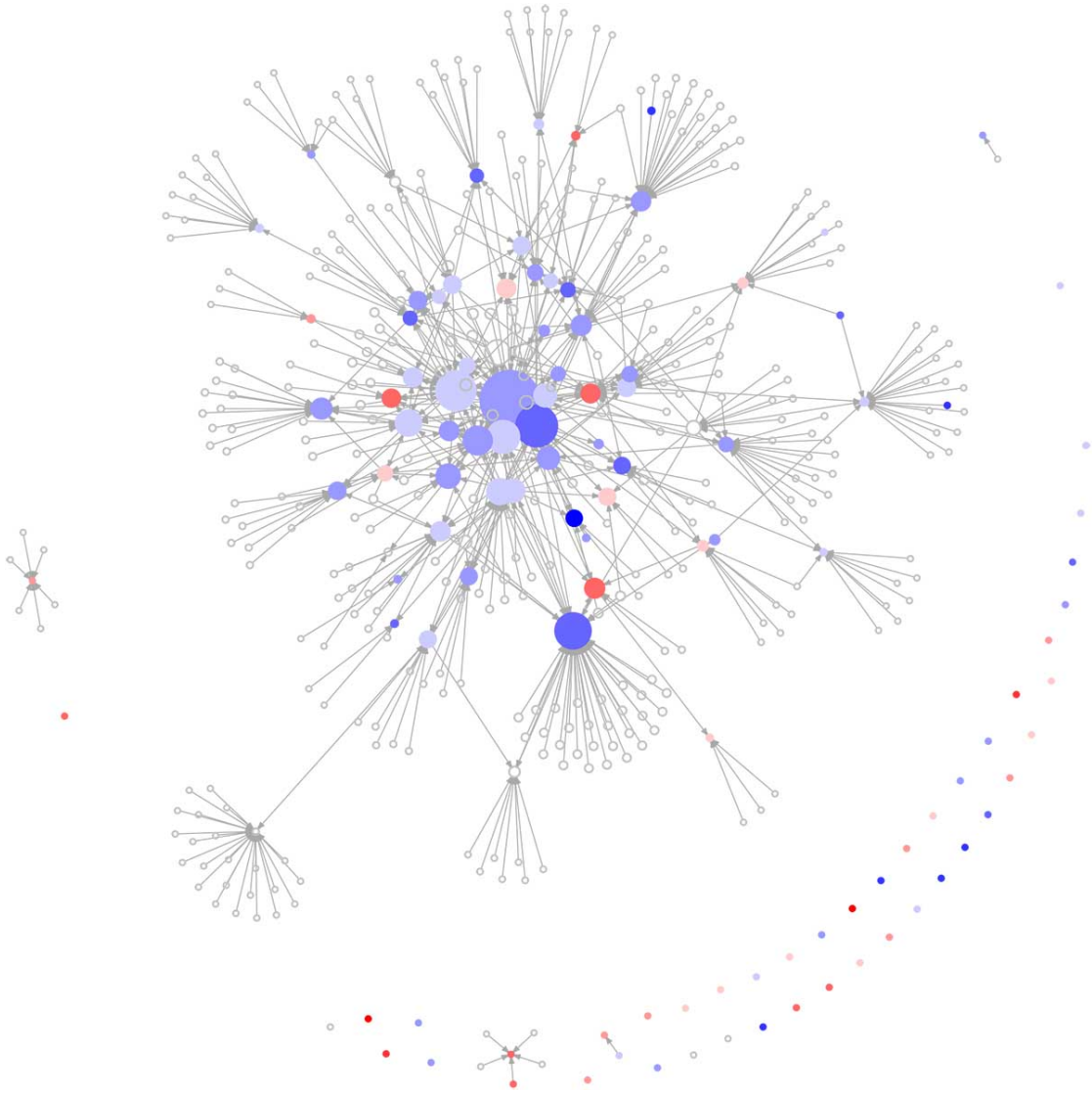


Figure 5.2: *An Educational Network of Clerics*

The network of teachers and students. Gray arrows point from teachers to students. Colored nodes indicate clerics that have estimated Jihad scores. Darker shades of blue indicate lower scores and brighter shades of red indicate higher scores. Node size indicates the eigenvector centrality of each cleric in the network.

helpful to be connected to well-connected teachers. It is these teachers with established networks themselves who can best advocate for their students to be appointed to particular positions. Thus, a young cleric will benefit from being more connected to well-connected

people.

The social network literature has developed a formal measure of exactly this type of connection, called *eigenvector centrality*. This measure formalizes the notion that the importance of each network node depends upon its connection to other important nodes, so clerics receive higher eigenvector centrality scores if they have many connections to teachers who are themselves well-connected. Hueristically, this metric assigns connectivity scores to each cleric in the network with higher weight to connections that are also high-scoring. The measure is called eigenvector centrality because each cleric's score will be equal to the largest set of eigenvectors that satisfy an eigenvector equation involving the adjacency matrix (the matrix denoting connections between clerics). The calculation itself does not provide much insight about the metric, so I omit it here.⁶ Rather, for intuition consider the network shown in Figure 5.2. Imagine starting at a random node on the graph and then traveling along the graph, following the edges to each of the nodes. At each decision to move to a new node, choose randomly among the available connections. After iterating this procedure many times, calculate the time spent at each node. This will be approximately the eigenvector centrality.

Career Paths. I expect that clerics who have better networks will be more likely to have successful careers inside the system of state-run religious institutions. Clerics who have prestigious appointments virtually always list them with their biographical information. These appointments include positions on religious councils, national ministries for the distribution of *waqfs* (Muslim trusts), national fatwa offices, and similar positions. I save the positions reported by each cleric and code whether the position is likely to be a state-funded position (knowing which positions are state-funded with absolute certainty is difficult); I denote these “insider” positions. My measure of career paths is simply the sum of state-funded positions

⁶See Newman (2010, chapter 7)

over the life-time of a cleric. Figure 5.3 shows the distribution of this variable for the 101 clerics in my analysis.

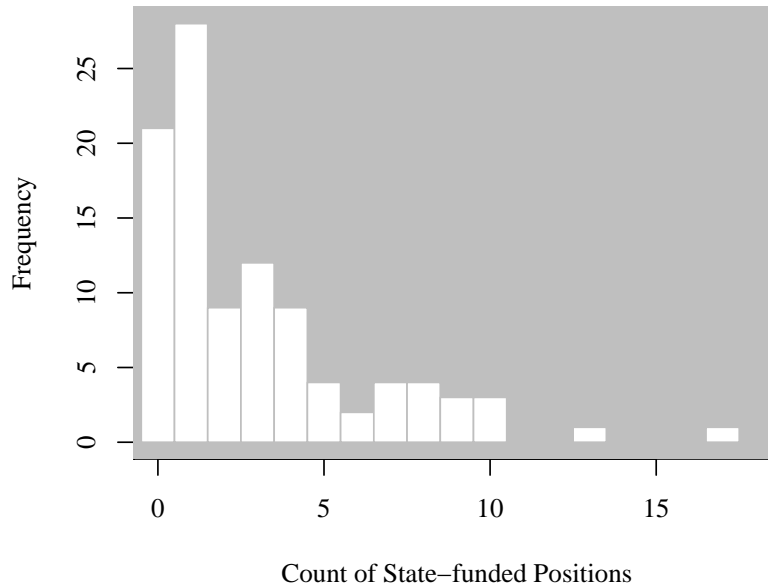


Figure 5.3: *The Distribution of the Count of State-funded Positions.*

This figure shows the histogram of the count of state-funded positions held by each cleric for the 101 clerics in my data set.

As with connections to teachers, the politics of CV writing come into play when clerics describe their careers, but mostly in ways that do not induce bias. The most prominent dynamic is that clerics sometimes list jobs they were offered but turned down, frequently giving reasons intended to highlight the pious humility of the cleric. The most problematic dynamic would if Jihadists systematically failed to report state-funded appointments because of the Jihadist suspicion of clerics who are close to political power. In practice, this does not seem to be the case. Jihadists who are known to have spent time in official positions report these positions in their biographies.

Control Variables

Several alternative explanations for cleric adoption of Jihadi ideology can also be tested to some extent using information coded from cleric biographies. In addition to control variables inspired by other theories, I also include several potential confounders that may influence both network quality and subsequent adoption of Jihadi ideology. This is because of the potential for selection, in which clerics with predispositions toward Jihadi ideology choose different kinds of networks. More generally, there may be some common cause of both network structure and subsequent ideology that will lead to non-causal correlation between network centrality and ideology if I do not condition on it.

Using the cleric biographies, I develop indicators of the alternative explanations discussed at the end of Chapter 3 and include them in the analysis.

Western exposure. I test whether exposure to the West is a plausible explanation for Jihadi ideology by coding whether a cleric mentions spending time in one or more of the advanced Western democracies during their formative years and education. I do not include time spent in the West after a cleric has already radicalized, and I also do not include the phenomenon of well-established clerics traveling to Western countries to give lectures or perform *Da‘wa* (missionary work) later in life. Ten of the 101 clerics have eligible Western exposure according to my definition. Conditioning on time in the West also controls for the possibility that Jihadi clerics have disproportionately spent time in the West and been disadvantaged when networking with teachers.

Religious ignorance. To test whether religious ignorance is a potential factor pushing some clerics toward Jihadi ideology, I use the information in cleric biographies to develop measures of religious knowledge. First, I code indicator variables for whether a cleric has (1) a master’s degree and (2) a doctoral degree in a subfield of the Islamic sciences. Fifty-four

percent of the 101 clerics have a master's degree, while 38 percent have a doctorate degree.

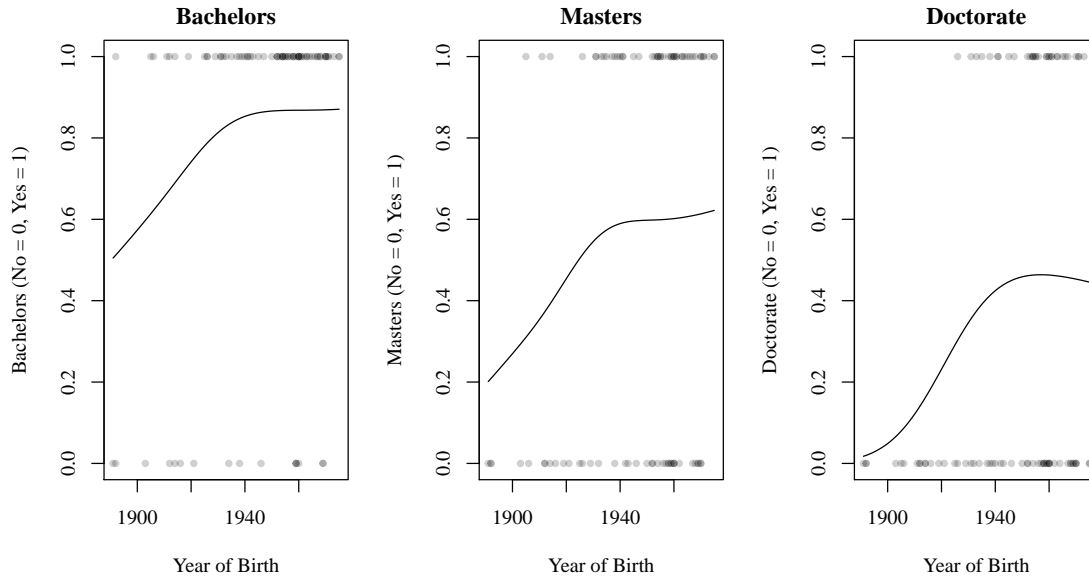


Figure 5.4: *Higher Education Attainment and Year of Birth.*

This figure shows the relationship between attainment of bachelors, masters, and doctorate degrees and cleric year of birth. A kernel regression fit is shown in black.

Because of the evolution of Islamic education over the lifetimes of these clerics, there are temporal trends in this data. Figure 5.4 shows the relationship between attainment of bachelors, masters, and doctoral degrees and the year of birth of each cleric. The probability of clerics attaining each type of degree is increasing over time for clerics born prior to 1935 (who would have started higher education in approximately 1955). For clerics born after 1935 (educated after 1955), the proportion of clerics attaining each degree appears to stabilize, with about 85 percent clerics gaining a bachelors, 60 percent of clerics gaining a masters, and 50 percent going on to obtain a doctorate.

Second, many clerics have memorized the Quran and list this fact in their biographies, along with some indication of the age at which they first completed the memorization.

Complete memorization of the Quran is greatly respected and conveys substantial religious credibility so any cleric who is a *ḥāfiẓ* (having memorized the Quran) has every incentive to indicate this among their religious credentials. Memorizing the Quran is culturally important because this was the way in which the Quran was first transmitted and remains an important symbol of mastery of the Quran.

What is the quality of this memorization? Clerics report spending substantial amounts of time on memorization; Sulayman bin Nasr al-Alwan has a biography which reports, “the sheikh was asked: How many hours do you spend reading these days? And he answered: I read more than 15 hours per day, divided between memorization, recall, and reading.” This focus on memorization has also spread to Islamic education more generally; Abd al-Rahman bin Nasr al-Barak has separate section of his website biography entitled “Memorizations” listing 9 books that the Sheikh has memorized.

Clerics themselves present Quranic memorization as evidence of their erudition, and particularly like to highlight the early age and great speed with which they completed the task. For example, Abd al-Rahman al-Dawsary’s biography states “It was amazing that he was able to memorize the entire Noble Quran in his seventh year, as he says himself (God have mercy on him): ‘I memorized the Noble Quran in two months. I cut myself off from people and locked myself in my library and didn’t come out except for prayers.’ ” The Quran is approximately 77,430 words,⁷ so this rate of memorization would be 1,290 words per day. On the other hand, some clerics are clearly honest about their memorization abilities, such as a cleric named Muhammad al-Hamud al-Najdi whose biography states that memorizing the Quran took him 15 years.

In my sample of 101 clerics, 36 percent mention memorizing the Quran. I assume that clerics who do not mention memorizing the Quran are less likely to have done so, and that

⁷See <http://www.mail-archive.com/comp-quran@comp.leeds.ac.uk/msg00223.html>.

clerics of all types are equally likely to report having memorized the Quran (although reporting is not necessarily 100 percent). Under these assumptions, reported Quranic memorization becomes a proxy for religious capital and intellect.

If clerics adopt Jihadi ideology out of religious ignorance, than I expect that clerics who have memorized the Quran and who have graduate degrees in theological studies will be less likely to adopt Jihadi ideology. Controlling for these measures of religious ignorance also rules out a selection story in which Jihadis have lower mental or religious ability and are thus rejected by the most central teachers.

Poverty. Cleric biographies rarely list any details about the material circumstances in which clerics were raised, so it is difficult to directly test the hypothesis that clerics who grew up in poverty are more likely to be Jihidist. As an extremely rough proxy, I measure the wealth of the country in which they were born (in GDP per capita) at the year of their birth, or at the earliest year for which there is recorded data (typically 1950). This roughly captures the economic milieu in which clerics were born and raised, but it cannot capture variation at the subnational or family level.

Measuring poverty accurately from cleric biographies is not possible. I did find some examples of clerics discussing their lack of material circumstances, but the apparent purpose was to demonstrate piety and humility, and the accounts often focused on periods later in life. For example, Abd al-Rahman bin Muhammad bin Qasim has a biography that relates the following story: “The Sheikh was a modest creature and reluctant and generous and he lived in a small house of clay inside his garden in a village called al-Amaria about 30 kilometers to the north of Riyadh. One day, King Saud visited his house and said to him: ‘We want to build you another house,’ but the Shaikh said: ‘I have built my house and enjoy returning to it’ – meaning that it was dear to him. This silenced King Saud.” If clerics are

choosing to remain poor, then poverty cannot really be a serious source of grievance.

Socialization. With the cleric educational network described above, I can test the argument that clerics primarily adopt ideologies similar to their teachers via a socialization process. Specifically, I measure *Teacher ideology* using the average Jihad scores of a cleric's teachers.

Cleric families. Some clerics have fathers, grandfathers, and other relatives who were also clerics. It may be the case that these individuals in "cleric families" have better networks than others because they inherit the network of their family member rather than having to develop a network on their own. If not accounted for, this dynamic could induce a selection effect by linking future clerics to more moderate networks early on and pushing them toward more moderate ideology. I code an indicator variable specifying whether a cleric mentions having a relative who is a cleric or, more specifically, taking theological instruction (often primary school and Quranic recitation) from a relative. Ten percent of the 101 clerics in my sample have cleric family members by this definition.

Religious primary school. In the Muslim world, religious and secular primary school systems often exist side by side. Parents may have many reasons for enrolling their children in one or the other, but an outcome of enrollment in religious primary school might be that clerics develop better education networks later in life because they are able to forge early connections with clerics in their primary school. I code (to the extent possible) whether each cleric was enrolled in religious or secular primary school. This particular fact is included in many biographies but not all, since it is not particularly central for establishing a cleric's religious authority. This means that the variable *religious primary school* is inevitably measured with a non-trivial degree of error.

Potential Unmeasured Confounders

There are several plausible processes through which such a selection effect might occur, some of which cannot be effectively accounted for with the information available. It could be the case for some clerics that Jihadi ideology is developed well before the cleric begins to express it in their writing. If future clerics who have already radicalized are less inclined to form connections with teachers, or choose less central teachers, this could induce the correlation between networks and ideology that I find below. Alternatively, teachers may choose not to take on students who show early signs of radicalization. All of these alternative mechanisms hinge on the possibility that radicalization happens prior to network formation rather than after, as I argue.

Ideally, I would account for this by conditioning on a baseline measure of the ideology of each cleric prior to their entry into the cleric educational network. Unfortunately, this is not available, because I do not have measures of ideology independent of cleric writings. Accounts of the early predispositions of clerics are not particularly credible because clerics and their followers may selectively report the past in order to show that a particular cleric was “born” for Jihad. Without any way to measure early ideology, it is difficult to say whether Jihadi clerics might have shown early evidence of radicalization that affected their network connections.

The circumstantial evidence is mixed about whether budding Jihadists might select less connected networks than other clerics. Some critics of Jihadists claim that this is the case. For example, a cleric named Abd al-Malik al-Ramadani al-Jazairi criticizes Jihadist Abu Qatada (who he calls Aboo Qataadah) as having avoided central scholars.

Firstly this man, as you know, did not study at the hands of the scholars meaning that he did not study with any of the people of knowledge. Even though

he was in Jordan at the time when Shaykh Muhammad Naasirudeen al-Albaanee (*rabeemahullaah*) was present ...yet I never saw this man (Aboo Qataadah) if he erred, come to see the Shaykh. I never ever saw him do this at all. He (Aboo Qataadah) used to stay from being present in the gatherings of the Shaykh as Aboo Qataadah used to stay away from the gatherings of the people knowledge (al-Jazairi 2007, 13-14).

However, this account should be viewed critically because it is part of a larger hit-piece criticizing Abu Qatada on every score imaginable.

Jihadists themselves show an ambivalence toward connections with the most central clerics. On the one hand, Jihadists like Abu Muhammad al-Maqdisi criticize these clerics and those who associate with them. On the other, Jihadists treat these clerics with a degree of reverence, and urge their students to read, understand, and follow many of their works. A striking example of this is a syllabus created by Jihadist Hamid al-Ali that is included in the Jihadist's bookbag collection and gives instructions for a 10-year period of study. One might expect a Jihadist program of study to focus on Jihadi authors. Instead, this document indicates that even Jihadists study the establishment scholars in the domains where they are recognized experts. The first reading assignment on the syllabus is a book by establishment cleric Ibn Uthaymeen, and overall, readings by modern establishment clerics appear to vastly outweigh readings by Jihadists (Jihadist works assigned include those by Safr al-Hawali, Muhammad Qutb, and Hamid al-Ali). This conforms to a broader pattern I sensed, both in reading cleric biographies and while interviewing students at Al-Azhar university: students who wish the highest level of knowledge must be willing to study from the recognized experts regardless of differences in ideology.

There could also be bias in the educational networks that clerics report in their biographies; perhaps Jihadis are equally connected to prominent clerics but choose not to report these connections because it undermines their Jihadi credentials. In this case, propensity

to accurately report network connections would be a confounding variable. I have already discussed evidence that this is not case in the section on measuring network connections above. While it is difficult to be sure that such reporting bias does not exist, Jihadi clerics do have substantial respect for the scholarly status of the top establishment Salafis. Jihadis that report studying with them play up this credential in their biographies, suggesting that Jihadis who have prominent connections report them. The reason is that Jihadists know that connections with famous clerics offer legitimacy. For example, in a video urging the release of Jihadist cleric Nasir al-Fahd from prison, a supporter attempts to promote his image as a serious scholar by saying “He had many sheikhs, so he’s not a drive-by sheikh; the ones who pop up suddenly on Youtube.”⁸

A slightly different but related observation is that Jihadists seem moderately obsessed with attempting to show that the establishment clerics are really on their side, but cannot admit it publicly. In the introduction to one of the editions of *The Defense of Muslim Lands*, Jihadist Abdallah Azzam writes of how he presented a draft of the work to a number of establishment scholars:

I wrote this Fatwa and its was originally larger than its present size. I showed it to our Great Respected Sheikh Abdul Aziz Bin Bazz. I read it to him, he improved upon it and he said “it is good” and agreed with it.

Then I showed this Fatwa, without the six questions at the end, to the peers of Sheikh Abdullah al Waan, Saeed Hawa, Mohammed Najeeb al Mutyey, Dr. Hassin Hamid Hissan and Umar Sayaf. I read it to them, they agreed with it and most of them signed it. Likewise, I read it to Sheikh Mohammed Bin Salah Bin Uthaimin and he too signed it.

This suggests that Jihadists do not, as a rule, select out of networks of establishment clerics.

Finally, it is possible that Jihadi clerics share some personality trait that makes them

⁸English video available at http://www.youtube.com/watch?feature=player_embedded&v=I6zZ5-uJFmY#t=102s, accessed 25 March, 2013.

less likely to connect with teachers and more likely to adopt the Manichean world-view of militant Jihad. Ideally, I might control for personality factors, but I have not identified any way to accurately measure them. Although it might seem intuitive that Jihadi ideologues are more inclined to be loners, lack social skills, or have unpleasant personalities, this does not match with anecdotal accounts. For example, Usama bin Laden was famously charismatic. However, it is currently impossible to systematically measure the personality traits of the 101 clerics in my study.

5.3 Findings

In this section, I present the results of a number of statistical models using the variables I have just measured. I start by showing that there is a bivariate correlation between centrality, appointments to state-funded positions, and Jihad scores. I then present more complex models that confirm the basic relationship and give stronger evidence that the relationship is causal, not just descriptive.

5.3.1 Bivariate Correlation

First, I demonstrate that strong bivariate relationships exist between network centrality, insider career paths, and adoption of Jihadi ideology. Although this simple regression of Jihad scores on centrality and insider appointments does not account for potential confounding, it does demonstrate the fundamental correlation that persists through all of my increasingly advanced statistical tests.

The left panel of Figure 5.5 shows the relationship between each cleric's eigenvector centrality in the education network and their Jihad score. I find a positive correlation

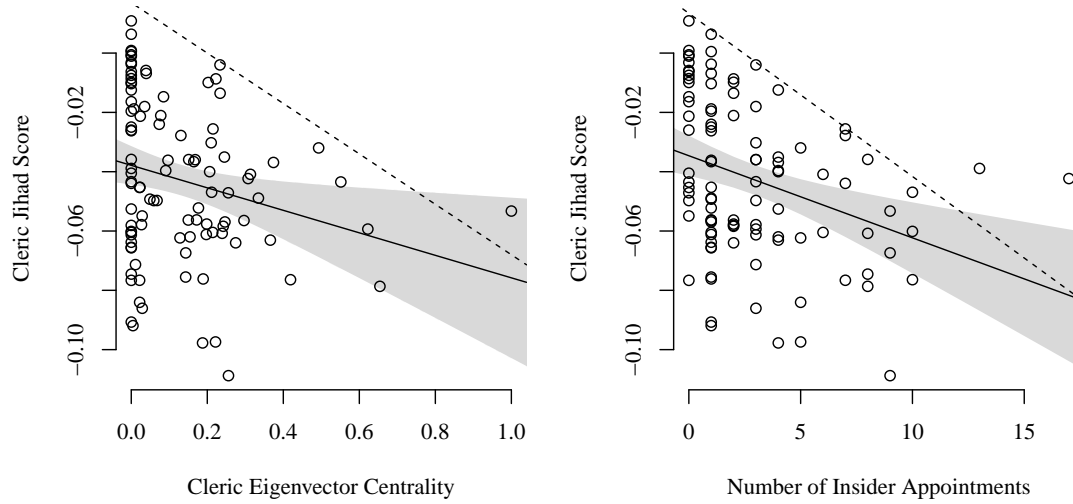


Figure 5.5: *Correlation Between Networks, Insider Appointments, and Jihad Scores*

The left panel shows the correlation between cleric eigenvector centrality in the educational network (x-axis) and cleric Jihad Scores (y-axis) with the regression fit and 95% confidence interval shown in gray. The right panel shows the correlation between the number of “insider” appointments for each cleric (x-axis) and their Jihad Score (y-axis), with the regression fit and 95% confidence interval shown in gray. The dashed lines separate regions of the figure where many observations fall from regions where virtually no observations fall; this is suggestive evidence that (lack of) centrality and insider appointments may be necessary, but not sufficient for a high Jihad score.

between these two that is statistically significant ($p = 0.015$). Substantively, the bivariate relationship is moderate — an increase from the minimum eigenvector centrality to the maximum only changes the predicted Jihad score by about a standard deviation. The right panel of Figure 5.5 shows a scatterplot of cleric Jihad scores by the number of insider (state-funded) positions each cleric has held. The regression fit indicates a statistically significant relationship ($p < 0.001$) that is moderate in substantive terms. The model estimates that changing from 10 insider positions to none would change the predicted Jihad score by slightly more than a standard deviation.

Interestingly, both scatterplots could be interpreted as support for the hypothesis that centrality and insider appointments are necessary conditions for Jihadist ideology. Both

scatterplots are characterized by regions that are heavily populated with observations and regions that have virtually no observations. These regions can be approximately demarcated with diagonal lines, plotted as dashed lines in Figure 5.5. Although I advanced my theory in probabilistic terms, this pattern could be evidence of a set of necessary conditions for a high Jihad score. In particular, the evidence is consistent with the claim that the highest levels of Jihadi ideology are only possible for clerics with no network connections and no insider appointments. As connections and appointments increase, the maximum observed level of Jihadi ideology appears to decrease systematically and almost linearly. At the other end, clerics who have eigenvector centrality above the 80th percentile (0.21) all fall well below the approximate threshold between Jihadist and non-Jihadists (at a Jihad score of about -0.022). A similar relationship exists between the maximum observed value of Jihad scores and the number of appointments.

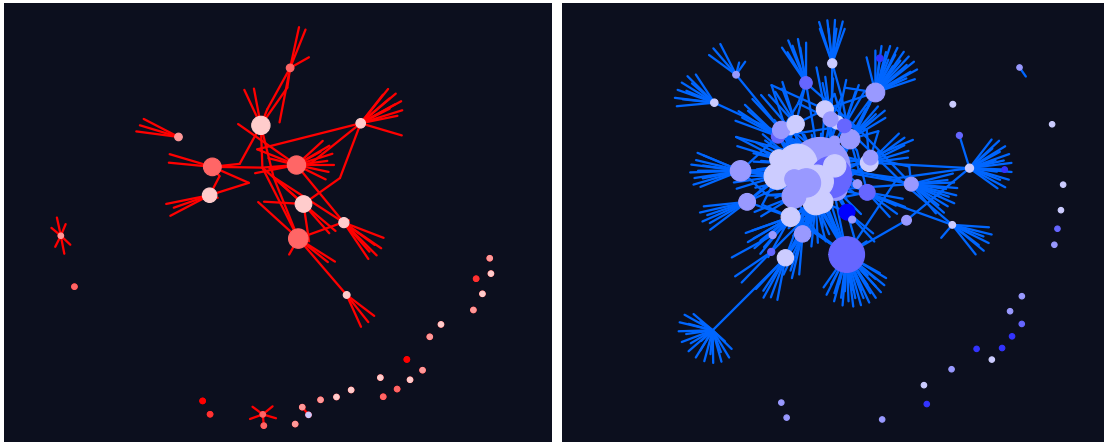


Figure 5.6: *Educational Networks of Jihadists and non-Jihadists*

The network of teachers and students, separated into Jihadi clerics (red) and non-Jihadi clerics (blue). Colored nodes indicate clerics that have estimated Jihad scores. Darker shades of blue indicate lower scores and brighter shades of red indicate higher scores. Node size indicates the eigenvector centrality of each cleric in the network. The network layout is the same as in Figure 5.2.

The bivariate correlation between the quality of educational networks and adoption of

Jihadi ideology can also be seen in the raw structure of the network. Figure 5.6 shows the educational network of the 101 clerics in my statistical models, divided into Jihadi (red) and non-Jihadi (blue), with their connections mapped (following the same network layout as Figure 5.2). The red graph showing the educational network of the Jihadi clerics has far fewer connections than the blue graph showing the network of non-Jihadi clerics, indicating less dense connection among Jihadi clerics, fewer connections to the networks of non-Jihadis, and fewer teachers in general.

In combination, centrality and appointments provide even more accurate predictions of cleric Jihad scores. To show this simply, I dichotomize each of the continuous variables, defining clerics as either high or low centrality, career insiders or outsiders, and Jihadist or not. This allows me to present the results of the interaction between centrality and appointments in a two-by-two table, shown in Figure 5.7.

	Outsider Career	Insider Career
Limited Network	72% 18/25	10% 1/10
Extensive Network	28% 7/25	17% 7/41

Figure 5.7: *Percentage of Jihadi Clerics by Network Centrality and Career Path*

This is a two-by-two table where the cell values are the percentage of Jihadi clerics, the rows show whether clerics have limited or extensive networks, and the columns show outsider versus insider career paths.

As my theory predicts, I find that clerics with limited networks and outsider career paths are by far the most likely to become Jihadist. Seventy-two percent — or 18 out of 25 — in this cell of the table become Jihadist. In contrast, clerics that follow the alternative pathway I theorize from well-connected networks to insider careers are much less likely to become Jihadist, although 17 percent do. Clerics who are well connected but have outsider careers or vice versa, are also relatively low. This suggests that having few network connections and an outsider career enables clerics to adopt Jihadi ideology at high rates. If either of these conditions does not hold, then the risk of Jihadism falls dramatically.

5.3.2 Regression Analysis

Next, I estimate more complicated regression models predicting the same set of outcomes as the previous section, but with covariates included. I find that after controlling for other factors, centrality predicts lower expressed Jihadi ideology, centrality is strongly predictive of more state-funded appointments, and a higher number of appointments predicts lower expressed Jihadi ideology.

In the first model, the key predictor of interest is each cleric's network centrality in the cleric educational network. This regression estimates the total effect of network centrality on the variable Jihad score. In the second model, I estimate the effect of network centrality on an intermediate variable in my proposed causal chain: the number of insider appointments. A third model estimates the total effect of insider appointments on Jihad scores, with network centrality among the covariates. Collectively, these three models give a strong sense that networks influence Jihadi radicalization and that at least some of the effect flows through the mechanism of career paths, but to directly infer this is a violation of the product and difference fallacies (Glynn 2012).

In all three models, I control for the covariates described above: cleric family, *ḥāfiẓ* status, religious primary school, master’s degree, doctoral degree, Western exposure, and GDP per capita of the cleric’s home country in the year of their birth. I also control for the average Jihad scores of each cleric’s teachers in some specifications, but this decreases the sample size from 101 to 54 and substantially decreases the precision of my estimates. Almost half of the clerics in my data set are missing this variable, either because they do not list any teachers or because I was not able to obtain texts to measure the teachers’ ideologies. I do not attempt to impute values for these because they are certainly not missing at random, and for those that have no teachers, there is actually no teacher ideology to impute.⁹

With these covariates, I start interpreting the models causally, although this interpretation depends crucially on my assumption that there are no unmeasured confounders. If this assumption does not hold, the models can still be interpreted predictively, as a description of patterns in the data. I use regression with bootstrapped standard errors, with 200 bootstrapped samples of the data set.¹⁰

Figure 5.8 presents the results of the first set of regression predicting Jihad scores as a function of eigenvector centrality.¹¹ These models answer the question: What is the total average effect of network centrality on Jihadi ideology?

The first model excludes the measure of teacher ideology, while the second includes it. The outcome is continuous, so the raw coefficients are interpretable, but the Jihad scores themselves are not particularly meaningful because the scores are on an arbitrary, unitless scale. To ease interpretation, I have standardized the coefficients in Figure 5.8 so that they can be interpreted as follows: “a one standard deviation change in x predicts a β standard

⁹This is essentially an issue of principal stratification (Frangakis and Rubin 2002).

¹⁰This is about the minimum number of bootstraps that is recommended (Efron and Tibshirani 1993). The reason for 200 rather than, say, 1000 bootstrapped samples is computational: the block bootstrap of the words in each document is quite computationally intensive.

¹¹These results are almost identical if I use degree centrality instead of eigenvector centrality.

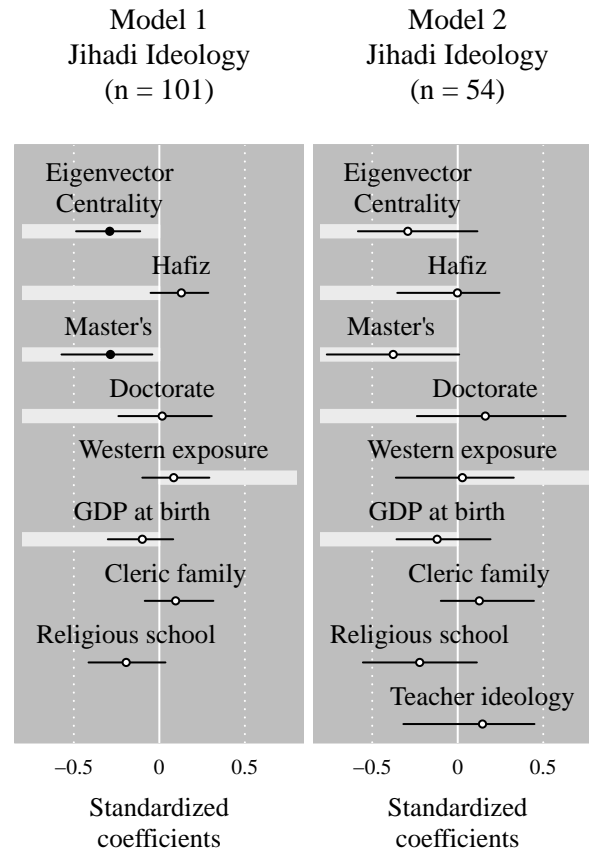


Figure 5.8: *Regression Models Predicting Jihad Scores*

The standardized coefficients of two regression models predicting cleric Jihad scores. Point estimates are represented by points with 95% confidence interval bands. Statistically significant changes have filled disks, while statistically insignificant changes have open disks. For variables about which my theory (or an alternative) makes a prediction, I highlight the region that the theory predicts in lighter gray to show which hypotheses are supported by the models. Note that including the variable *Teacher ideology* decreases the sample size from 101 to 54 because *Teacher ideology* is not defined for clerics who fail to list teachers in their biography.

deviation change in y.”

I find that clerics who are more central in the network are substantially less likely to adopt Jihadi ideology. According to the model, if a cleric moves from the 25th to the 75th percentile of *Centrality*, their predicted Jihad score increases by 0.01, or by .58 of a standard deviation. Looking at a slightly different contrast, the model estimates that a one standard

deviation change in network centrality¹² causes a (roughly) 0.3 standard deviation change in Jihad score. Substantively, this means that a cleric who moved about 30 spaces up the list of well-connected clerics will move down the list of Jihadists an average of 8.6 spots. This is relatively modest movement, but depending on where the cleric starts, it could be enough to move a cleric from borderline Jihadist to non-Jihadist.

Model two in Figure 5.8 re-estimates the same model using only the 54 observations that have observed values for *Teacher Ideology*. In this model, all of the coefficients lose significance, meaning that none of the theoretically motivated variables are statistically significant predictors of Jihadi ideology. However, I do *not* take this as substantial evidence against my theory. A careful comparison of the coefficients on eigenvector centrality in models one and two shows that they are essentially the same in these two specifications. The loss of statistical significance comes from changes in the standard error of eigenvector centrality rather than changes to the estimate. This suggests that the primary effect of including *Teacher Ideology* is to reduce the sample, rather than correct a biased *Centrality* estimate. I confirm this by simulation; if I re-estimate the bootstrapped standard errors in model one with only 54 observations per bootstrap, the confidence interval is (-0.14, -0.07), making the effect estimate statistically insignificant. This, in combination with the fact that *Teacher Ideology* does not have a strong relationship with the outcome variable in a propensity score model, strongly suggests that the loss of statistical significance is due to sample size rather than bias reduction.

Most of the alternative explanations for cleric radicalization find no empirical support. Clerics are not more likely to adopt Jihadi ideology after spending time in the West, or if their respective countries of origin were poorer at the time of their birth. There *is* evidence that clerics with a Masters degree are less likely to become Jihadist, although there is not

¹²The standard deviation of eigenvector centrality is 0.17.

similar effect of having a doctorate. This provides some evidence that clerics with fewer credentials may be more likely to become Jihadist, although the other measures of religious and academic ability — a doctorate and reported memorization of the Quran — do not have similar effects.

Another way of modeling the relationship between *Centrality* and Jihadism is to dichotomize the cleric Jihad score, replacing it with a binary variable indicating whether each cleric is above some threshold of Jihadi ideology. The choice of the cut-point is somewhat arbitrary. I select a cut-off of -0.022 — around the 75th percentile — which codes the 27 top-scoring clerics as Jihadi and the remainder as non-Jihadi.

The model predicts that a cleric with eigenvector centrality at the 25th percentile (and other variables set at their medians) has a 32 percent chance of being Jihadist, while the same cleric with centrality at the 75th percentile has only a 7 percent chance of being Jihadist. This is a 26 percentage point change, with a confidence interval between 8 and 52 percentage points — highly statistically significant. To put this finding in more concrete terms, I consider Abu Basir al-Tartusi who has the fifth highest Jihad score of the 101 clerics and has no connections in the network. The model predicts that he has a 60 percent chance of being Jihadist, given his covariates (meaning that roughly half of the clerics who fit his covariate profile will be Jihadist). However, when I simulate predictions for this same cleric while changing his centrality score from the 1st to the 75th percentile, the model now predicts that he would have only an 18 percent chance of being Jihadi. This change would move him from being one of the most outspoken advocates of Jihad to simply being a relatively conservative Salafi with few, if any, Jihadist leanings.

These results suggest that cleric educational networks are key drivers of Jihadi ideology, but not because they facilitate the spread of ideology from teachers to students. Rather, the

structure of the network itself is important. Clerics who are well-connected are much less likely to adopt Jihadi ideology than their less-networked peers.

Next, I move to two regressions showing an empirical link from *Centrality* to *Insider Appointments*. These models answer the question: What is the total effect of eigenvector centrality on insider appointments.

The outcome variable is the count of insider (state-funded) appointments held by each cleric. For simplicity, I model this using linear regression, treating the count as if it were a continuous variable. This is for convenience; it makes the regression coefficients more interpretable. I get very similar results using a negative binomial generalized linear model — more appropriate for response variables that are counts — so I am confident that modeling the outcome as continuous is not problematic.

The key result of models 3 and 4 in Figure 5.9 is that *Eigenvector Centrality* is a strong predictor of insider career appointments. The estimated effect is statistically significant in both specifications and the coefficient remains stable whether or not I include *Teacher ideology* (thus dropping 47 observations). Figure 5.9 shows standardized coefficients so that the magnitudes are comparable; *Eigenvector centrality* is the strongest predictor of insider appointments in the models. The unstandardized coefficient on *eigenvector centrality* in model 3 is 1.90, meaning that a move from minimum to maximum centrality would likely result in approximately two additional insider appointments. This may sound small, but 21 percent of my 101 clerics have no insider appointments and another 27 percent have only one insider appointment over their lifetimes, so a 2-position increase would dramatically alter the arc of their careers. The coefficient in model 4 implies a similar effect size.

Next, I take the outcome variable from models 3 and 4 and include it as a predictor in a modified version of models 1 and 2. These new models (5 and 6 in Figure 5.10) answer the

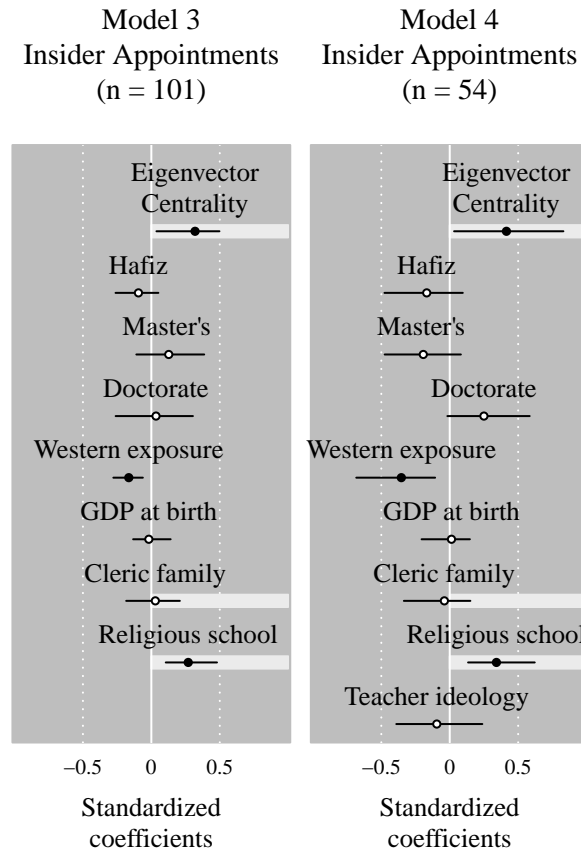


Figure 5.9: *Regression Models Predicting Insider Appointments*

The coefficients of two regression models predicting cleric insider appointments. Point estimates are represented by points with 95% confidence interval bands. Statistically significant changes have filled disks, while statistically insignificant changes have open disks. For variables about which my theory (or an alternative) makes a prediction, I highlight the region that the theory predicts in lighter gray to show which hypotheses are supported by the models. Note that including the variable *Teacher ideology* decreases the sample size from 101 to 54 because *Teacher ideology* is not defined for clerics who fail to list teachers in their biography.

question: What is the average effect of insider appointments on Jihadi ideology?

The results of models 5 and 6 in Figure 5.10 suggest that career paths strongly condition Jihadist ideology. I find that an increase of one insider position is associated with a -0.0016 increase in Jihad score, which is moderate. Substantively, a cleric who increases from the 25th percentile (1 insider position) to the 75th percentile (4 insider positions) decreases Jihad

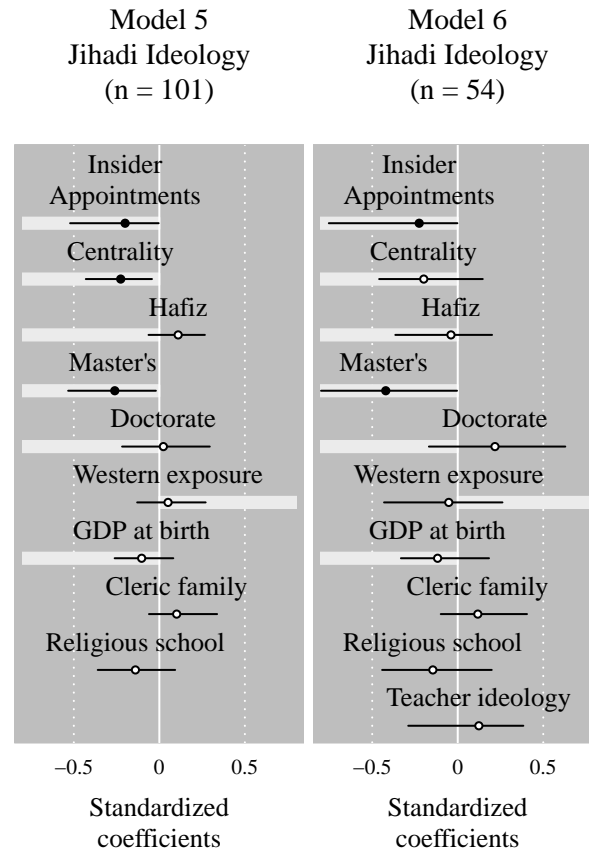


Figure 5.10: *Regression Models Predicting Jihad Scores, Conditioning on Insider Appointments*

The coefficients of two regression models predicting cleric Jihad scores. Point estimates are represented by points with 95% confidence interval bands. Statistically significant changes have filled disks, while statistically insignificant changes have open disks. For variables about which my theory (or an alternative) makes a prediction, I highlight the region that the theory predicts in lighter gray to show which hypotheses are supported by the models. Note that including the variable *Teacher ideology* decreases the sample size from 101 to 54 because *Teacher ideology* is not defined for clerics who fail to list teachers in their biography.

scores by -0.005. This means that the average cleric would be expected to move 5 spots down the list of the most-Jihadist clerics following this three unit increase.

All of the results above are robust to several alternative modeling choices. First, I have tested whether dichotomizing the key theoretical variables — centrality, appointments, and Jihad scores — leads to different conclusions. The results with these dichotomized models

are similar to the results of the models using the continuous variables.

Another concern is that some of the biographies are short and provide insufficient information about particular clerics. I have assumed that failure to list academic advisors indicates a lack of advisors, but this assumption is most plausible for clerics who have detailed biographies where the absence of advisors is conspicuous. Some clerics have only small amounts of biographical material, so I am concerned that perhaps this is biasing my results. I re-estimate each of the models dropping any clerics who have less than 200 words of biographical information. The results get stronger, both substantively and in terms of statistical significance. This suggests that, if anything, measurement error due to insufficiently detailed biographies is dampening the magnitude of the coefficients on *eigenvector centrality* and *insider appointments* as predictors of Jihadi ideology.

5.3.3 Extensions

In this section, I consider several extensions and alternatives to the models of the previous section. Specifically, I analyze the same data using matching and I reanalyze the data as a case-control study. Finally, I present some related analysis on the propensity of Jihadi clerics to go to prison.

Matching

Matching methods have been used in a variety of fields to improve causal inference (Rubin 1973; Rosenbaum and Rubin 1983; Ho et al. 2007). Matching is a procedure for preprocessing a data set in a way that makes a subsequent analysis of the data more likely to recover causal estimates. Most matching procedures identify units that receive a treatment condition (of interest to the researcher) and match them to the most similar unit that received a control

condition. Units that do not have adequate matches in the opposite treatment condition are removed from the data set in a process called pruning. In essence, matching attempts to take an observational data set and identify regions of the data that are similar enough to be analyzed as if they came from an experiment.

If units match exactly, then no assumptions are necessary to conclude that paired observations are similar. Otherwise, matching requires assumptions about how to best characterize proximity. Disagreements about how to best construct matched data sets have given rise a host of different matching methods. However, exact matching remains the gold standard for analysis.

I use a matching method called coarsened exact matching (CEM) (Iacus, King and Porro 2012) because it has good performance relative to many other matching methods and offers the possibility of discovering exact matches, if exact matches are available. The CEM algorithm proceeds by coarsening each matching variable — the control variables in the regressions above — so that each variable consists of a set of ordered categories. Then, each unit is matched to all other units that share the same values of all of the coarsened matching variables. Units that do not share the same values with at least one unit of the opposite treatment condition are pruned from the data set. The variables are then un-coarsened and the matched data can be analyzed in a variety of ways, but usually through weighted least squares regression.

In general, matching requires substantially fewer assumptions with binary treatment variables, so I dichotomize *Eigenvector Centrality* into a binary indicator for *High Centrality*, where clerics are coded as low centrality if their centrality scores are in the bottom 1/3 and high centrality otherwise. The results are robust to many alternative cut-points (see below).

I apply CEM with coarsenings that enforce exact matching on all but one of the variables.

In the subsequent matched data set, the only remaining clerics are identical in terms of having a family member as a teacher, reporting *ḥāfiẓ* status, attending religious primary school, obtaining a Masters or Doctorate degree, and spending time in the West. I do not match the GDP per capita of cleric's home countries at birth because this measure is continuous, appears to be irrelevant, and can be adequately controlled in the least squares regression used to estimate the average treatment effect.

Encouragingly, 74 of the 101 clerics remain in the exactly matched data set: 45 of 66 high-centrality clerics and 29 of 35 low-centrality clerics are retained. This is a remarkably high degree of balance for an observational data set and provides confidence that the regression estimates in the previous section may in fact be close to the true causal effects. Using the matched dataset, I estimate the effect of (dichotomized) network centrality using regression with each of the control variables. The estimated effect is -0.017, which is almost double the magnitude of the effect estimated without matching above. However, these effects are not directly comparable because the pruning process of CEM changes the estimand by omitting treated units that cannot be matched. Substantively, this estimated effect is very large. A cleric who changes from low centrality to high centrality would move 18 places down the list of most Jihadi clerics. This is enough to move many clerics from strongly Jihadi to strongly non-Jihadi, depending on their initial ideology.

The matching relies on my decision to dichotomize network centrality at an arbitrary cut-point. Figure 5.11 shows that the results are robust to many, though not all, of the possible cut-points I could have chosen. I consider 20 cut-points corresponding to the 5th percentile, 10th, 15th, and so on. Twelve of these twenty cut-points produce estimates that are statistically distinct from zero. All of them have a negative coefficient, suggesting that the choice of cut-point is consequential but most reasonable cut-points give similar answers.

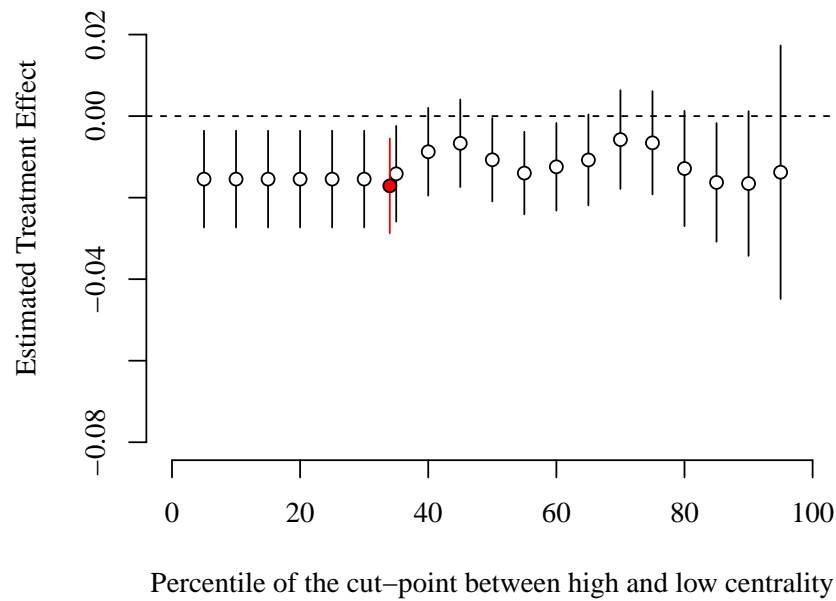


Figure 5.11: *Average Treatment Effects with Alternative Cut-offs for Defining Treatment and Control*

The estimated average treatment effects from CEM followed by weighted least squares using different cut-offs to dichotomize treatment and control. The cut-off I use in the analysis above is shown in red.

Case-Control Design

It may be the case that parts of my data collection process induce bias in the estimates of the previous sections. The most serious threat to inference is induced by the fact that I collected clerics from sources that gave some indication about their likely ideology. In particular, I purposefully selected a number of Jihadists from lists compiled by McCants (2006) and Brachman (2009), meaning that my data set probably over-represents the number of Jihadists.

The problems potentially induced by my data collection could be accounted for by using a case-control design, common in the medical literature. Case-control studies are typically

used to study diseases that are rare enough that random samples of the population typically include very few cases of the disease. To overcome this problem, a researcher using a case-control sampling procedure first selects a number of “cases” — individuals that have developed the disease. The researcher then samples a number of “controls” who have not developed the disease but are similar on some background covariates. Both sets of units *must* be sampled without respect to the proposed causal variable of interest — the “risk factor” in the parlance of case-control studies. The analyst then compares the relative rate of the proposed risk factor in the cases and controls, usually via logistic regression. The absolute magnitude of the coefficients is not informative because of the sampling procedures, but the odds ratio *can* be interpreted, and depending on the covariates, can be interpreted causally (Holland and Rubin 1988).

My sampling procedures are inadvertantly the same as the sampling strategy for a case-control design. Although I did not intend to use this style of analysis from the outset, it may be that this is a more appropriate and cautious way to analyze the data.

To aid in the interpretability of the results, I dichotomize the key theoretical variables: network centrality, insider appointments, and Jihad scores. Jihad scores must be dichotomized in order to fit the paradigm of “cases” and “controls;” I split the continuous Jihad scores at -0.022 such that the 27 most Jihadi clerics are considered “cases” with the rest “controls.” I dichotomize network centrality such that clerics with the bottom third of centrality scores are coded as low centrality with the rest coded as high centrality. I split the count of insider appointments such that those with two or fewer appointments are coded as outsiders while those with more than two are coded as insiders. This results in 58 outsiders and 43 insiders.

I then estimate a conditional logistic regression where the outcome variable is the binary

indicator of Jihadi ideology, with the indicator for low centrality as the key risk factor of interest and the controls from the previous sections included. The model estimates a statistically significant relationship between low centrality and increased risk of Jihadism ($p = 0.002$). The estimated odds ratio is 5.48, indicating that clerics with low network centrality are roughly five times more likely to become Jihadist than clerics with high network centrality.

Turning to the effects of career paths, I estimate a similar regression with the indicator for insider and outsider career paths as the main variable of interest, with the same set of controls and the indicator for network centrality. The estimated coefficient on the indicator of career paths is highly statistically significant ($p = 0.006$) and the estimated odds ratio is 14.8, meaning that clerics with outsider careers are 15 times more likely to become Jihadist than clerics.

Reanalyzing the data using a case-control design does not address many concerns about measurement and causal inference in my study, but these results suggest that the strong correlation between educational networks, insider career paths, and Jihadi ideology is not due to my sub-optimal data collection procedures.

Prison

Instead of garnering prestigious appointments, Jihadi clerics tend to go to prison; this section examines this phenomenon. Anecdotally, it is well known that prominent Jihadi clerics have spent significant time in prison because of their ideology. A number of clerics are still incarcerated, notably Umar Abd al-Rahman (the “blind Sheikh”) and Abu Muhammad al-Maqdisi. A large number were detained by Saudi Arabia during the 1990s and ultimately released, with some going on to moderate their views and others eventually forming the core

of Al-Qaeda’s current stable of theologians and apologists (Lacroix 2011).

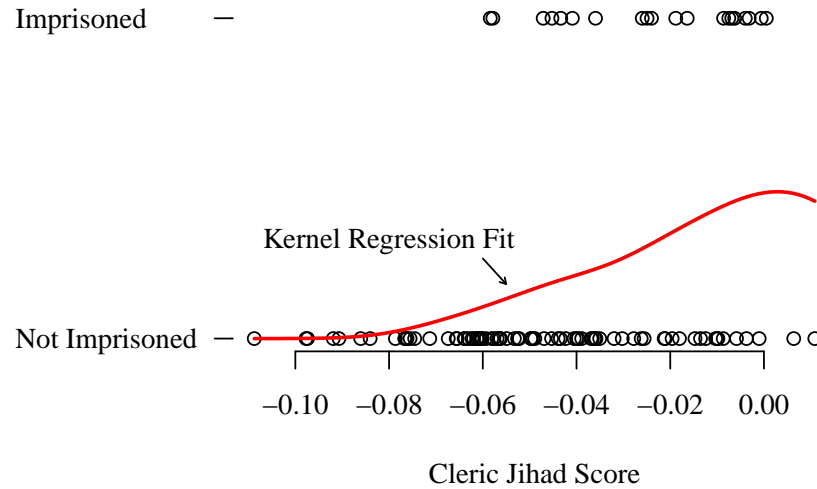


Figure 5.12: *A Scatterplot of Jihad Scores and Cleric Imprisonment*

This figure plots cleric Jihad scores on the x-axis and whether each cleric has been imprisoned on the y-axis, with the kernel regression fit between these two variables plotted in red. Higher Jihad scores correlated with a higher probability of imprisonment.

To systematically identify clerics who have spent time in prison, I searched for the words “prison” and “arrest” in cleric bios and coded the variable *prison* as “1” if either of these words appear and “0” otherwise. Twenty of the 101 clerics have been arrested or spent time in prison. Jihadi clerics are systematically more likely to spend time in jail. If I use dichotomized Jihad scores, 13 percent of the 74 non-Jihadist clerics report spending time in prison, while 38 percent of the 26 Jihadis report prison time. I plot the bivariate relationship between Jihad score and imprisonment in Figure 5.12, along with the kernel regression estimate of the relationship. I find that Jihad scores are positively correlated with imprisonment and arrest; clerics with the highest Jihad scores face a roughly 50 percent chance of imprisonment at some point.

This stark difference in incarceration rates holds when I control for other cleric charac-

teristics. Using logistic regression, I predict whether a cleric will mention prison time in their biography using cleric Jihad scores and the other control variables. The model, shown as Model 7 in Figure 5.13, predicts that with the other covariates held at their medians, a cleric with the median Jihad score — about that of the well-known Yusuf al-Qaradawi — will face about a 10 percent probability of imprisonment. However, if the Jihad score is increased by a standard deviation — making it now comparable with the score of Jihadist Abdallah Azzam — the predicted probability of imprisonment rises to 25 percent.

Interestingly, network centrality is statistically significant in this model and has a negative sign, meaning that conditional on being Jihadi or not, well-connected clerics are less likely to spend time in prison. Thus, although clerics with better networks are less likely to be Jihadist in the first place, this implies that if a well-connected cleric does become Jihadist, it is harder for the government to punish them.

The costs of incarceration may actually be beneficial to the careers of Jihadi clerics. They allow clerics to credibly demonstrate that their rulings are not compromised by allegiance to a political regime but instead represent their genuine interpretation of Islamic doctrine. This is reflected in the way that Jihadi clerics discuss their arrests and incarcerations as credentials. The biographies of Jihadi clerics repeatedly stress instances where a cleric's unwillingness to make ideological compromises led to punishment by regime authorities. This credible demonstration of independence may further these clerics careers by helping them appeal to lay Muslims who have preferences for independent clerics. For example, the biography of Rafai Surur literally lionizes his willingness to go to prison for his Jihadi beliefs. "The sheikh was included in the defendants of the case [number; 462, of 1981, Supreme State Security], known by the name 'Case of the Organization of Jihad.' He was an example of the Noble Lion and the Patient Sheikh, that does not bend to the tyrants and bows only to

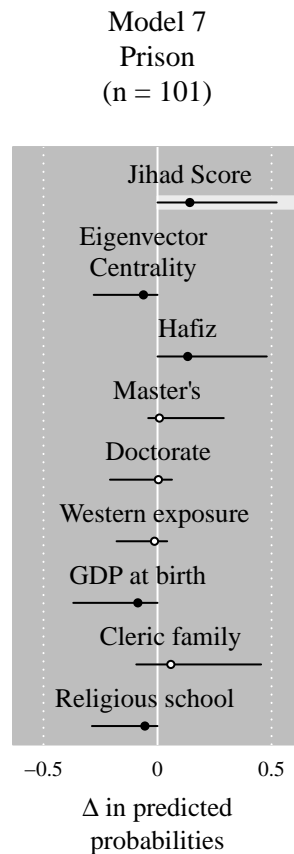


Figure 5.13: *A Regression Model Predicting Cleric Imprisonment*

The change in predicted probabilities following a one-standard-deviation-increase in each of the predictors for a logistic regression models predicting cleric imprisonment. Point estimates are represented by points with bootstrapped 95% confidence interval bands. Statistically significant changes have filled disks, while statistically insignificant changes have open disks. For variables about which my theory (or an alternative) makes a prediction, I highlight the region that the theory predicts in lighter gray to show which hypotheses are supported by the models.

God.”

I saw evidence of this support for imprisoned Jihadist clerics while attending Salafi demonstrations in downtown Cairo on April 26, 2012 following the banning of the Salafist presidential candidate. Although the protest was aimed at persuading the military government to step aside and allow the candidates to run freely, I spotted a sign supporting the



Figure 5.14: *Support for Jihadist Umar Abd al-Rahman*

Photograph of a sign supporting Jihadi cleric ‘Umar ‘Abd al-Rahman taken at a Salafi rally for the presidential candidacy of Sheikh Hazim Salah Abu Ismail on April 26, 2012 in Tahrir square, Cairo, Egypt. Photograph by the author. The sign displays Abd al-Rahman’s face and reads “Freedom for Sheikh Umar Abd al-Rahman”.

release of Jihadi cleric Umar Abd al-Rahman who is serving a life sentence in the US for his role in the 1993 World Trade Center bombing (see Figure 5.14). At the same time, I was having a discussion with a group of approximately 15 to 20 protesters who assured me that their movement was peaceful and did not support violent tactics to achieve political aims. This apparent contradiction highlights the possibility that Abd al-Rahman’s advocacy of militant Jihad is primarily viewed as evidence that he is willing to speak truth to power. This buys him support among Salafis in Cairo, even those who are not particularly interested in the Jihadi cause that Abd al-Rahman represents.

On the other hand, some clerics have renounced their Jihadi ideology after being imprisoned. Most notably, three Jihadi members of the “awakening” movement — Aid al-Qarni, Safar al-Hawali, and Salman al-Awda — renounced Jihadi ideology after spending significant time in Saudi jails during the 1990s. Unlike other clerics who have retained their Jihadi orientation, these three clerics have little incentive to play up their incarceration. Rather than being a symbol of theological independence, the prison time of these “reformed” clerics is a reminder that they ultimately gave up Jihadi ideology to appease political elites. I find evidence of this: the biographies of the three clerics do mention their arrests and imprisonment, but often obliquely. Salman al-Awda mentions his prison time in a paragraph at the end of his biography in vague terms that elide his former involvement with Jihadism:

The Sheikh was imprisoned for five years, from the year 1415 AH to the end of 1420 AH, due to some lessons and stances. He has been released with his fellow preachers, and resumed his activities in his home, including lessons in the interpretation and ethics and education reform after sunset prayers on Wednesday, Thursday and Friday.

Safar al-Hawali is even more terse, simply mentioning under the heading “Important Events” that he was arrested from 1994 to 1999.

Quantitatively, while other Jihadi clerics who have been to jail mention this fact an average of eight times in their biographies (and some as many as 25 times), the three “reformed” clerics mention their prison time an average of only two times. This is evidence that clerics who are widely known to be co-opted by the state no longer try to use Jihadi ideology or the resulting prison time as signals of theological independence.

5.4 Conclusion

Why do some Muslim clerics voice more support for the ideology of militant Jihad in their writings than others? Using a variety of statistical analyses, I find evidence that clerics strategically adopt or reject Jihadi ideology in response to career incentives. Clerics that are well-connected face promising prospects within the state system of religious institutions and have little incentive to adopt an incendiary ideology that would undermine their career. Clerics with less access to prestigious networks of senior clerics face more limited career opportunities within the state system and are more likely to seek careers outside. In doing so, they face pressure to adopt Jihadi ideology to signal their independence from the political regime in order to attract the trust of lay Salafi Muslims.

Chapter 6

Conclusion

This book asks why some Muslim clerics adopt the ideology of global, militant Jihad while most do not. I demonstrate that while this question is crucial to understanding the sources of Jihadi terrorism, it has received little attention. Current understandings in both popular and scholarly contexts generally remain impressionistic. In this dissertation, I develop theory and evidence to show why some Muslim clerics become Jihadist. I first offer a description of Jihadist ideology, focusing on the ways in which Jihadist interpretations of *tawhid* — the oneness of God — give rise to virtually all of Jihadism’s central tenets. I then advance a theory of cleric radicalization in which clerics’ choices to adopt or reject Jihadi ideology are influenced by the quality of their educational network connections and their subsequent employment prospects. When young, pious men begin the educational process to become a cleric, they become embedded in educational networks of teachers. Those that establish strong networks with many ties to prominent teachers have advantages when seeking employment in clerical academic circles — the types of positions and careers that are funded by the Egyptian and Saudi states. Clerics who have fewer connections are less likely to successfully negotiate this academic pathway because they cannot leverage their prestigious connections

to get a job. Instead, they seek other types of employment that are typically outside of the state-run system of religious institutions. There are many options for outsider clerics, but becoming Jihadist is one available career path that may be attractive. Specifically, in the crowded market of outsider clerics vying for financial support, Jihadi ideology may serve as a signal of independence from the regime that is important for some types of potential supporters.

I test this argument by amassing a substantial new data set of writings and biographical information for 101 Salafi Muslim clerics who are among those most likely to become Jihadist. I develop a method for estimating the degree to which each of these clerics express the ideology of global Jihadism. I find that it is possible to recover the same results as expert codings using statistical natural language processing. I find that the factors suggested by my theory — the strength of their academic networks and their subsequent career paths — condition cleric choices to adopt or reject Jihadi ideology. A variety of tests suggests that there is reason to believe that this relationship is causal, although establishing causation remains difficult without some form of randomization.

6.1 Contributions

In this section, I briefly discuss the contributions of my research to several subfields of political science and sister disciplines.

Jihad Studies

Most directly, my work offers an exploration and explanation of a phenomenon that is of great interest to the interdisciplinary field of Jihad studies. This field largely exists between several disciplines: Middle East studies, religious studies, and practitioners, as well as an

occasional political scientist (Wiktorowicz 2001; Gerges 2005; Devji 2005; McCants 2006; Lia 2008; Brachman 2009; Hegghammer 2010^{a,b}; Lahoud 2010; Moghadam and Fishman 2011; Wagemakers 2012; Deol and Kazmi 2012; Hegghammer 2013). The scholars working in these fields have long been concerned with issues of radicalization, ideology uptake, and the drivers of violent activism (Sageman 2004; Wiktorowicz 2005^b). My work connects to many of these work and extends them, offering a new theory of cleric radicalization where previously there was none, and a new set of tools and methods for studying Jihadists.

Specifically, my work raises the issue of cleric radicalization which as been occasionally debated in the literature but which has received no serious treatment. Studies of Jihadi activism by lay Muslims tend to assume that there is a ready supply of radical clerics waiting to entice lay Muslims to join the Jihad (Sageman 2004; Wiktorowicz 2005^b). Other work focuses on the clerics themselves, but generally does not study any comparable clerics who do not become Jihadist (Lia 2008; Wagemakers 2012); a research design that makes it almost impossible to learn about general causes of cleric radicalization (King, Keohane and Verba 1994). My work is the first to develop a research design that can test hypotheses about cleric radicalization. Despite substantial limitations of the data and analysis, my approach comes close to the limits of what we can know on a question that was previously unasked.

Political Economy of Religion

My study also directly contributes to a growing literature on the political economy of religion (Iannaccone 1988, 1994, 1995; Gill 1998; Iannaccone 1998; Iannaccone and Berman 2006; Berman and Laitin 2008; Kuran 2011; Cosgel, Miceli and Rubin 2012; Chaney Forthcoming). This literature is concerned with many aspects of religious experience, practice, and organization, but the key tenets of the paradigm are that religious institutions can be

thought of as firms providing religious products for a market of instrumentally rational religious seekers. Rather than being innate, inherent, or primordial, religious preferences and practices are influenced by the supply and demand of religious goods and the structures of the individuals and organizations that produce religious experience. Religious adherents will be sensitive to costs and benefits of their adherence.

My work on the links between educational networks, career paths, and Muslim cleric radicalization complement the thrusts of this research tradition. In some sense, my research offers a hard test of many of the assumptions of the economics of religion literature. If individuals as committed to extremism as Jihadi clerics are partially responding to economic incentives, then the economics of religion paradigm clearly has some purchase. As with previous studies in this tradition, I find evidence that religious actors — even those holding extreme views — are in many cases acting rationally to advance their career prospects within a set of network and institutional constraints. By highlighting the importance of career considerations, my work points out new mechanisms for understanding preference formation among religious elites. My basic argument, with modification for local context, may apply broadly to religious leaders in a variety of settings: Shia Muslim clerics, Catholic clergy, and modern rabbinical schools.

Religion and International Relations

There is also a growing literature on the role of religion in international politics. Religion as a political force has been historically ignored by most political scientists, but recent years have seen a surge in scholarship (Fox 2000; Hasenclever and Rittberger 2000; Philpott 2000; Fox 2003; Toft 2007; Horowitz 2009; Hassner 2009; Toft, Philpott and Shah 2011). My research connects by offering an explanation for one of the largest intrusions of religion into

international affairs in the last half century. On one hand, my research is a continuation of a strand within this literature that focuses on the role of Islam and violence in international affairs. This focus is probably to the detriment of the broader field; the role of religion in international relations is much broader and future research should strive to move beyond a preoccupation with Islam and violence. Still, given the significance of global Jihadism in the international arena over the last two decades, this focus may be justified.

My study also suggests avenues for continuing the process of bringing religion into mainstream International Relations research. This movement has been underway for some time, but in some cases has been stalled or delayed because of the difficulties of measuring religious ideologies, beliefs, and actions, and the inherent challenge of determining whether and how these factors might influence the broad political processes of international conflict and cooperation. My study suggests new avenues for attacking both of these problems. I develop measures of religious expression that are new to the tool-kit of international relations, and my theory suggests specific types of actors that influence global affairs and studies the means that they use to do so.

Individuals in International Relations

There is also a small literature on the role of individuals in international affairs (Bynam and Pollack 2001; Chiozza and Goemans. 2011). In general, International Relations theory has focused on higher levels of analysis — the international system and the states within it. However, if a phenomenon as important and influential as global Jihadism is in part caused by the choices of individual clerics within a domestic political economy of religion, then there may be other aspects of international politics that are not fully understood because scholars are not looking at the motives and constraints of the individuals who actually conduct

international relations.

Statistical Analysis of Political Text

All of the foregoing contributions are primarily theoretical, but my dissertation makes several practical contributions as well. Most importantly, I introduce and develop methods for processing and analyzing Arabic-language text. Text analysis has been a major growth area in the social sciences. Although the model I use to estimate cleric scores is basic and relies on technology that has been in use for a long time, my tools for collecting large amounts of Arabic text data from the internet and processing it are innovative. I plan to make these tools available to the scholarly community.

6.2 Policy

What, if anything, can policy-makers in Arab or Western countries do to limit the adoption of Jihadi ideology? Policy-makers in the West often seem concerned about radicalization in Muslim educational contexts. An article by Susan Moeller examining media reporting on the “War on Terror” found that commentators from a wide range of political perspectives — including Thomas Friedman and Newt Gingrich — uniformly view Islamic education as a radicalizing force.¹ The link between the *madrassa* and terrorism seems firmly entrenched in the minds of policy-makers.

My research questions this link, at least for a certain set of schools and students. Although there may be Islamic schools that radicalize students, there is not substantial evidence in my data that school attendance at any level led some clerics to be more radical than their unschooled counterparts. Instead, I find that the *failures* of graduate education are actually

¹<http://yaleglobal.yale.edu/content/jumping-us-bandwagon-%E2%80%9Cwar-terror%E2%80%9D>.

highly predictive of future Jihadi ideologues. Students who have less access to prominent graduate mentors are the most at-risk of edging toward violent extremism. Rather than adopting the mantra that all Islamic schooling is radicalizing, policy-makers should consider the possibility that more education and improved career prospects might forestall radicalization, even if that education and career is inside of a very conservative, Islamist environment.

More tentatively, my research suggests that the preferred policy of Arab regimes — arrest and imprisonment — may be a double-edged sword. Incarcerating Jihadi clerics counteracts the pressures toward Jihad by raising the cost of a career based on Jihadi ideology, but it also raises the signaling power of adopting Jihadi ideology. Clerics who are close to indifferent between their career paths will probably be persuaded by the threat of repression to avoid Jihadism, but these were never the clerics who would become hard-core Jihadis under most circumstances. The hard-core Jihadi clerics appear willing to bear the cost of increased repression and it makes them more credible in the eyes of their followers.

Instead, my research suggests that co-opting clerics may be more successful. Doing so in the late stages of cleric ideology development is probably costly and difficult because clerics who successfully resist “selling out” will send the same costly signal about their theological independence as clerics who risk imprisonment. Rather, successful cooptation starts early, by providing more clerics with access to better educational networks and ultimately, the possibility for better career prospects within the state system.

More broadly, my research suggests that changes in the political institutions of Egypt and other Muslim-majority states after the “Arab spring” of 2011 may have far-reaching consequences for the future adoption and expression of Jihadi ideology. On one hand, events in Egypt between February 2011 and June 2012 seems to confirm Western fears that political opening will lead to the rise of militant Islamists throughout the Middle East. For example,

Muhammad Mursi, the newly elected Islamist president of Egypt publicly declared on June 29th, 2012 that he would seek for the release of the Jihadi cleric Umar Abd al-Rahman, the mastermind of the first world trade center bombing. In the short term, it seems that democratic opening is making militant Islamist ideologies more mainstream, rather than sidelining them.

However, my research suggests that this opening is likely to eventually undermine the sources of legitimacy upon which Jihadi clerics currently rely. Jihadi clerics survive in part because of the cooptation of the mainstream clerical elite by the governments of the Middle East. This cooptation fuels Jihadi ideology by provoking fears among certain types of lay Muslims that clerics who work for the regime cannot be trusted, making them more likely to listen to and support non-state clerics, such as Jihadis. The political opening in Egypt has undermined the control of the central government over the religious establishment. For the first time in a half century, the clerics of Al-Azhar University are contemplating electing their head sheikh rather than accepting a government appointee. Azharite clerics have been more outspoken on political issues in the wake of the January 25th revolution. As mainstream clerics become more free to speak their minds, the credibility value of being a declared Jihadi will substantially decrease, draining long-term support among the majority of lay Muslims who do not support militant Jihad. This in turn will decrease the attractiveness of Jihadi ideology as a potential career path for outsider clerics.

Jihadi ideology is often perceived to be the result of immutable, irreconcilable conflicts between fundamentalist Islamism and Western society. My findings suggest that this interpretation, while rhetorically convenient for actors on both sides, is mostly false. In fact, the primary ideologues fueling the Jihadist movement appear to do so because of career incentives rather than ancient hatreds. Hatred may exist — there is evidence of substantial

cultural distrust between Muslim and Western societies — but most clerics do not adopt Jihadi ideology despite this animosity. Instead, adoption of violent, global Jihadi ideology is strongly influenced by the structure of seemingly mundane social networks, career incentives, and domestic political institutions. Perhaps the adoption of Jihadi ideology is less about Islam and less about the West than we have previously supposed.

Bibliography

- Aboul-Enein, Youssef H. 2010. *Militant Islamist Ideology: Understanding the Global Threat*. Annapolis MD: Naval Institute Press.
- Abu-Zahra, Nadia. 1997. *The Pure and the Powerful: Studies in Contemporary Muslim Society*. Ithaca Press.
- AI-Nashashibi, May Y., D. Neagu and Ali A. Yaghi. 2010. An improved root extraction technique for Arabic words. In *2nd International Conference on Computer Technology and Development*.
- al-Jazairi, Abd al-Malik al-Ramadani. 2007. "The Savage Barbarism of Aboo Qataadah." SalafiManhaj. Available at <http://www.salafimanhaj.com/pdf/SalafiManhajQataadah.pdf>, accessed 25 March, 2013.
- Al-Maqdisi, Abu Muhammad. 1984. *Millat Ibrahim (The Religion of Abraham)*. At-Tibyan Publications. Available in electronic form at http://www.e-prism.org/images/Millat_Ibrahim_-_English.pdf, accessed 18 March, 2013.
- al-Rasheed, Madawi. 2007. *Contesting the Saudi State: Islamic Voices from a New Generation*. New York: Cambridge University Press.
- Azzam, Abdallah. 1979. *Defense of the Muslim Lands*. London: Azzam Publications.
- Bar, Shmuel. 2006. *Warrant for Terror: Fatwas of Radical Islam and the Duty of jihad*. Lanham, MD: Rowman & Littlefield.
- Beauchamp, Nick. N.d. "Text-Based Scaling of Legislatures: A Comparison of Methods with Applications to the US Senate and UK House of Commons." Working paper, available at http://www.democraticwriting.com/work/Beauchamp_scaling_2.24.11.pdf.
- Benmelech, Efraim and Claude Berrebi. 2007. "Human Capital and the Productivity of Suicide Bombers." *Journal of Economic Perspectives* 21(3):223–238.

- Benmelech, Efraim, Claude Berrebi and Esteban F. Klor. N.d. “Economic Conditions and the Quality of Suicide Terrorism.” NBER Working Paper 16320, <http://www.nber.org/papers/w16320>.
- Bergesen, Albert J., ed. 2007. *The Sayyid Qutb Reader*. New York: Routledge.
- Berman, Eli and David Laitin. 2008. “Religion, Terrorism and Public Goods: Testing the Club Model.” *Journal of Public Economics* .
- Bischof, Jonathan and Edoardo Airoldi. N.d. “Poisson convolution on a tree of categories for modeling topical content with word frequency and exclusivity.” Available at <http://arxiv.org/abs/1206.4631>, accessed 18 March 2013.
- Blei, David M., Andrew Y. Ng and Michael I Jordan. 2003. “Latent Dirichlet Allocation.” *Journal of Machine Learning Research* 3:993–1022.
- Bonner, Michael. 2006. *Jihad in Islamic History*. Princeton University Press.
- Boyle, Helen N. 2004. *Quranic Schools: Agents of Preservation and Change*. New York: RoutledgeFalmer.
- Brachman, Jarret M. 2009. *Global Jihadism*. Routledge.
- Bueno de Mesquita, Ethan. 2005. “The Quality of Terror.” *The American Journal of Political Science* 49 (3):515–530.
- Bulliet, Richard W. 1970. “A Quantitative Approach to Medieval Muslim Biographical Dictionaries.” *Journal of the Economic and Social History of the Orient* 13:195–211.
- Bynam, Daniel L. and Kenneth M. Pollack. 2001. “Let Us Now Praise Great Men: Bringing the Statesman Back In.” *International Security* 25 (4):107–146.
- Caeiro, Alexandre. 2011. Transnational Ulama, European Fatwas, and Islamic Authority. In *Producing Islamic Knowledge: Transmission and Dissemination in Western Europe*, ed. Martin van Bruinessen and Stefano Allievi. New York: Routledge.
- Chaney, Eric. Forthcoming. “Revolt on the Nile: Economic Shocks, Religion and Political Power.” *Econometrica* .
- Cherribi, Sam. 2010. *In the House of War: Dutch Islam Observed*. Oxford University Press.
- Chiozza, Giacomo and Hein E. Goemans. 2011. *Leaders and International Conflict*. New York: Cambridge University Press.

- Christakis, Nicholas A. and James H. Fowler. 2009. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York: Little, Brown, and Company.
- Cook, David. 2005. *Understanding Jihad*. Berkeley: University of California Press.
- Cornwall, Marie. 1987. "The Social Bases of Religion: A Study of Factors Influencing Religious Belief and Commitment." *Review of Religious Research* 29 (1):44.
- Cosgel, Metin M., Thomas J. Miceli and Jared Rubin. 2012. "The Political Economy of Mass Printing: Legitimacy, Revolt, and Technology Change in the Ottoman Empire." *Journal of Comparative Economics* 40(3):357–371.
- Crecelius, Daniel Neil. 1967. *The Ulama and the State in Modern Egypt* PhD thesis Princeton University.
- Deol, Jeevan and Zaheer Kazmi, eds. 2012. *Contextualising Jihadi Thought*. New York: Columbia University Press.
- Devji, Faisal. 2005. *Landscapes of the Jihad*. Cornell University Press.
- Efron, Bradley and Robert Tibshirani. 1993. *An Introduction to the Bootstrap*. Boca Raton, FL: Chapman & Hall/CRC.
- Euben, Roxanne. 1999. *Enemy in the Mirror*. Princeton: Princeton University Press.
- Euben, Roxanne L. and Muhammad Qasim Zaman, eds. 2009. *Princeton Readings in Islamist Thought: Texts and Contexts from al-Banna to Bin Laden*. Princeton: Princeton University Press.
- Fabbe, Kristin. 2012. *Disciples of the State: Secularization and State Building in the Former Ottoman World* PhD thesis Massachusetts Institute of Technology.
- Finn, Melissa. 2012. *Al-Qaeda and Sacrifice: Martyrdom, War and Politics*. London: Pluto Press.
- Fox, Jonathan. 2000. "Is Islam more conflict prone than other religions? A cross-sectional study of ethnoreligious conflict." *Nationalism and Ethnic Politics* 6 (2):1–24.
- Fox, Jonathan. 2003. "Religion as an Overlooked Element of International Relations." *International Studies Review* 3 (3):53–73.
- Frangakis, Constantine E and Donald B Rubin. 2002. "Principal stratification in causal inference." *Biometrics* 58 (1):21–29.

- Gaffney, Patrick D. 1994. *The Prophet's Pulpit: Islamic Preaching in Contemporary Egypt*. Berkeley, CA: University of California Press.
- Gerges, Fawaz A. 2005. *The Far Enemy: Why Jihad went Global*. New York: Cambridge University Press.
- Gill, Anthony. 1998. *Rendering unto Caesar: The Catholic Church and the State in Latin America*. The University of Chicago Press.
- Glynn, Adam. 2012. "The Product and Difference Fallacies for Indirect Effects." *American Journal of Political Science* 56(1):257–269.
- Gong, Abe. N.d. "An automated snowball census of the political web." Accessed at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1832024.
- Graf, Bettina and Jakob Skovgaard-Petersen, eds. 2009. *Global Mufti*. London: Hurst & Company.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78 (6):1360–1380.
- Grimmer, Justin and Brandon Stewart. forthcoming. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* .
- Hallaq, Wael B. 2009. *Shari'a: Theory, Practice, Transformations*. New York: Cambridge University Press.
- Hasenclever, Andreas and Volker Rittberger. 2000. "Does Religion Make a Difference? Theoretical Approaches to the Impact of Faith on Political Conflict." *Millenium - Journal of International Studies* 29 (3):641–674.
- Hassner, Ron E. 2009. *War on Sacred Grounds*. Ithica, NY: Cornell University Press.
- Hassner, Ron E. forthcoming. "How to Cite a Sacred Text." *Politics and Religion* .
- Hastie, Trevor, Robert Tibshirani and Jerome Friedman. 2009. *Elements of Statistical Learning: Data Mining, Inference, and Prediction*. Springer.
- Hegghammer, Thomas. 2009. *Global Salafism: Islam's New Religious Movement*. New York: Columbia University Press chapter Jihadi-Salafis or Revolutionaries? On Religion and Politics in the Study of Militant Islamism, pp. 244–266.
- Hegghammer, Thomas. 2010a. *Jihad in Saudi Arabia: Violence and Pan-Islamism since 1979*. Cambridge: Cambridge University Press.

- Hegghammer, Thomas. 2010b. "The Rise of Muslim Foreign Fighters: Islam and the Globalization of Jihad." *International Security* 35 (3):53–94.
- Hegghammer, Thomas. 2013. "Should I Stay or Should I Go? Explaining Variation in Western Jihadists' Choice between Domestic and Foreign Fighting." *American Journal of Political Science* 107 (1).
- Hegghammer, Thomas and Stephane Lacroix. 2011. *The Meccan Rebellion: The Story of Juhayman al-'Utaybi Revisited*. Amal Press.
- Helgren, Taylor. 2011. "Joining Al-Qaeda: The Decision to Become a Transnational Terrorist." Honors thesis, Harvard University.
- Ho, Daniel E., Kosuke Imai, Gary King and Elizabeth A. Stuart. 2007. "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference." *Political Analysis* 15(3):199–236.
- Holland, Paul W. and Donald B. Rubin. 1988. "Causal Inference in Retrospective Studies." *Evaluation Review* 12 (3):203–231.
- Hopkins, Daniel and Gary King. 2010. "A Method of Automated Nonparametric Content Analysis for Social Science." *American Journal of Political Science* 54:229–247.
- Horowitz, Michael C. 2009. "Long Time Going: Religion and the Duration of Crusading." *International Security* 34 (2):162–193.
- Huntington, Samuel. 1993. "The Clash of Civilizations?" *Foreign Affairs* 72 (3):22–49.
- Iacus, Stefano M., Gary King and Giuseppe Porro. 2012. "Causal Inference Without Balance Checking: Coarsened Exact Matching." *Political Analysis* 20 (1):1–24. Unpublished manuscript. Available at <http://gking.harvard.edu/files/cem-plus.pdf>.
- Iannaccone, Laurence R. 1988. "A Formal Model of Church and Sect." *The American Journal of Sociology* 94:s241–s246.
- Iannaccone, Laurence R. 1994. "Why Strict Churches Are Strong." *American Journal of Sociology* 99 (5):1180–1211.
- Iannaccone, Laurence R. 1995. "Voodoo Economics? Defending the Rational Choice Approach to Religion." *Journal for the Scientific Study of Religion* 34:76–88.
- Iannaccone, Laurence R. 1998. "The Economics of Religion: A Survey of Recent Work." *Journal of Economic Literature* 36:1465–1496.

- Iannaccone, Laurence R. and Eli Berman. 2006. "Religious extremism: The good, the bad, and the deadly." *Public Choice* 128 (1-2):109–129.
- Jackson, Roy. 2011. *Mawlana Mawdudi and Political Islam: Authority and the Islamic State*. New York: Routledge.
- Jamal, Amaney. 2012. *Of Empires and Citizens: Pro-American Democracy or No Democracy at All*. Princeton: Princeton University Press.
- Keefer, Philip and Norman Loayza, eds. 2008. *Terrorism, Economic Development, and Political Openness*. Cambridge University Press.
- Kepel, Gilles and Jean-Pierre Milelli, eds. 2010. *Al Qaeda in Its Own Words*. Cambridge: Belknap Press of Harvard University Press.
- Khalidi, Rashid. 2004. *Resurrecting Empire: Western Footprints and America's Perilous Path in the Middle East*. Boston, MA: Beacon Press.
- Khalidi, Tarif. 1973. "Islamic Biographical Dictionaries: A Preliminary Assessment." *The Muslim World* 63 (1):53–65.
- Khosrokhavar, Farhad. 2011. *Jihadist Ideology: The Anthropological Perspective*. Aarhus, Denmark: Centre for Studies in Islamism and Radicalization.
- King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing social inquiry : scientific inference in qualitative research*. Princeton, N.J.: Princeton University Press.
- King, Gary and Ying Lu. 2008. "Verbal Autopsy Methods with Multiple Causes of Death." *Statistical Science* 23 (1):78–91.
- Krueger, Alan B. 2007. *What Makes a Terrorist: Economics and the Roots of Terrorism*. Princeton University Press.
- Krueger, Alan B. and Jitka Maleckova. 2003. "Education, Poverty and Terrorism: Is There a Causal Connection?" *Journal of Economic Perspectives* 17 (4):119–144.
- Kuran, Timur. 2011. *The Long Divergence: How Islamic Law Held Back the Middle East*. Princeton, NJ: Princeton University Press.
- Lacroix, Stephane. 2011. *Awakening Islam: The Politics of Religious Dissent in Contemporary Saudi Arabia*. Cambridge Massachusetts: Harvard University Press.
- Lahoud, Nelly. 2010. *The Jihadis' Path to Self-Destruction*. London: C. Hurst & Co. (Publishers) Ltd.

- Larkey, Leah S., Lisa Ballesteros and Margaret E. Connell. 2007. "Light Stemming for Arabic Information Retrieval." *Arabic Computational Morphology* 38:221–243.
- Lav, Daniel. 2012. *Radical Islam and the Revival of Medieval Theology*. New York: Cambridge University Press.
- Lazarus-Yafeh, Hava. 1981. *Some Religious Aspects of Islam*. Leiden: E.J. Brill chapter Contemporary Religious Thought Among The Ulama of Al-Azhar, pp. 90–105.
- Lee, Alexander. 2011. "Who Becomes a Terrorist? Poverty, Education, and the Origins of Political Violence." *World Politics* 63 (2):203–245.
- Lia, Brynjar. 2008. *Architect of Global Jihad: The Life of Al Qaeda Strategist Abu Mus'ab Al-Suri*. New York: Columbia University Press.
- Lowe, Will and Kenneth Benoit. forthcoming. "Validating estimates of latent traits from textual data using human judgment as a benchmark." *Political Analysis* .
- Lowe, William and Kenneth Benoit. N.d. "Estimating Uncertainty in Quantitative Text Analysis." Unpublished Manuscript prepared for the 2011 Midwest Political Science Association.
- MacQueen, J. B. 1967. Some Methods for classification and Analysis of Multivariate Observations. In *Proceedings of 5th Berkeley Symposium on Mathematical Statistics and Probability*. Berkeley, University of California Press pp. 281–297.
- Martin, Andrew D. and Kevin M. Quinn. 2002. "Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the US Supreme Court." *Political Analysis* 10 (2):134–153.
- Masud, Muhammad Khalid, Brinkley Messick and David S. Powers, eds. 1996. *Islamic Legal Interpretation: Muftis and Their Fatwas*. Harvard University Press.
- McCants, William. 2006. *Militant Ideology Atlas*. Technical report Combating Terrorism Center, U.S. Military Academy.
- Meijer, Roel, ed. 2009. *Global Salafism: Islam's New Religious Movement*. New York: Columbia University Press.
- Messick, Brinkley. 1996. *Islamic Legal Interpretation: Muftis and their Fatwas*. Harvard University Press chapter Media Muftis: Radio Fatwas in Yemen, pp. 310–320.
- Moghadam, Assaf and Brian Fishman, eds. 2011. *Fault Lines in Global Jihad: Organizational, Strategic, and Ideological Fissures*. New York: Routledge.

- Mohammed, Khaleel. 2005. "Assessing English Translations of the Qur'an." *Middle East Quarterly* 12 (2):58–71.
- Mottahedeh, Roy Parviz and Ridwan al Sayyid. 2001. The Idea of the Jihad in Islam before the Crusades. In *The Crusades from the Perspective of Byzantium and the Muslim World*, ed. Angeliki E. Laiou and Roy Parviz Mottahedeh. Dumbarton Oaks.
- Musallam, Adnan. 2005. *From Secularism to Jihad: Sayyid Qutb and the Foundations of Radical Islamism*. Praeger.
- Newman, Mark. 2010. *Networks: An Introduction*. New York: Oxford University Press.
- Okagaki, Lynn, Kimberly A. Hammond and Laura Seamon. 1999. "Socialization of Religious Beliefs." *Journal of Applied Developmental Psychology* 20 (2):273–294.
- Philpott, Daniel. 2000. "The Religious Roots of Modern International Relations." *World Politics* 52 (2):206–245.
- Poole, Keith and Howard Rosenthal. 1985. "A Spatial Model for Legislative Roll Call Analysis." *American Journal of Political Science* 29 (2):357–384.
- Porteous, Ian, David Newman, Alexander Ihler, Arthur Asuncion, Padhraic Smyth and Max Welling. 2008. "Fast Collapsed Gibbs Sampling for Latent Dirichlet Allocation." *KDD*.
- Porter, Martin.F. 1980. "An algorithm for suffix stripping." *Program* 14 (3):130–137.
- Qutb, Sayyid. 2006. *Ma'alim fi'l-Tareeq [Milestones]*. Birmingham: Maktabah Booksellers and Publishers.
- Reynolds, Dwight F., ed. 2001. *Interpreting the Self: Autobiography in the Arabic Literary Tradition*. Berkeley: University of California Press. Full text available at <http://ark.cdlib.org/ark:/13030/ft2c6004x0/>.
- Roberts, Margaret E., Brandon M. Stewart and Edoardo Airoldi. N.d. "Incorporating Substantive Information in Topic Models for Social Science." Unpublished Manuscript. Harvard University.
- Rosenbaum, Paul R. and Donald B. Rubin. 1983. "The Central Role of the Propensity Score in Observational Studies for Causal Effects." *Biometrika* 70 (1):41–55.
- Rubin, Donald B. 1973. "Matching to Remove Bias in Observational Studies." *Biometrics* 29(1):159–183.
- Sageman, Marc. 2004. *Understanding Terror Networks*. University of Pennsylvania Press.

- Schelling, Thomas C. 1978. *Micromotives and Macrobehavior*. New York: W. W. Norton & Company.
- Toft, Monica Duffy. 2007. "Getting Religion? The Puzzling Case of Islam and Civil War." *International Security* 31 (4).
- Toft, Monica Duffy, Daniel Philpott and Timothy Samuel Shah, eds. 2011. *God's Century: Resurgent Religion and Global Politics*. New York: W. W. Norton & Company, Inc.
- Tuastad, Dag. 2003. "Neo-Orientalism and the new barbarism thesis: Aspects of symbolic violence in the Middle East conflict(s)." *Third World Quarterly* 24 (4):591–599.
- ud-Din al Halili, Muhammad Taqi and Muhammad Muhsin Khan. 1996. *The Noble Quran in the English Language*. Madina, Saudi Arabia: King Fahd Complex for the Printing of the Holy Quran.
- Wagemakers, Joas. 2009. *The Transformation of a Radical Concept: al-wala' wa-l-bara' in the Ideology of Abu Muhammad al-Maqdisi*. New York: Columbia University Press chapter Chapter 6, pp. 81–106.
- Wagemakers, Joas. 2012. *A Quietist Jihadi: The Ideology and Influence of Abu Muhammad al-Maqdisi*. Cambridge: Cambridge University Press.
- Wiktorowicz, Quintan. 2001. "The New Global Threat: Transnational Salafis and Jihad." *Middle East Policy* 8 (4):18–38.
- Wiktorowicz, Quintan. 2005a. "A Genealogy of Radical Islam." *Studies in Conflict & Terrorism* 28:75–97.
- Wiktorowicz, Quintan. 2005b. *Radical Islam Rising: Muslim Extremism in the West*. Rowman & Littlefield Publishers, Inc.
- Wiktorowicz, Quintan. 2006. "Anatomy of the Salafi Movement." *Studies in Conflict & Terrorism* 29:207–239.
- Zebiri, Kate. 1993. *Mahmud Shaltut and Islamic Modernism*. Oxford: Clarendon Press.
- Zeghal, Malika. 1996. *Gardiens De L'Islam: Les Oulémas D'Al Azhar dans L'Egypte Contemporaine*. Presses de Sciences Po.
- Zeghal, Malika. 1999. "Religion and Politics in Egypt: The Ulema of Al-Azhar, Radical Islam, and the State (1952-1994)." *International Journal of Middle East Studies* 31:371–399.