# LINKING DETERRENCE TO TERRORISM
## Promises and Pitfalls

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CAN TERRORISM BE DETERRED? Despite the subject's overwhelming practical importance, deterrence theory has yet to be systematically applied to counter-terrorism. For the most part, the literature evaluating deterring terrorism is innovative but sparse. A critical mass has by no means been reached, nor has a concrete research agenda been identified. These deficiencies need to be remedied. Applying the logic of deterrence to terrorism will not only prove an interesting theoretical enterprise, but it might also reveal more pragmatic strategies for confronting and containing the threat of terrorism. What we need today is a better appreciation for the theory and practice of deterring terrorism.

Much of the debate on deterring terrorism has been driven by reactions to the policy responses following 9/11. With al Qaeda's attack on the United States, the immediate thrust of state policy was built around the assumption that terrorist organizations like al Qaeda were altogether undeterrable. The 9/11 attacks corroborated arguments that terrorists were irrational and that religiously motivated terrorism in particular could not be deterred. The strategic response of the United States was a global "War on Terror," a marshaling of preventive capabilities, a reliance on the use of preemptive force in international relations, and a strategy of eradicating al Qaeda and its supporters. The global conflict with al Qaeda necessarily formed the contextual backdrop against which the emerging research on deterring terrorism developed.

Eventually, however, the accepted premise that terrorists were irrational and that deterring terrorism was not possible was critically questioned. Terrorists were more properly described as "rational fanatics."[1] Though individual

3

members may embrace extremist views, the organizations they form none-theless establish practical priorities and use violence to achieve a variety of strategic, territorial, and political goals.[2] Consequently, the logic of deterrence is relevant when thinking about combating terrorism.

Nevertheless, focusing on al Qaeda has led to other theoretical and practi-cal concerns. Al Qaeda's demise, for instance, may be a worthy goal, but it also negates the feasibility of applying deterrence in practice. That the United States and its allies have sought to destroy al Qaeda and have purposefully targeted and killed many of its top leaders, including Osama bin Laden, cre-ates a deterrent dilemma. Deterrence is a bargaining tactic that emphasizes the use of threats to manipulate an adversary's behavior and hinges on offer-ing an adversary a way out. If al Qaeda rightly assumes that the United States is seeking its eventual annihilation, it will have little reason to believe that an alternative deterrent relationship, in which it is allowed to survive, is ever possible. And yet, terrorist groups are complex and intricate organizations. In thinking about deterrence, disaggregating the terrorist organization into its parts and processes reveals the peripheral actors and specific individuals against which deterrence might be applied. If so, even in al Qaeda's case, where de-struction is a primary strategic goal, deterrence theory remains relevant.

Finally, any study of deterring terrorism should avoid too narrowly focusing on al Qaeda. The differences between terrorist groups are important. Disparate goals and diverging terrorist motivations—whether nationally, ideo-logically, or religiously rooted—determine whether and how deterrence can be applied to any particular case. The contours of a deterrent strategy are there-fore partially determined by the type and nature of the terrorist organization in question, its distinctive goals, assets, activities, and areas of operation, and on the specific actors and processes inherent to it. Importantly, this book is about deterring terrorism, writ large, and looks beyond al Qaeda and 9/11 in order to identify the circumstances and cases in which deterrence is feasible.

Many of these initial quandaries reveal how an application and evaluation of deterring terrorism might properly begin. However, under all circumstances, deterrence, when applied to terrorism, is but one part of a much broader counterterrorism strategy that includes both offensive and defensive tactics. The simultaneous application of deterrence and other more traditional coun-terterrorism approaches necessarily blurs the line between offense, defense, and deterrence, creating theoretical, practical, and methodological challenges in how we think about and apply deterrence theory to terrorism.

## FOUR WAVES OF DETERRENCE RESEARCH

During the Cold War, Thomas Schelling reminds us in his foreword, the evolution, development, and maturation of deterrence theory proved a slow and deliberate process. The growth and refinement of core concepts of deterrence took many decades and were the result of "three waves" of deterrence research.[3] The process began in earnest in a preliminary, first wave of research that followed quickly after the end of the Second World War. Early theorists were responding specifically to the development of nuclear weapons and their effect on the study and practice of warfare more broadly.[4] While these early deterrence theorists established the conceptual groundwork for the approaches that were to be developed a decade later, their immediate theoretical and political influence on the theory and practice of international relations was more limited. It was not until the USSR eventual emerged as a capable nuclear power that policymakers and academics were united in one common goal: avoiding any and all nuclear conflicts.

In the second wave of research that emerged as a reaction to these shifting international priorities, deterrence theory provided strategists with an abstract framework with which to manage the nuclear rivalry. This wave of deterrence research was marked by scientific modeling and the application of game theory methodology to deterrent relations. Many of the core theoretical deterrent concepts that remain in use today are products of this second wave of research. In a relatively short burst of theoretical creativity, deterrence theory developed into a nuanced area of study.[5] Herein, the theoretical prerequisites of deterrence—*commitment, communication, capability, credibility, and resolve*—were identified and fleshed out, and the theoretical foundations of deterrence were established.[6] Deterrence, or "inducing an adversary . . . *not* to do something," was differentiated from "compellence," or inducing another "*to do* something" it might not otherwise have done.[7] *Deterrence by punishment*, which manipulates behavior through the application of threats, was subdivided from *deterrence by denial*, which functions by reducing the perceived benefits an adversary expects to collect.[8] Both processes address an actor's cost-benefit calculus but approach it from different ends; punishment adds costs, while denial takes away benefits.

Given the characteristic similarities shared by the United States and the USSR and their alliance partnerships, the scope conditions of the deterrence concepts developed during this second wave of research were respectively

narrow. Elementally, traditional deterrence theory referenced the bipolar setting of the era, applied most specifically to nuclear conflict, was oriented toward preserving the international status quo, and sought to inform the behavior of mutually rational and unitary state actors.

In time, the theoretical and deductive enterprise of the second wave gave way to the empirically driven third wave of deterrence research. Emerging during the 1970s, the third wave was primarily geared toward evaluating and testing the concepts, models, causal links, and theories that had been previously proposed.[9] By means of both qualitative and quantitative methodology, a substantial research agenda emerged. Deterrence success and failure, it was illustrated, were based not only on an actor's commitment and/or resolve but could also be dictated by the type and nature of the interests at stake and by the costs associated with acquiescing to a threat.[10] And while in theory a deterrent was deemed effective when the expected utility of pursuing a given action was less than the expected costs of enduring a punishment, utility itself, it was found, could be measured differently by varied, though equally rational, actors.[11]

Likewise, threats and denial strategies were offset by the deterrent/compellent value of positive inducements and rewards, which second-wave theories neglected to properly address.[12] The third wave also tackled some of the psychological processes inherent to deterrent relations, illustrating how individual cognitive characteristics, fear, pressure, fatigue, and other human traits and organizational constraints influenced the manner in which calculations were made and decisions taken.[13] An actor's assessment of costs, benefits, and probabilities could also be influenced by misperceptions and failures to accurately or systematically interpret an adversary's views, intentions, and positions.[14] And culture, values, historical development, and other social and political characteristics were also thought to influence how deterrence could be applied in practice.[15] In culmination, the third wave provided a more nuanced interpretation of the limitations, scopes, and boundaries associated with applying deterrence theory in practice.

Today, we are in the midst of a "fourth wave" of deterrence research,[16] which emerged at the end of the Cold War as a result of the collapse of the USSR. The focus of this research is directed toward mapping the contours of deterrence theory against a backdrop of novel and often asymmetric threats, from "rogue" states capable of producing and proliferating weapons of mass destruction to non-state actors like cyber warriors, pirates, and terrorist orga-

nizations.[17] As part of the fourth wave of deterrence research, this edited volume aims to evaluate the theoretical and practical challenges involved in deterring terrorism in particular. Today, as in the early phases of the Cold War, the theory and practice of deterring terrorism remain in their mere infancy. Core concepts of deterring terrorism are only now being developed, and very few studies have taken empirical steps to test and refine theoretical propositions.[18] This volume addresses both these areas, offering insight on the theory and practice of deterring terrorism while highlighting empirical evaluations of the subject.

## DETERRING TERRORISM: THEORY, PRACTICE, AND EMPIRICISM

The research presented here is based on findings generated during a conference organized by the Center for Security Studies (CSS), held in November 2009 at the ETH Zurich (Swiss Federal Institute of Technology) in Switzerland. The Zurich gathering was the first of its kind to bring terrorism experts and deterrence experts together to discuss the common theme of deterring terrorism.

This volume, like the conference itself, investigates two broad themes. The first is theoretical in nature: Can the traditional tenets of deterrence theory be applied to counterterrorism? What theoretical boundaries need to be expanded, and what core concepts need to be refined or developed? How can we circumvent the incompatibility between destroying an organization and deterring an organization? And how do structural complexity and asymmetries in power, organization, capability, and resolve inform deterrent relationships between states and terrorist organizations? The second broad theme is practical in nature: What role does deterrence have within a dynamic counterterrorism strategy? Are some terrorist organizations more predisposed than others to deterrence, and if so, why? More specifically, what particular elements within terrorist networks and what stages within the terrorism process are most susceptible to deterrence and compellence? How can we distinguish between deterrent measures and traditional offensive and defensive counterterrorism measures? And how are we to establish metrics for measuring the success and failure of our counterterrorism deterrent policies and strategies?

The book is organized in three parts. The first section evaluates the theoretical and practical promises and pitfalls of linking deterrence theory to conventional terrorism. It begins from the consensus view emerging from

fourth-wave scholarship that while deterrence may contribute to the management of terrorist threats (and should not so easily be discarded), actual applications of deterrence to counterterrorism will be more limited in scope. In thinking about deterring terrorism, absolute deterrence success—an imperative goal during the Cold War—is replaced by marginal success. Deterring all terrorism may not be possible, but deterring some terrorism may be sufficient. The conceptual difference is important. The conditions and structural context that were associated with deterring the Soviet Union, for instance, are radically different from those associated with deterring conventional terrorism. Traditional deterrence practice, especially during the Cold War, was based on the avoidance of all wars—particularly those that risked a nuclear exchange. In counterterrorism, on the other hand, deterrence is based on influencing adversarial behavior at the fringes, so that applications of deterrence in theory and practice allow room for some acts of political violence to occur even within an ongoing deterrent relationship. From this starting position, the chapters in the first section investigate both the theory and practice of deterring terrorism.

From a theoretical point of view, these chapters illustrate how traditional deterrence theory may be too narrow in scope to serve as a single, unifying theory for counterterrorism and investigate the benefits and unintended trade-offs of broadening the logic and meaning of deterrence. From a practical point of view, the chapters suggest that while in theory deterrence can be applied to counterterrorism, doing so in practice may be especially challenging because of the difficulties associated with properly building, defining, communicating, and situating deterrent threats within the context of an ongoing counterterrorism campaign.

In the second section of the book, the focus in particular is on deterring terrorism employing chemical, biological, radiological, and nuclear (CBRN) weapons—collectively referred to as weapons of mass destruction (WMD). An especially worrying trend that has emerged from the end of the Cold War has been the confluence between the growth of transnational terrorist organizations and the continued proliferation of WMD technology, know-how, and weaponry. These chapters explore the various strategies that might help deter the terrorist acquisition and use of WMD. This focus is especially pertinent given recent decisions in the United States to adopt a strategy of deterring WMD terrorism. Closer analysis, however, illustrates that significant strategic ambiguities remain and that little consideration has been placed on gauging

how deterring WMD terrorism might work in practice. Successfully applying deterrence to WMD terrorism may depend on how terrorist groups themselves think about the practicality of acquiring WMD materials and the utility of using such weapons. Herein, a strategy that relies on deterrence by denial offers persuasive contributions to more traditional approaches that are primarily based on deterrence by punishment.

In the third section of the book, several empirical evaluations of deterring terrorism are put forward. To date, qualitative and quantitative research on the subject of deterring terrorism has been near nonexistent.[19] Despite the fact that testing and assessing theoretical propositions require robust empirical research—as third-wave scholars have shown—very few authors have tested deterring terrorism against specific historical events or case studies. The chapters in this section offer a cross-selection of empirical research on the subject of deterring terrorism, relying on both comparative case studies of various terrorist groups and state facilitators and on more tailored evaluations of specific campaigns of terrorism. In so doing, the third section of this volume offers insight on how the theory of deterrence actually applies in practice. It derives regional, local, and historical lessons for deterring terrorism, develops policy recommendations for countering terrorism more broadly, and addresses some of the traditional methodological concerns involved in testing deterrence theory.

## A ROADMAP TO THE VOLUME

### Deterring Conventional Terrorism

The volume is composed of twelve chapters, four in each of the three thematic sections. In Chapter 1, Jeffrey Knopf offers a broad overview of the literature on deterring terrorism, laying down the theoretical and analytical groundwork upon which subsequent chapters are rooted. Knopf situates research on deterring terrorism into the broader fourth wave. He then illustrates that despite public reservations concerning the feasibility of deterring terrorism, there is general consensus within the literature that the logic of deterrence "remains relevant in dealing with terrorism," and that while it is "unlikely to be 100 percent effective," the emphasis is on improving results "at the margins" rather than on achieving perfection. In Chapter 2, Janice Gross Stein suggests that while deterring terrorism is "not impossible in theory," doing so in practice is "exceedingly difficult." Deterring terrorism is possible under certain conditions, Stein explains, but the "abstract formulation" of deterrence

theory "is deceptively simple," such that applications of deterrence in practice are far more problematic than is conventionally accepted. She suggests that applying deterrence theory to counterterrorism requires that we think about deterrence as a broader political strategy of influence that not only takes into consideration our own behavioral limitations in combating terrorism but also explores the role promises and positive inducements (and not only threats) have in shaping our deterrent relationships with adversaries.

In Chapter 3, Paul Davis argues that classic deterrence theory, with its emphasis on punishment, is "not an appropriate focal point" for thinking about deterring terrorism. Instead, Davis places impetus on "influence," a concept that goes well beyond threats of punishment to incorporate all varieties of instruments in affecting behavior. He then offers a number of conceptual models depicting terrorist decision making and (group and individual) motivation for participating in terrorism to further pinpoint which elements, actors, and processes within each model might be most susceptible to influencing strategies. In Chapter 4, Frank Harvey and Alex Wilner investigate the theoretical prerequisites for deterrence and compellence success and examine the dilemmas and limitations associated with deterring terrorism in practice. Their focus is on "counter-coercion": an opponent's ability to "interfere with and diminish" a defender's coercive strategy in ways that alters that defender's behavior. Terrorist organizations, they argue, retain "enormous counter-coercion potential" that can diminish and undermine a state's preferred deterrent or compellent strategy. Terrorists do so, Harvey and Wilner propose, through both active and passive counter-coercion.

### Deterring WMD Terrorism

Chapters 5 through 8 mark the volume's shift in focus from assessing the theoretical and practical assumptions involved in deterring terrorism in general to evaluating the prospects for deterring WMD terrorism more specifically. In Chapter 5, Brian Michael Jenkins speculates on how terrorist organizations might interpret the utility and risk of acquiring and using nuclear weapons. Jenkins suggests that understanding how terrorists think about nuclear weapons will help states decide how best to further reduce the likelihood that they acquire and use them. In Chapter 6, Martha Crenshaw reviews the U.S. policy and strategy of deterring al Qaeda's use of nuclear weapons. As it now stands, the primary intent of U.S. policy is to deter nuclear terrorism "through threats of retaliation." In a detailed overview of the steps taken by the George W.

Bush and Barack Obama administrations, Crenshaw demonstrates that while Washington has taken strides to formulate a deterrent strategy that specifically targets al Qaeda's use of nuclear weapons, the very idea of deterrence is not yet "integrated into an overall strategic conception that is logically coherent in relating ends to means." Establishing a deterrent policy on paper is one thing; putting U.S. deterrent policy into practice is quite another.

In Chapter 7, James Smith develops a framework for deterring WMD terrorism that relies on the application of deterrence by denial. For Smith, deterrence by denial "targets the adversary strategy" and operates through a "counter-strategy aimed at denying the adversary strategic success." He suggests that denial has gained a degree of importance in deterring terrorism and offers a comprehensive framework that includes the denial of opportunity, capability, strategy, and legitimacy. In Chapter 8, Wyn Bowen and Jasper Pandza assess how deterrence by denial can be applied to counter radiological terrorism. The authors begin by illustrating the wide range of potential attack scenarios involving radiological materials and assess the likely consequences of a terrorist attack using a radiological dispersion device (RDD), or "dirty bomb." Contrary to public perceptions, they suggest that RDD attacks "would cause very few, if any, casualties due to radiation," but would have major and lasting psychological, social, and economic effects. With this backdrop, the authors explore how deterrence by denial might inform efforts to counter radiological threats.

## Empirical Evaluations of Deterring Terrorism

The remaining four chapters present empirical evaluations of deterring terrorism, testing some of the propositions, frameworks, and theories developed in the previous eight chapters against particular case studies. In Chapter 9, Shmuel Bar offers a case study evaluation of Israeli deterrence vis-à-vis the Palestinian organizations Hamas and Fatah over the past decade. Differentiating between strategic and tactical deterrence, he suggests that Israel has retained strategic deterrence in relation to its state adversaries (as a result of their "perception" of Israel's military capabilities) but only occasionally achieved tactical deterrence with terrorist adversaries (as a result of Israel's "day-to-day" use of its counterterrorism capabilities). Bar concludes that Israel was able to achieve "a degree of intermittent deterrence against Palestinian terrorists," but that success was generally limited to the few historical periods where terrorist leaders were in control of the violence "orchestrated by

their followers" and the occasions where Israel "properly and credibly communicated" deterrent threats. In Chapter 10, David Romano offers a comparative analysis of two case studies of deterring political violence: Turkish and Iranian efforts to deter/compel Kurdish insurgent groups. In a detailed historical assessment of both cases, Romano offers insight as to the role deterrence, compellence, positive inducements, and other forms of persuasion have had on informing both Turkish and Iranian policy vis-à-vis violent Kurdish non-state actors. Deterrent success was the result of applying the right balance of threats and promises.

In Chapter 11, Michael Cohen investigates the deterrence of state sponsorship of conventional terrorism. In a comparative analysis of Iran and Libya, he highlights the factors involved in deterring and compelling these states from facilitating and actively supporting terrorist activity. Cohen argues that retarding the "growth of existing terrorist groups" and impeding "the birth of new ones" will require investigating why some states forgo the sponsorship of terrorism while others do not and gaining a deeper understanding of the "cross-national variation" in the cessation of state sponsorship. Finally, in Chapter 12, Fred Wehling investigates a case of CBRN terrorism, drawing lessons for deterring terrorism from the campaign of chlorine-enhanced bombings by al Qaeda in Iraq (AQI) in 2006–7. AQI's chlorine campaign, writes Wehling, "offers a rare opportunity to study deterrence theory when terrorists demonstrate both a clear motivation and capability to use CBRN." After illustrating how the Coalition (and Iraqi) strategy was carried out, Wehling judges its deterrent and compellent effect on AQI's behavior.

In the Conclusion, we, as editors of the volume, highlight some of the more pertinent conclusions derived from the chapters. We emphasize the unresolved issues and theoretical, practical, and methodological dilemmas associated with deterring terrorism. By drawing out the theoretical and practical implications of the overall analysis, we offer insight on where the study of deterring terrorism is heading and suggest avenues for further research.

## FINAL THOUGHTS

The goal of this edited volume in bringing these chapters together is to offer a comprehensive overview of the theory and practice of deterring terrorism. By combining theoretical research with empirical research, the book as a whole takes two important steps. First, it identifies how and where theories of deterrence apply to counterterrorism, shedding light on how traditional and less-

traditional notions of deterrence can be applied to novel and asymmetric threats. Second, the book offers a preliminary assessment of these theoretical propositions, evaluating specific terrorist groups, conflicts, and events in light of the deterrence literature. The sum of these two processes is greater appreciation for how deterrence continues to resonate with and can be applied to emerging, twenty-first-century threats. And while deterrence is unlikely to become a policy panacea for terrorism, the processes involved in deterrence carry value for developing and applying effective counterterrorism policies that can help states contain and curtail the nature and ferocity of the terrorism challenge they face.

Deterring terrorism will prove a complicated endeavor, far more complex than deterring state adversaries. But both deterrent processes share the same inherent logic: manipulating an adversary's behavior in ways that suit one's preferences by applying a variety of coercive leverages against that adversary's assets, goals, and values. Deterring terrorism is possible, but difficult. With the right approach and under the right conditions, deterrence theory can help inform broader counterterrorism strategies in a way that allows states to better manage the threats they face.

## NOTES

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