

Précis of *The Myth of Martyrdom: What Really Drives Suicide Bombers, Rampage Shooters, and Other Self-Destructive Killers*

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Abstract: For years, scholars have claimed that suicide terrorists are not suicidal, but rather psychologically normal individuals inspired to sacrifice their lives for an ideological cause, due to a range of social and situational factors. I agree that suicide terrorists are shaped by their contexts, as we all are. However, I argue that these scholars went too far. In *The Myth of Martyrdom: What Really Drives Suicide Bombers, Rampage Shooters, and Other Self-Destructive Killers*, I take the opposing view, based on my in-depth analyses of suicide attackers from Asia, Africa, Europe, the Middle East, and North America; attackers who were male, female, young, old, Islamic, and Christian; attackers who carried out the most deadly and the least deadly strikes. I present evidence that in terms of their behavior and psychology, suicide terrorists are much like others who commit conventional suicides, murder-suicides, or unconventional suicides where mental health problems, personal crises, coercion, fear of an approaching enemy, or hidden self-destructive urges play a major role. I also identify critical differences between suicide terrorists and those who have genuinely sacrificed their lives for a greater good. By better understanding suicide terrorists, experts in the behavioral and brain sciences may be able to pioneer exciting new breakthroughs in security countermeasures and suicide prevention. And even more ambitiously, by examining these profound extremes of the human condition, perhaps we can more accurately grasp the power of the human survival instinct among those who are actually psychologically healthy.

Keywords: coerced suicide; counterterrorism; murder-suicide; rampage shooters; school shooters; self-destructive behavior; suicide prevention; suicide terrorism; survival instinct; workplace shooters

1. Introduction

In the aftermath of the September 11th attacks, there was a rush to explain the psychology of suicide terrorists. The president of the United States suggested that Al Qaeda's hijackers were "evil-doers" and "cowards." United States Senator John Warner declared that "Those who would commit suicide in their assaults on the free world are not rational" (Atran 2003, p. 1535). Others insisted that the 9/11 attackers were "crazy," "lunatics," and "monsters" (Ellis 2002; Pearson 2001).

Fortunately, many scholars attempted to improve the scientific accuracy of this discourse, emphasizing that commentators should be wary of engaging in the "fundamental attribution error" (Atran 2003; Ellis 2003). This refers to the perceptual trap human beings often fall into, whereby they attribute the behavior of other people to *who they are* – their disposition, their personality – while ignoring the critical influence of social and situational factors. When we do bad things, we usually understand that context, misfortune, and pressure contributed to our actions; when strangers do bad things, we often assume that they are inherently bad people. So even though it may have been comforting to dismiss Mohamed Atta and

his fellow hijackers as some sort of crazy fanatics, most scholars wisely counseled against it.

Instead, many built their explanations of suicide terrorists on the leading theories and research from social psychology. Hassan (2001) claimed that these attackers share a deep belief in religious fundamentalism and become completely ideologically committed to engaging in acts of martyrdom. Atran (2003) explained the psychology of

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suicide terrorists by citing Milgram's (1963) famous experiment on obedience to authority, along with past research on institutional manipulation, group indoctrination, and collective loyalty and commitment. Pape (2005) focused on the strategic logic of suicide bombings at the organizational level, and the opportunity this combat tactic provides to individuals who hope to see their side win. Townsend (2007) stressed the importance of group processes, systematic indoctrination, and shared altruism, religious beliefs, and murderous intent. And Post et al. (2009) emphasized collective identity, charismatic leadership, deindividuation, and ingroup-outgroup enmity as the primary factors that produce suicide attackers.

These scholars, along with many others, each contributed to our understanding of the contextual factors which help shape the behavior of suicide terrorists. However, I argue that by insisting that these attackers are psychologically normal, not suicidal, and driven by self-sacrifice, they may have gone too far.

Consider this brief sample of their statements:

- "Stressing the importance of social psychology, [our research] emphasizes the 'normality' and absence of individual psychopathology of the suicide bombers" (Post et al. 2009, p. 13)
- "Overall, suicide terrorists exhibit no socially dysfunctional attributes (fatherless, friendless, or jobless) or suicidal symptoms" (Atran 2003, p. 1537)
- "the uncomfortable fact is that suicide terrorists are far more normal than many of us would like to believe" (Pape 2005, p. 211)
- "most suicide bombers are psychologically normal" (Hassan 2010, p. 190)
- "virtually all suicide bombers are psychologically stable" (Brym 2007, p. 40)
- "suicide terrorists are not truly suicidal" (Townsend 2007, p. 49)

Past scholars have also claimed that suicide terrorists are:

- "not significantly different from other rebels or soldiers around the world who are willing to engage in high-risk activism out of a sense of duty and obligation" (Hafez 2006, p. 6)
- "much like ordinary soldiers with a strong sense of duty and a willingness to sacrifice all for the common good" (Pape 2005, p. 218)
- "qualitatively similar to countless people throughout history who have given their lives for a higher cause" (Pastor 2004, p. 704)

Although I initially agreed with these statements, I have come to doubt their accuracy. Many commentators have been right to be wary of committing the fundamental attribution error, right that suicide terrorists are not "crazy lunatics" or "monsters," and right that these attackers are significantly influenced by their contexts, as most people are. But the evidence I have uncovered suggests that these attackers are suicidal in a variety of ways, and that they are not the psychological equivalent of others who are willing to sacrifice their lives for a cause.

By contrast, it appears that suicidal motives, mental health problems, and personal crises are the most

significant reason why fewer than 300 suicide terrorists usually blow themselves up each year. These factors may be what make them behaviorally different from the more than 90 million people and tens of thousands of terrorists who share their ideology and belief that suicide attacks are "often" or "sometimes" justified, but who do not choose to die (Pew Research Center 2007–2010).

In my book, *The Myth of Martyrdom: What Really Drives Suicide Bombers, Rampage Shooters, and Other Self-Destructive Killers* (Lankford 2013c), I present results from in-depth analyses of suicide attackers from Asia, Africa, Europe, the Middle East, and North America; attackers who were male, female, young, old, Islamic, and Christian. I studied suicide terrorists who committed the most deadly attacks and suicide terrorists who committed the least deadly attacks. Based on my findings, I propose that in terms of their behavior and psychology, suicide terrorists share far more in common with people who commit suicide and murder-suicide than with people who selflessly sacrifice their lives for a collective cause.

I hope that, after seeing the evidence for themselves, other scholars in the behavioral and brain sciences will apply their expertise to this critically important subject. There are many exciting new ways that this research could be extended, some of which I have envisioned, others which I may barely understand. Through our combined efforts, we can potentially help policymakers and security officials predict and prevent suicide attacks more effectively than ever before. And even more ambitiously, perhaps by furthering our knowledge of this incredibly extreme behavior, we can take another step towards truly understanding the human survival instinct.

2. The view that suicide terrorists are psychologically normal and not suicidal

In retrospect, it is easy to understand why most scholars initially believed that suicide terrorists are psychologically normal and not suicidal. After all:

1. Most commentators who have claimed otherwise seem to be committing the fundamental attribution error.
2. Past research has shown that most people who carry out violence for organizations are socially influenced but psychologically normal.
3. Most organizations specifically prohibit mentally disturbed people from joining, so they can avoid potential security risks.
4. Most people who personally knew past suicide attackers reported that they were psychologically normal and driven by self-sacrifice.
5. Initial studies of suicide terrorists did not uncover any evidence of psychopathology or suicidality.

I agree that these points are each true. However, I question their relevance and application to suicide terrorists' underlying psychology.

It is certainly accurate that controlled experiments have shown that ordinary people can be transformed into violent actors through a series of social psychological techniques (Milgram 1963; Sherif et al. 1961; Zimbardo 1972). And in accordance with past studies on mass killing and institutional violence (Browning 1998; Staub 1989; Waller 2002), previous

research on terrorists has found that the vast majority do not have personal pathologies or psychological disorders—they were relatively ordinary before they were recruited and indoctrinated by terrorist organizations (Gunaratna 2002; Hoffman 1998; Williams 2002). But it is simultaneously possible that this past research is valuable and accurate, and that it does not explain suicide terrorists. Atran (2003) seems to have overlooked this possibility, concluding that because Milgram (1963) showed that “extreme behaviors may be elicited and rendered commonplace by particular historical, political, social, and ideological contexts,” suicide terrorists must be “nonpathological individuals” who “respond to novel situational factors” (Atran 2003, p. 1536).

As far as I know, there are no replications or extensions of the Milgram (1963), Sherif et al. (1961), or Zimbardo (1972) experiments which show that many psychologically healthy people can be convinced to commit suicide to serve a greater good. Following orders to harm others seems very different from following orders to kill oneself.

Similarly, Post et al. (2009) asserted that “Understanding the psychology of suicide terrorism must necessarily be rooted in an understanding of the psychology of terrorism” (p. 18), and then inferred that the psychological normalcy of regular terrorists denotes a similar psychological normalcy among suicide attackers. But upon closer examination, it appears there are fundamental psychological differences between the tens of thousands of terrorists who risk their lives for the cause—but fight to survive—and the tiny percentage who intentionally blow themselves up. In fact, many suicide bombers are barely terrorist members at all—they are community members with no prior terrorist experience or affiliation who are only there to carry out suicide attacks (Pedahzur 2005). And they largely constitute a self-selected sample, having chosen to volunteer for suicide missions, unlike the vast majority of their peers. Of course, by definition, self-selection suggests a difference.

Interviews of other members of terrorist organizations conducted by Berko (2007) and Merari (2010) showed further differences between them and suicide attackers. Notably, when asked if they had ever considered carrying out a “martyrdom operation,” most regular terrorists and terrorist dispatchers said no.

In general, when assessing whether people are lying, it helps to consider whether their statements benefit them or not. Historians have referred to this as the “criterion of embarrassment,” and the United States legal system has a similar classification for admissions people make against their own self-interest. The rationale is that when a speaker “reveals something incriminating, embarrassing, or otherwise damaging...the lack of incentive to make a damaging statement is an indication of the statement’s reliability” (U.S. Legal 2011).

When regular terrorists say they would not intentionally die for the cause, their statements directly contradict terrorist propaganda and the claims about total commitment made by their leaders. Furthermore, it seems unlikely that they are lying, because in their social context, admitting that they would not volunteer for “martyrdom operations” is almost like saying that they don’t have what it takes to be heroes. Many seemed almost ashamed or defensive about their admissions, and some offered excuses (Merari 2010). Overall, it appears that most terrorists are very different from those who self-select for suicide missions.

Another well-established principle that may have been applied to suicide terrorists rather prematurely is that organizations specifically prohibit mentally disturbed people from joining. In general, this is often true. But the founder of the CIA’s Center for the Analysis of Personality and Political Behavior and current chair of the American Psychiatric Association’s Task Force for National and International Terrorism and Violence may have gone too far when he stated—in reference to the 9/11 hijackers—“terrorist groups make it a point to expel, or not to admit, emotionally unstable people. After all, they’d be a security risk. You wouldn’t want an emotionally unstable person in the Green Berets; you wouldn’t want an emotionally unstable person in a terrorist operation or cell” (Weaver 2006).

This view has been repeated by experts around the world, and at first, it sounds very logical. There is no doubt that many organizations screen applicants for mental health prior to entry. And if this claim is accurate, scholars could reasonably argue that most suicide bombers must be psychologically normal, because if they were not, they would never get the organizational support they usually rely upon.

Despite extensive research, however, I was unable to find compelling evidence that terrorist organizations actually behave in this manner. Although Brym (2007), Hassan (2010), Post et al. (2009), and Taarnby (2003) each make this claim, only Post et al. (2009) provide any support for it. They purport to have confirmed that terrorist organizations prioritize the mental health of their members based on the example of just one terrorist—not a suicide attacker—who was sent to a psychiatrist after struggling with post-traumatic stress disorder (PTSD) symptoms.

I have come to believe that the security risks of using emotionally unstable people for suicide attacks have been overstated. Like anyone handling a potentially dangerous substance or weapon, terrorist organizations naturally take precautions to minimize risks. They keep most suicide attackers in the dark about their operational priorities; information is only shared on a need-to-know basis (Gunaratna 2002; Hassan 2001; Williams 2002). They certainly do not take a suicidal recruit, give him directions to their leaders’ houses, give him a map of all hidden weapons caches, and then give him that month’s schedule of upcoming attacks.

In fact, a number of past suicide bombers have been arrested and successfully interrogated, and their sponsoring organizations have not simply crumbled because of it. And even if someone is emotionally unstable, that does not mean he or she cannot be strategically used. In the vast majority of cases, it makes more sense for terrorist organizations to use their most expendable assets to carry out suicide attacks, because they can only use them once.

On rare occasions, recruiters have openly acknowledged this. In interviews with Berko (2007), a suicide bomber dispatcher known as Mahmoud admitted that “I asked them to find me guys who were desperate and sad” (p. 1). Berko (2007) adds that Mahmoud sought “social nonentities ... men and women who have trouble finding themselves, sometimes influenced by anger and bitterness at their marginality” (p. 7). Along similar lines, a Palestinian Authority general told Stern (2003) that the profile of a typical Hamas suicide bomber was:

Young, often a teenager. He is mentally immature ... He can’t find a job. He has no options, and there is no social safety net to help him ... He has no girlfriend or fiancée ... No means for him to enjoy life in any way. Life has no meaning but pain ...

He feels he has lost everything ... He goes to the local mosque... Hamas members are there and notice him looking anxious, worried, and depressed ... Gradually, they will begin to recruit him. (Stern 2003, p. 50)

But again, these accounts of suicide bombers were the exception, not the norm.

In fact, another major reason for the scholarly consensus that suicide terrorists are psychologically normal, not suicidal, and driven by self-sacrifice, is that this was the most common description offered by those who personally knew them. For instance, from 1996 to 1999, an international relief worker interviewed many dispatchers, friends, and family members of deceased suicide bombers. She also reportedly interviewed some failed suicide attackers themselves. Her conclusion, which was published in *The New Yorker* just two months after 9/11, was that “None of the suicide bombers—they ranged in age from eighteen to thirty-eight—conformed to the typical profile of the suicidal personality. None of them were uneducated, desperately poor, simple-minded, or depressed ... They all seemed to be entirely normal members of their families. They were polite and serious, and in their communities they were considered to be model youths” (Hassan 2001, para. 14). Her later publications seem to indicate that this description was mostly based on second-hand accounts: “Almost all were described as courageous, resolute, and serious with no evidence of brainwashing, coercion, or psychological problems” (Hassan 2006, p. 39).

Similarly, Townsend (2007) conducted a review of five “empirical reports” on the subject: three that depended largely upon interviews of the deceased suicide terrorist’s friends and family members, and two that were based on interviews of regular terrorists, not suicide terrorists. As she concluded, “The results of [her] review strongly suggest that suicide terrorists are not truly suicidal, and that attempting to find commonalities between suicide terrorists and others who die by suicide is likely to be an unhelpful path for any discipline wishing to further understanding of suicidal behavior” (p. 47).

Interviews can yield valuable information, and the statements of those who knew suicide attackers can be enlightening. In the absence of other information, they are sometimes all we have to go on. However, even when sources provide consistent answers, that does not necessarily mean they are reliable. When it comes to suicide attacks, the vast majority of terrorists, family members, and suicide terrorists have insisted that these are actually “martyrdom operations” inspired by the desire to sacrifice for God and the cause, and that those who carry them out are mentally healthy. But their statements often appear laden with terrorist propaganda. As Hassan (2001) acknowledged, “When they spoke, they all tended to use the same phrases” (para. 14). Their statements passed neither the “criterion of embarrassment” nor the “admission against interest” tests, and as I outline in Chapter 2, there are a number of reasons to doubt their veracity.

A final reason why many scholars believe that suicide terrorists are psychologically normal and not suicidal is that initial studies did not uncover any evidence of psychopathology.

One widely cited example comes from a prominent scholar and former adviser for two presidential campaigns who purported to have conducted the most “comprehensive and reliable survey now available” of all 462

suicide terrorists from 1980 to 2003 (Pape 2005, p. 202). He found:

no documented mental illness, such as depression, psychosis, or past suicide attempts ... no evidence of major criminal behavior ... [and] not a single report that a suicide attacker was gay, an adulterer, or otherwise living in a way that would bring shame in a traditional society... Rather, the uncomfortable fact is that suicide terrorists are far more normal than many of us would like to believe. (Pape 2005, pp. 210–11)

By logging every suicide attack they could find from 1980 to 2003, Pape (2005) and his research team created a valuable database that can be used to assess suicide terrorism on a global level. And even more impressively, in the years that followed, they expanded their database to include more than 2,200 attacks from 1980 to 2011.

But this research seems better on breadth than depth, and does not appear to have accurately captured the psychology of suicide attackers. The U.S. Centers for Disease Control and Prevention’s data indicate that approximately 5% of the population is depressed—and this percentage may be even higher in certain war-torn contexts. If suicide terrorists are representative of the population at large, the chances that none of the 462 suicide terrorists from this sample were depressed would be approximately 1 in 19,574,665,823. It seems implausible that any group of 462 people, anywhere on the globe, would fit the description of what this study found: zero members who were depressed, major criminals, gay, adulterers, or living with shame. The United States Congress would not pass this test; I doubt a large monastery would.

The lesson I draw from this is that in many cases, we know next to nothing about an individual suicide terrorist. And for many of the incidents in Pape’s database, only the suicide terrorist’s gender, organizational sponsor, and attack details were available. We should be careful to avoid assuming that their mental health problems will be widely reported and easily identifiable—and that the absence of such reports indicates their psychologically normalcy.

3. Comparisons with people who commit conventional suicide

One of the first post-9/11 studies to suggest a significant connection between conventional suicide and suicide terrorism was authored by Lester et al. (2004), who recommended that “if detailed biographies of terrorists and suicide bombers were to be collected, evidence might well be found of a high frequency of risk factors for suicide” (p. 292). In response to this call, I conducted an in-depth review of primary sources, such as suicide notes, manifestos, diary entries, internet posts, love letters, and martyrdom videos, as well as secondary sources, such as previous scholarly research, government reports, electronic news and video archives, existing data sets, and legal documents. I present the results throughout the book, but particularly in Chapter 3 and Appendix A.

I found evidence of more than 130 suicide terrorists who appeared to have risk factors for conventional suicide: 44 with depression, PTSD, or other mental health problems; 12 with serious physical injuries or disabilities; 66 who had suffered the unexpected death of a loved one or close friend; and 104 who had struggled with a precipitating

crisis event. This is certainly not an exhaustive list; there may be thousands of suicide terrorists whose secret struggles still remain hidden. But obtaining more information about these attackers' lives is a step in the right direction.

The suicide terrorists' personal crises included divorce and adultery scandals, unwanted pregnancies, major job problems, serious health problems, and the death of a loved one. Other suicide attackers, who could not be quantified, had reportedly been raped or sexually assaulted, addicted to heroin or other drugs, or struggling with other physical or mental health problems. Of course, not everyone who has these problems becomes suicidal. But past research has identified very similar personal crises among those who commit conventional suicide, including the loss of employment, economic distress, family problems, romantic problems, poor health, and the death of a loved one (Durkheim 1897; Farber 1968; Maris et al. 2000).

In a number of these cases, there appeared to be a direct cause-and-effect link between the crisis and the individual's decision to seek death. The crisis – and the individual's subsequent inability to cope – could help explain why many of these people who had no prior terrorism experience or terrorist affiliation suddenly volunteered to blow themselves up. Something must have changed in their lives, and the crisis event seems like the most obvious factor. For example, Wafa Idris, the first Palestinian female suicide bomber, suffered a miscarriage that left her unable to get pregnant again, and she was subsequently divorced by her husband. Intensely shamed, she returned home to live with her mother, and then eventually blew herself up. Although this is purely speculative, it seems possible that if not for the miscarriage and divorce, she might still be alive today.

A reasonable question is whether these mental health problems and personal crises are more common among suicide terrorists than other terrorists. Merari's (2010) interviews and psychological assessments of preemptively arrested suicide bombers, regular terrorists, and organizers of suicide attacks suggest so. Although his sample was relatively small ($n = 41$), his research team found significantly more suicidal tendencies, depressive tendencies, PTSD, previous (non-terrorist) suicide attempts, and dependent/avoidant personality types among the suicide bombers (Merari 2010). The regular terrorists and organizers of suicide attacks genuinely appeared more psychologically normal. I provide a detailed analysis of this study in Chapter 3.

I also uncovered a number of direct quotes from suicide terrorists that revealed their psychological pain. Given the "criterion of embarrassment" and "admission against interest" tests discussed earlier – and the powerful stigmas against admitting mental health problems in these attackers' social contexts – their statements appear credible.

For example, Umar Abdulmutallab, who attempted to blow up an airplane over Detroit on Christmas day 2009, had previously posted online that: "i am in a situation where i do not have a friend... i have no one to speak too, no one to consult, no one to support me and i feel depressed and lonely. i do not know what to do" (Greene 2009, para. 18). Bryant Neal Vinas confessed that after dropping out of the army because it was too "mentally overwhelming," he ultimately volunteered for a suicide attack in Pakistan because he was "having difficult time with the

altitude. I was getting very sick, so I felt that it would be easier" (Neumeister & Hays 2012, para. 23). And a female suicide bomber interviewed by Berko (2007) revealed that after she missed what she thought was her last chance for marriage, "my life wasn't worth anything and my father wouldn't let me marry the boy I wanted to, so I found a Fatah operative in Jenin and volunteered, to get back at my father" (p. 1).

Another example I recently discovered comes from FBI records of an intercepted phone call between Shaker Masri and his girlfriend. Just days after she dumped him, he decided to become a suicide bomber. And then he seemed to melt down over the phone, exclaiming "I, for myself, I cannot; I cannot; I cannot; I cannot, cannot, cannot. I do not; I do not. Life is not worth living for me. I cannot enjoy life. I have not enjoyed it since I was eighteen. I have not enjoyed life since I was a child. I lost that innocence. I need to regain it back" (Parker 2010, p. 17).

In the majority of cases, the suicide terrorists did not make admissions of this sort – or if they did, I could not find evidence of them. Of course, this does not necessarily mean they were psychologically normal or selflessly sacrificing their lives for an ideological cause. After all, even if these attackers were suicidal, they would have a very good reason to lie: Given the ability to control their public reputation through the words they utter, most people would rather be remembered as heroic martyrs than suicidal cowards.

In some cases, there seemed to be a clear discrepancy between the ways suicide terrorists described their own mental health and the evidence from other sources. For instance, in the note left behind by Nicky Reilly, a.k.a. Mohamad Abdulaziz Rashid Saeed, he insisted, "I have not been brainwashed or indoctrinated. I am not insane. I am not doing it to escape a life of problems or hardships. I am doing what God wants from his mujahideen" (Reilly 2008). But after his attempted attack, psychiatrists reported that Reilly had an IQ of 83, was thought to have the mental age of a 10-year-old, and suffered from Asperger's syndrome and obsessive-compulsive disorder, among other psychological problems. His family was also a disaster: His parents separated before he was born, his stepfather was a convicted heroin dealer, and his younger brother had been sent to prison for 6 years after robbing a man and beating him unconscious. And Reilly had previously attempted suicide by intentionally overdosing on drugs, stabbing himself in the stomach, and slitting his own wrists.

Mohamed Atta, ringleader of the 19 hijackers who struck on 9/11 and the first pilot to crash into the World Trade Center towers, also seemed quite comparable to people who commit conventional suicide, although he never admitted it. In Chapter 4, I present results from my psychological autopsy of Atta, which uncovered evidence that he struggled with at least four risk factors for suicide: (1) social isolation, (2) depression, (3) guilt and shame, and (4) hopelessness (see also Lankford 2012a).

Atta appears to have displayed 8 of the 11 symptoms of depression identified by the National Institute of Mental Health (2009): (1) persistent sad, anxious, or "empty" mood; (2) feelings of hopelessness, pessimism; (3) feelings of guilt, worthlessness, helplessness; (4) loss of interest or pleasure in hobbies and activities; (5) decreased energy,

fatigue, being “slowed down”; (6) appetite and/or weight changes; (7) thoughts of death or suicide, suicide attempts; and (8) restlessness, irritability. For comparison’s sake, many clinically depressed people exhibit fewer symptoms than Atta did. Among the details that stand out: Atta had struggled with social isolation since childhood; insisted that “joy kills the heart;” avoided laughing whenever possible; condemned fun, music, and delicious food; complained about needing to eat to stay alive; wrote an angry last will and testament at age 27; was overcome by shame about the subject of sex; and lamented, “how much time have we wasted in our lives?”

Past research on suicide pacts suggests that every member of a group need not be suicidal, at least in the conventional sense, for them all to kill themselves (Maris et al. 2000). So one possibility is that some of the other 9/11 hijackers were suicidal in unconventional or indirectly self-destructive ways. Nevertheless, a preliminary review presented in Chapter 4 reveals similarities between some of them and others who commit suicide for conventional reasons. For example, Tawfiq bin Attash, who volunteered to be one of the hijackers but failed to gain entry to the United States, had lost both his brother and his lower right leg in a traumatic battle in Afghanistan. Marwan al-Shehhi, who crashed the second plane into the World Trade Center, had suffered from the unexpected death of his father when he was 19 years old, had struggled to cope, and had withdrawn from his family. Hani Hanjour, who crashed into the U.S. Pentagon, was apparently crippled by insecurity and failure, which had depressed him. Pilot Ziad Jarrah, who intended to strike the U.S. Capitol Building but failed, had complained about being “dissatisfied with his life” and had insisted that he “didn’t want to leave Earth in a natural way” (McDermott 2005, p. 206; National Commission on Terrorist Attacks Upon the United States 2004). In addition, hijacker Wail al Shehri reportedly “fell into a deep depression” in late 1999 that was so bad that he had to leave his job and seek medical treatment: “His friends say it was not just depression, but perhaps even a suicidal tendency” (Sennott 2002, para. 13). And hijacker Ahmed al Nami’s behavior apparently became so strange that his family feared a “bipolar disorder” (Sennott 2002, para. 18). Less is known about the others, but there is certainly sufficient reason to question their mental health.

4. Comparisons with people who commit murder-suicide

Within the broader category of murder-suicide, there is a subset of offenders who seem to be a natural comparison to suicide terrorists: rampage, workplace, and school shooters who similarly carry out premeditated, mass murder-suicide attacks that kill innocent bystanders, before killing themselves. Like certain suicide terrorists, some of these mass shooters planned their attacks for months or years before finally striking, and some of them also left behind notes or explanations in which they claimed to be fighting for a cause.

On the surface, perhaps the most significant difference between suicide terrorists and suicidal rampage, workplace, and school shooters is the role of organizations: suicide terrorists usually work with them, whereas mass shooters

almost always act on their own. However, as reviewed earlier, many suicide terrorists are self-selected and decide for themselves that they are ready to die. For these attackers, the organization may provide rationalizations for violence, suggested targets, and the explosive device. But those who act alone can obtain these same things, just from different sources. They may get their rationalizations for violence from radical websites, their ideas for targets from news coverage of previous attacks, and their weapons from local shops.

To begin identifying other similarities and differences between these types of attackers, I conducted the first combined quantitative assessment of suicide terrorists and rampage, workplace, and school shooters who attempted suicide, which I detail in Chapter 6 (see also Lankford 2013a). The study was of all suicide attacks that could be identified from previous scholarship, government reports, or media databases, occurred in the United States between 1990 and 2010, yielded a minimum of two casualties, and were not primarily domestic in nature (targeting family members or significant others). The FBI definition was used to assign attacks to the terrorist category, and all remaining public attacks that did not land in the school or workplace categories were designated as rampage shootings. The resulting dataset included 81 suicide attacks in total: 12 suicide terrorist strikes, 18 rampage shootings, 16 school shootings, and 35 workplace shootings.

For details about each attacker’s life, I searched primary source documents, previous scholarship, government reports, and media databases. This data collection method has been valuable for research on similar attackers in the past (Kelly 2010; Larkin 2009; Newman et al. 2004). Overall, ANOVA, chi-square, and multinomial logistic regression tests did not indicate that the pre-attack struggles of suicide terrorists were significantly different from the pre-attack struggles of rampage shooters and school shooters who attempted suicide. All three types of attackers appeared about equally likely to have struggled with mental health problems, social marginalization, family problems, work or school problems, and precipitating crisis events; almost equally likely to have prepared an explanation or suicide note before striking; and almost equally likely to have successfully ended up dead as a result of their attacks. It was the workplace shooters who seemed to be the most different type: their attacks occurred almost twice as often, yielded about half as many casualties, and appeared to be more directly linked to grudges against specific targeted victims.

Beyond some expected differences in their rhetoric, the biggest behavioral difference between the suicide terrorists, rampage shooters, and school shooters was their method of suicide attempt. Most rampage and school shooters shot themselves in the head, but only one suicide terrorist did this. It may be that the terrorist attackers were the most concerned with disguising their suicidal intent, which is more easily done by detonating an explosives-laden suicide vest, provoking “suicide by cop,” or crashing an airplane at a high rate of speed. With these attack methods, onlookers may be more apt to conclude that these attackers did not want to die, they were just *willing* to die, in order to accomplish their mission.

But if maximizing enemy fatalities was these suicide terrorists’ primary goal, they were not particularly good at it.

With the exception of 9/11, suicide terrorist attacks in the United States from 1990 to 2010 were actually *less lethal* than rampage and school shootings involving suicide attempts over the same period. This seems at odds with the conventional wisdom that suicide terrorists are psychologically normal attackers who sacrifice their lives for mission success, while rampage and school shooters are mentally unbalanced individuals who simply “snap” and begin shooting.

Upon closer inspection, the similarities between these various perpetrators of murder-suicide become even more clear. There have been cases of suicide terrorists who act and attack like suicidal mass shooters, and cases of suicidal mass shooters who act and attack like typical suicide terrorists. For instance, suicide terrorists Ali Hassan Abu Kamal, who opened fire at the Empire State building, Mir Aimal Kansi, who struck CIA headquarters, Hesham Mohamed Hadayet, who attacked Los Angeles International Airport, and Nidal Hasan, who struck the Fort Hood Army base, each claimed to be driven by the desire to serve their ideological cause. But much like suicidal mass shooters, they were each struggling with serious personal problems, attacked with firearms, and apparently intended to die as a result of their attacks. Abu Kamal shot himself in the head, while the other three expected to be shot and killed by police, which would constitute “suicide by cop.” On the other hand, Virginia Tech shooter Seung Hui Cho referred to himself as a “martyr” and claimed to be sacrificing his life for God, which sounds very similar to the statements made by Islamic suicide terrorists. And George Sodini reportedly considered blowing himself up on a public bus – much like a suicide bomber – a week before he opened fire on a Pittsburgh aerobics class and then shot himself in the head. Similarly, when Sebastian Bosse was found after shooting five people at his high school and then killing himself, he had explosive devices strapped to his body. And perhaps most dramatically, Columbine killers Eric Harris and Dylan Klebold had fantasized about using suicide terrorist tactics as well. Three years before 9/11, Harris stated that he and Klebold would like to “hijack a hell of a lot of bombs and crash a plane into NYC with us inside” (CNN 2001). This is eerily similar to what Al Qaeda’s 19 hijackers eventually did, and suggests that these attackers may have been attracted to similarly grandiose methods of suicide due to their underlying psychological similarities.

Overall, a number of these attackers seemed to recognize that by committing acts of mass murder-suicide against random, innocent victims, they could combine the only surefire way for an average person to become famous with the only foolproof way to kill people and get away with it. After years of feeling like a failure, loser, victim, or outcast, they attempted to compensate through a desperate grasp for attention, social recognition, fame, and glory. But they also avoided the potential humiliation of arrest, detainment, and criminal punishment by committing suicide before they were caught. For suicide terrorists, this seems like one of those times when the terrorist organization’s priorities are the same as the suicidal individual’s. Both want attention. The terrorist organization benefits from publicity because its strategy is based on reaching as many hearts and minds as possible, then rallying them to the cause. And by filming martyrdom videos prior to their attacks, suicide bombers become convinced that in death

they will be respected and worshipped, even though they will not get to experience their glory in the physical world. It should be emphasized that when it comes to homicide, the desire for fame and glory is an extraordinarily rare motive. The fact that it appears to be so common among certain suicide terrorists, rampage shooters, and school shooters seems to be another sign of their underlying similarities.

5. Comparisons with coerced, escapist, and indirectly suicidal people

In Chapter 7, I propose that there are four basic types of suicide terrorists: (1) conventional, (2) coerced, (3) escapist, and (4) indirect (see also Lankford 2014). Conventional suicide terrorists are comparable to people who commit suicide for conventional reasons. Coerced suicide terrorists become suicidal because they feel pressured and fear the organizational consequences of not carrying out a suicide attack. Escapist suicide terrorists become suicidal because they fear being captured or punished by the enemy. And indirect suicide terrorists become suicidal at an unconscious level: they orchestrate their deaths in ways that disguise their desire to die, even from themselves.

Because human psychology is so complex, it seems likely that some attackers will defy perfect categorization and thus be a combination of types. However, this typology could be useful for quickly assessing an individual suicide terrorist and identifying his or her primary motive for seeking death, be it personal problems, pressure from others, fear of an approaching enemy, or hidden self-destructive urges. In Appendix C, I present a chart with behavioral expectations and potential security countermeasures for each type.

To better understand the psychology of the coerced, escapist, and indirect types, it may help to compare them with people who commit suicide for similar reasons. For instance, consider the famous kamikaze pilots of Japan, who appear to have been long misunderstood. Atran (2003) subscribes to the conventional wisdom, describing them as “young, fairly well educated pilots who understood that pursuing conventional warfare would likely end in defeat. When collectively asked by Adm. Takijiro Onishi to volunteer for ‘special attack’ (*tokkōtai*) ‘transcending life and death,’ all stepped forward, despite assurances that refusal would carry no shame or punishment” (p. 1535). By this view, the kamikaze pilots were greatly influenced by social and situational factors, which inspired them to sacrifice their lives for a noble cause.

This is what many of us were taught in school, and until recently, I assumed it was accurate. But as renowned kamikaze expert Ohnuki-Tierney (2006) explains based on her extensive research, when the *tokkōtai* program was instituted, “none of the professional soldiers who had graduated from the naval and army academies volunteered” (p. 166). Lacking volunteers, the military drafted 4,000 boys and university students for this purpose. I contend that it was not ideology, not group commitment, and not altruistic self-sacrifice that led these pilots to carry out suicide attacks; I believe the Japanese military used coercion and brutality to essentially *make them suicidal*. In other words, these boys may have been psychologically normal prior to being drafted, but they quickly became

psychologically compromised because of the crisis they found themselves in, the way they were treated, and the pressures upon them. In general, a recent meta-analysis of 37 studies found that bullying greatly increases victims' likelihood of suicidal behavior (Kim & Leventhal 2008). Far worse pressures and mistreatment were present in this case.

The military systematically broke new recruits with regular beatings and abuse. As one would-be kamikaze recalls, "training" took place day after day. I was struck on the face so hard and frequently that my face was no longer recognizable" (Ohnuki-Tierney 2006, p. 168). Another explains, "I felt little desire to rush out and die gloriously for some great cause. Like all the others, I was overwhelmingly demoralized and intimidated ... Anxiety had left me exhausted yet too nervous for sleep ... By the first month's end, many in our group were breaking emotionally, beyond remedy. Continual pain, continual humiliation, continual pressure. Endless stress! It could not be endured forever" (Kuwahara & Allred 1957, pp. 29, 64). Because of these psychological pressures, 9 of 60 recruits in one unit actually killed themselves during training. However, the majority gave in and carried out their kamikaze missions as intended. Many were deeply traumatized and threatened with further punishment if they disobeyed, which is why they decided to die.

In some sense, the kamikaze pilots may have had a rational motive for suicide: they preferred death over future pain. But I would emphasize that this is the underlying motive for most suicidal people, whether the pain they want to avoid is already present or only anticipated, and whether it is physical or psychological. As discussed earlier, past suicidal people have killed themselves to escape the psychological pain of loss of employment, economic distress, family problems, romantic problems, and the death of a loved one, or the physical pain of living with serious health problems (Durkheim 1897; Farber 1968; Maris et al. 2000). Some of their suicidal decisions could be considered rational as well.

I propose that, much like the kamikaze, many coerced suicide terrorists may have been psychologically healthy for most of their lives, but they became psychologically compromised and made suicidal decisions because of the abnormal pressures upon them. From the terrorist organization's perspective, levying these pressures makes a lot of sense: If you need people to perform a task that only a suicidal person would do—and you don't have enough suicidal individuals on hand—you should try to create new ones. For instance, in Afghanistan and Pakistan, teenagers have been kidnapped and beaten by their captors, who attempted to break their spirits, make them suicidal, and then funnel them into suicide attacks. In rare cases where the teenagers were rescued and assessed by a psychiatrist, they appeared to have signs of depression and other psychological disorders. Along similar lines, in Iraq, women have reportedly been raped by terrorists and then encouraged to carry out "martyrdom operations" to atone for their "crime" of sexual victimization.

Naturally, the amount of pressure required to make a person choose death depends upon that individual's psychological strengths or weaknesses. Some people will endure almost anything in order to survive, as most concentration camp prisoners during the Holocaust did. Others have a relatively low threshold for pressure or pain: they

would prefer to commit suicide than risk the uncertainty or discomfort of trying to cope, resist, or escape.

For example, a preemptively arrested suicide bomber named Nazima volunteered for weapons training with a terrorist group, and then was repeatedly pressured to carry out a suicide attack, until she found herself in the midst of a major psychological crisis. As she later recalled:

When they told me I was going to carry out "an action" I cried a lot, I almost fainted, everything went black before my eyes ... I kept telling [the dispatcher] that I wasn't religious, I didn't pray ... I asked him if I could start all over from the beginning, to forget that there had ever been a connection between us ... They refused, naturally, and said "You know everything about us and we aren't sure of what will happen once you leave this room." (Berko 2007, pp. 5–6)

Nazima knew that her best chance for survival was to ask her father for help, but although she had the opportunity, she feared doing so, and instead decided she would rather blow herself up.

Coerced suicide terrorists are not primarily driven by ideological commitment or the desire to sacrifice their lives for a cause. They find themselves caught between the proverbial rock and a hard place, and become psychologically compromised because of the pressures upon them. I wonder about their mental health as the end draws near. In the days leading up to their suicide attacks—when they have surrendered all hope and stopped looking for options—perhaps their psychology becomes similar to many other suicidal people.

Another type of suicide terrorist appears comparable to people who kill themselves to escape the imminent arrival of police, security, or military forces. People who commit escapist suicides sometimes claim to be doing it for ideological reasons, and that they are demonstrating defiance or commitment to the cause. For instance, Adolf Hitler insisted that the Nazis' self-orchestrated deaths would not constitute suicide because they were heroic self-sacrifices, made by those who courageously refused to negotiate or surrender, because only cowards would cling to life. Similarly, shortly after 9/11, Osama bin Laden instructed his bodyguards to shoot him in the back if capture by American forces was ever imminent, but claimed his death would be "martyrdom," not suicide.

These claims do not stand up to scrutiny. They do not pass the previously discussed criteria for evaluating statements' credibility, because they portray the speakers in a better light, not a worse one. And in each case, the primary benefactor of the suicide would be the person who died, escaped, and thus avoided the consequences of remaining alive—not his followers or the broader cause. I suggest that when people commit suicide to avoid serious punishment, they are generally driven by fear, not ideology.

Similar to those who kill themselves due to coercive pressures, people who commit escapist suicides may have a rational motive: they find themselves in a major crisis, and decide they would rather die than suffer future discomfort, humiliation, or pain. Historical records suggest that there have been a number of mass suicides for this reason, primarily by people who were besieged by their enemies and believed that execution, rape, and/or enslavement were inevitable. In cases of mass suicides, the vast majority of participants were probably psychologically healthy prior to their crises; it was the impending arrival of the enemy that left them psychologically compromised

and desperate for the least painful way out. Of course, it is also possible that the consensus among those who killed themselves in these groups is exaggerated in the historical record, and that coercion played a significant role.

In modern cases of escapist suicides, there may be more interaction between the situational crisis and individual's psychological tendencies, because of the limits on what most approaching enemies will do to their captives. Systematic rape, medieval-styled torture, and summary execution are rarer than in the past, which may be why mass escapist suicides are less common. For example, when Nazi Germany was defeated in 1945, less than 15% of the upper echelon killed themselves: 8 of 41 party regional leaders, 7 of 47 high-ranking SS and police leaders, 53 of 554 army generals, 14 of 98 Luftwaffe generals, and 11 of 53 admirals (Goeschel 2009).

In many cases, it appears that those who commit escapist suicides are not just making hasty decisions in the heat of the moment. Some appear to have already considered an eventual suicide long before the emergency situation arose. For days, weeks, months, or years, they seem to have been emboldened by the knowledge that if they were ever cornered and trapped, suicide would become their self-imposed exit strategy.

One of the most notable cases of escapist suicide terrorism comes from Madrid, where in 2004, seven men blew themselves up in their apartment after they were cornered by police. Their suicidal explosion killed one Spanish police officer and wounded several others, but three weeks earlier, they had planted bombs on commuter trains in a much deadlier attack. Notably, a number of those who eventually killed themselves had previously served time in prison, which may explain their desperation to avoid going back. Attacker Allekema Lamari—who was reportedly a 40-year-old virgin with a mental disorder—had specifically told a friend that he would never be caught alive again. And fellow terrorist Abdennabi Kounjaa, who also had a criminal record, had written a final letter to his family in Morocco that sheds some light on his psychology. Although Kounjaa was in Spain voluntarily, he called it “hell” and warned his children to never follow him there. He also lamented that “I can’t put up with this life living like a weak and humiliated person under the scrutiny of infidels and tyrants,” adding that “this life is the path towards death” and that he preferred “death instead of life” (Alonso & Reinares 2006, p. 190). In other cases, terrorists have blown themselves up to escape arrest or punishment in Iraq, Afghanistan, and Uzbekistan, and it seems likely that this type of suicide attack has occurred in many other countries as well.

A final type of suicide terrorist should be compared with individuals who are indirectly suicidal. Such people are usually in denial about their suicidal urges, so they orchestrate their own deaths in ways that disguise their desire to die, even from themselves. For instance, by repeatedly engaging in risky, self-destructive behaviors, such as substance abuse, high-risk recreation, deviant sexual behavior, erratic driving, and self-mutilation, they ensure that their final day will come—sooner, rather than later. Of course, other people take similar risks without being suicidal at all. The key distinction is that somewhere deep inside, indirectly suicidal people engage in risky behaviors and actually hope to fail. And if an “accidental” death does not come quickly enough, sometimes they end up committing suicide by their own hand.

Perhaps the clearest form of indirect suicidality is the game of Russian roulette, in which players insert one bullet into a six-chambered revolver, and then spin the chamber so that the bullet’s placement is determined by chance. Each participant aims the gun at his or her own head and pulls the trigger, taking an approximately 16% chance of death. Russian roulette players often claim that they are not suicidal, and that “the goal of the game is to experience the rush of excitement in cheating fate” (Maris et al. 2000, p. 451). But their lives have often been filled with depression, substance abuse, and a range of high-risk and self-destructive behaviors. In addition, many are under the influence of alcohol or drugs when they play the game, which helps them mask their suicidal intentions from themselves.

I propose that indirect suicide terrorists often launch armed assaults on police stations, military bases, or other hard targets where they expect to be greeted by a hail of bullets that result in “suicide by cop.” However, although their chances of death are much greater than the 16% odds offered by Russian roulette, their suicidal intentions are much more easily camouflaged by the nature of the act. After all, it can be extremely difficult to differentiate between someone who engages in a high-risk terrorist mission and wants to survive and someone who mounts the exact same attack and wants to die. What stands out is that in many of these scenarios, the attackers could have picked much softer targets elsewhere and would have almost certainly killed more of the enemy. Instead, they chose riskier targets that offered an increased likelihood of their own deaths—which was probably part of the appeal. In Chapter 7, I provide several examples of suicide terrorists who seemed to fit this description.

A number of terrorist hostage-takers may be indirectly suicidal as well. For example, during the 1995 Budennovsk hospital attack, tactical leader Shamil Basayev, who was understandably distraught after the death of his wife and family just a few weeks earlier, told journalists that “It does not matter to us when we die” (Kohan 1995). Much like other indirectly suicidal people who gamble on death but survive, Basayev and some of his fellow terrorists lived through that first attack, but nevertheless found a premature end. Many were later killed by Russian security forces. And Basayev died in a mysterious bomb explosion at age forty-one. In other incidents, terrorists appear to have taken hostages primarily to force people to pay attention to them, even though they realized that, at any moment, government security forces might assault the complex and kill them. At some level, they may have wanted that to happen.

6. Comparisons with sacrificial heroes

Suicide terrorists have been commonly considered to be the psychological equivalent of others who sacrifice their lives for a greater cause. However, I propose that the similarities between suicide attackers and legitimate sacrificial heroes have been significantly overstated.

In general, suicide terrorists are often assumed to be brave because they embrace death, which most people are afraid to do. But when evaluating bravery and fear,

we should consider the actor's contextual alternatives. Although it may seem bold to jump from a window, it is much less so if you're fleeing a room that is on fire. Suicide terrorists often appear to be so desperate to escape unbearable pain—be it real or imagined, physical or psychological—that death may feel like the less intimidating alternative. Of course, perceptions of risk vary as well. For many suicide terrorists, blowing themselves up may feel like the least risky thing they could do—it could offer the greatest certainty that their overwhelming crisis will no longer plague them. For these individuals, the risky thing may be to face their uncertain future, tackle their problems one day at a time, or swallow their pride and ask for help.

Along these lines, by definition, sacrifice requires “the forfeiture of something highly valued for the sake of one considered to have a greater value or claim” (American Heritage Dictionary 2004). This means that suicide terrorists could only “sacrifice” their lives if they attribute high value to them. If they are intending to trade something they put a low value on (continued suffering in this “transient” and “dirty” world, according to their own statements) for something they value highly (heavenly rewards), that would be an upgrade, not a sacrifice. And this difference in how suicide attackers perceive life would make them psychologically different from millions of mentally healthy people who genuinely believe in heaven, but also value their lives—which seems to be why they are content to wait for a natural end.

To shed further light on the psychological and behavioral differences between suicide terrorists and sacrificial heroes, I examine specific cases in Chapter 5 and compare them across key variables (see also Lankford 2012b). The suicide attacks include Hanadi Jaradat's suicide bombing of an Israeli restaurant and Mohamed Atta's 9/11 attack on the World Trade Center. The sacrificial actions include Secret Service agent Tim McCarthy stepping in front of the president to take a bullet, and the separate cases of soldiers Ross McGinnis, Leroy Petry, and Matthew Croucher each jumping on a grenade to protect their comrades.

One key difference is the amount of decision time. Suicide attacks are almost always planned in advance, and many attackers spend months or years deciding that they want to die. Jaradat and Atta were no different. Even when a suicide terrorist's behavior is triggered by an unexpected crisis, significant premeditation is usually involved in planning the attack. By contrast, McCarthy, McGinnis, Petry, and Croucher had to make split-second decisions in the heat of the moment. Unlike most suicide terrorists, they did not orchestrate their situations. These deadly threats—the bullet, the grenade—found them, not the other way around. And unlike most suicide terrorists, they did not have days, weeks, months, or years to weigh the options and look for better solutions. McCarthy specifically recalls that he barely had the chance to think before jumping in front of the president, and thus attributes his behavior to “reaction based upon the training” (Crean 2007).

Another critical difference is whether the actor had the intention of dying. Although some explosive vests malfunction and some suicide terrorists are arrested before they can strike, it does not seem that any of those who attempt their attacks actually intend to survive. In fact, they often explicitly clarify their intention of dying in

suicide notes or “martyrdom” videos, as Jaradat and Atta both did. On the other hand, Secret Service agents who take a bullet for the president and soldiers who jump on a grenade to protect their comrades actually do hope to survive. Secret Service agents specifically wear bulletproof vests to protect themselves in the extremely unlikely event that they do get shot. And soldiers who jump on a grenade seem to have a realistic—albeit uncertain—chance of living. If they get to the grenade quickly enough, they can attempt to throw it back at their attacker. Petry tried this, although the grenade exploded just as he released it, costing him his right hand. Or they can attempt to smother it with a backpack or other equipment, as Croucher did, and may be fortunate enough to escape unscathed. Croucher later explained that he “fully expected” to lose a limb, but that he was willing to make that sacrifice “if I could keep my torso and head intact” (Harding 2008). Of course, he also realized that the selfless action could have cost him his life: “It took 30 seconds before I realized I was definitely not dead” (Harding 2008).

A final difference is whether the actor's behavior has the direct result of saving others or harming them. Terrorist leaders often claim that in the long run, suicide attacks save lives, because every enemy killed brings their people a step closer to victory. After 9/11, bin Laden argued that defeating the United States would save millions of innocent Muslims. But even if suicide terrorists were actually sacrificing their own lives in an attempt to save their countrymen, that goal would be an indirect and potential outcome, not a direct and nearly certain one.

The further the gap between one's actions and the desired payoff, the less likely those benefits will ever occur. Even if we give suicide terrorists such as Atta and Jaradat the benefit of the doubt, the indisputable fact remains that a tremendous number of dominoes would have to fall between their attacks and any lives being (indirectly) saved. In fact, suicide attacks often provoke a violent backlash against the families and countrymen of attackers, putting them in more danger, not less. All suicide terrorists can really count on is that their self-destructive acts will probably kill themselves and harm others.

By contrast, McCarthy instantly knew that by stepping in front of the president and taking the bullet, he greatly increased the chance that the president's life would be saved. And McGinnis, Petry, and Croucher each jumped on a grenade, instead of running in the opposite direction, because they immediately realized that it was their only way to save lives. As Croucher recalls, “I knew a grenade like this has a killing circumference of about five meters ... It was a case of either having four of us as fatalities or badly wounded—or one” (Harding 2008). Even though, at a minimum, he fully expected to lose a limb, Croucher did everything he could to protect his comrades.

In Chapter 5, I discuss criteria for sacrificial heroism in much greater depth. I acknowledge that heroic figures like McGinnis, Petry, and Croucher may have also been killers. And some suicide terrorists may have legitimately done heroic things during their lives. But a close examination of these specific behaviors suggests that carrying out a suicide attack was not one of them.

7. Explaining, predicting, and preventing suicide attacks

Why are suicide terrorism attacks so common in certain international hot spots? Why are they so rare in the United States? And how can we identify suicide terrorists and suicidal mass shooters, before it is too late? By better understanding the psychology of suicide attackers, we should be able to answer each of these questions more accurately than ever before. However, we should consider several other critical variables as well.

In Chapter 8, I propose that there are three minimum requirements for suicide attacks: (1) suicidal intent (whether it is conventional, coerced, escapist, or indirect), (2) access to weapons, and (3) access to enemy targets. If these factors are present, a suicide attack could occur; if they are not, a suicide attack is essentially impossible. I also identify four additional facilitators for the most deadly attacks and prolonged suicide terrorism campaigns: (4) homicidal intent, (5) a sponsoring terrorist organization, (6) social stigmas against conventional suicide, and (7) social approval of suicide terrorism (see also Lankford 2011c). Although some attackers are primarily suicidal and largely indifferent to the casualties they cause, others with both suicidal and homicidal intent want to take as many victims with them as possible. In turn, sponsoring terrorist organizations may increase suicidal and homicidal intent, provide access to weapons and enemy targets, and boost social approval of suicide terrorism through their propaganda.

Social stigmas against conventional suicide and social approval of suicide terrorism often work together. When a community strongly condemns conventional suicide as a certain path to hell, it virtually disappears as a potential escape route. This may be one of the primary reasons why suicide rates in the Islamic world are so low. On the other hand, when a significant percentage of people believe that suicide terrorism is justified, a new door opens for desperate individuals looking for a way out.

As I detail in the book, these factors may help explain why suicide terrorism has been so common in certain international hot spots, such as Iraq and Afghanistan. Some scholars have blamed Western occupation, making the argument that local inhabitants carry out suicide attacks because they are inspired to defend their homeland and political sovereignty (Pape & Feldman 2010). And, certainly, foreign occupation can provoke significant anger. However, I suggest that mentally healthy people find many alternative ways to fight without intentionally dying.

The key is that foreign occupation and war do not only provoke political backlash, they also have major psychological consequences on the local populace. For example, during the first two years of the Iraq War, more than 67,000 civilians were documented as killed or wounded, and many more went missing (Iraq Body Count 2005). Others lost their jobs and homes. It seems virtually inevitable that this would lead to a rise in suicidal and homicidal intent. And there are other indications that access to weapons, access to targets, social approval of suicide terrorism, and the presence of sponsoring terrorist organizations also increased. But it should be emphasized that foreign occupation is not inexorably linked to suicide terrorism. Civil war, sectarian violence, and drone

strikes may produce an increase in many of these variables as well.

Separately, many scholars and government leaders have been baffled by the scarcity of suicide terrorism attacks on American soil. From 1990 to 2010, there were just thirteen attacks in the United States that met the definition of suicide terrorism – fewer than one per year. In Chapter 8, I suggest that this can be explained by a number of factors, including low social approval of this tactic domestically, weak social stigmas against conventional suicide, lack of access to pre-made explosive vests, and the absence of a local terrorist organization that could arm and deploy a procession of bombers. But given that about 34,000 Americans kill themselves each year and that many others could be coerced into doing so, the United States is certainly not immune to a sudden spike in suicide attacks.

Fortunately, much more can be done to identify future suicide terrorists and suicidal mass shooters before they strike. For instance, previous homeland security initiatives have emphasized the need for public vigilance, calling on citizens to report suspicious behavior. But most people have assumed this refers to the suspicious behavior of strangers, not to their own friends and family. With the help of scholars who can share their latest findings about the critical warning signs, members of the public could be much better educated on how to recognize suicidal people in their midst. In the past, due to their intimate knowledge of those closest to them, family members have sometimes proven to be more effective at detecting at-risk individuals than the FBI or CIA. Educating them on exactly what to look for would increase their ability to help.

Furthermore, the ubiquity of Internet communications offers an unprecedented opportunity to find and monitor potential suicide attackers. Our lives are more interconnected than ever before, which makes it far easier to see into the hearts and minds of people we have never met. It might be easy to assume that suicide terrorists and mass shooters would not put clues about their attack plans online. But like the rest of us, they are not purely rational. They are often psychologically compromised, emotionally conflicted, and deeply consumed by pain. Before they attempt suicide – which is often referred to as a “cry for help” – they sometimes cry out by posting online. In addition, suicide attackers are often socially isolated and desperate for attention, which makes Internet forums, online communities, dating web sites, and social networking platforms especially attractive for fulfilling their needs. And if they have bottled-up anger that they cannot share with those around them, they may be particularly likely to vent it online, where many users still feel essentially anonymous and free to say whatever is on their minds. By identifying behavioral patterns in online activity, scholars may be able to assist security officials in fine-tuning systems for Internet surveillance. For efficiency's sake, I suggest that the surveillance should largely be done by computer programs, not human analysts. But in order to minimize false positives and privacy infringement, the software must be based on good science.

These are just a few of the many possibilities. Given the evidence that suicide terrorists are suicidal, experts from the behavioral and brain sciences may be able to pioneer a series of major breakthroughs in threat assessment, security screening, suicide prevention, and other exciting areas.

8. Conclusion

I hope that my findings will be valuable for scholars conducting research well beyond the scope of counterterrorism. It is often helpful to learn from extremes, and I have studied some profound extremes of the human experience – from people at their very worst and most hopeless to people at their very best and most heroic. One thing I have learned is that the hardwired survival instinct appears far stronger than most people give it credit for.

There is a wildly popular, cross-cultural, highly romanticized assumption that heroic individuals often embrace certain death because they are so passionately committed to a cause. I used to subscribe to this view, but now I'm not so sure. In extreme crises, relatively normal people may commit suicide to avoid future discomfort, punishment, or pain. But that seems more selfish than selfless. And certainly, people can have a vested interest in encouraging *others* to die for the good of the group. But do mentally healthy people with time and options actually kill themselves for an ideological cause?

Suicide terrorists were supposed to be a prime example of this phenomenon. So were the kamikaze pilots of Japan. So were soldiers who jump on a grenade to save their comrades, and Secret Service agents who take a bullet for the president. But the evidence I've uncovered suggests that past suicide terrorists and kamikaze pilots were suicidal and psychologically compromised, due to a combination of individual, social, and situational factors. And it appears that soldiers who jump on a grenade and Secret Service agents protecting the president genuinely hope to survive.

What about self-immolators like Mohamed Bouazizi, who may have sparked the Arab Spring after he stood in front of a government office in Tunisia, poured gasoline over his body, and lit himself on fire? I've looked into his case, and there are many reasons to think he was suicidal as well (see Lankford 2011b).

What about the human waves of Iran? The legend is that during the Iran–Iraq War, tens of thousands of children and teenagers, wearing keys to heaven around their necks, willingly cleared minefields with their bodies, boldly embracing the fact that their death was certain. But consider the source and the potential for ulterior motives: it certainly seems as though Iranian leaders would have had good reason to create another exaggerated myth. I have been in brief contact with an expert on the subject, and he suggests that many of these children and teenagers actually survived. Perhaps they all hoped to be so lucky. And perhaps significant coercion played a role in getting them on those minefields in the first place.

What about those rare Buddhist monks who have set themselves on fire, reportedly for political purposes? Were they psychologically normal and driven by altruism? If we dig too deep, I'm almost afraid of what we might find. Most people don't mind questioning the motives of suicide terrorists, but in the case of monks they might respond more aggressively, regardless of the truth.

Ultimately, I do know that mentally healthy people often put their lives at great risk for a higher cause. But given that hardwired survival instinct, I wonder if they always hope to live to see tomorrow – no matter what they believe in.

Open Peer Commentary

Martyrdom's would-be myth buster

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Abstract: Lankford overgeneralizes individual psychology from limited, fragmentary and doubtful materials, and underplays strategic, ideological, and group dynamical factors. His speculative claims manifest a form of fundamental attribution error: the tendency – especially evident in popular attachment to moral presumptions of individual responsibility and volition – to overestimate effects of personality and underestimate situational effects in explaining social behavior. The book's appeal may owe more to ideological preference than to interests of science or national security.

Given that “by definition, suicidal terrorists are suicidal,” Lankford's book *The Myth of Martyrdom* (Lankford 2013c) reaches its conclusion before starting. Absent evidence of clinical morbidity or past suicide attempts, Lankford uses indicators such as “fleeting suicidal thoughts,” “risky life style,” and “suicide-like gestures,” which may subsume tens if not hundreds of millions of people. He claims to overthrow “the conventional wisdom” that suicide terrorists were “ordinary individuals before they were recruited and indoctrinated” (p. 4) through “brainwashing” (p. 12). But “brainwashing” hardly figures among experts cited. Rather, suicide terrorists are often portrayed as self-seekers propelled by: moral outrage against foreign occupation or perceived attacks on the Muslim community, a search for personal significance and glory in a sacred cause, and the group dynamics of peer influence and popular support. (On brainwashing as popular fiction, see Atran 2010c; Sageman 2008).

Lankford charges that: “scholars and government experts continue to spread this terrorist propaganda” of self-sacrifice (p. 49), albeit unwittingly, because older academics unimaginative conformists “too scared of being wrong,” and so adopt a “less risky perspective” (pp. 3–4).

Consider: For Lankford, social scientists conduct surveys and interviews “because it gives them new, exclusive” data, ignoring “social or cultural biases” or that respondents “may be lying, with ulterior motives” (p. 21). Relevant social science, however, assumes *mistrust* of direct informant responses as revealing objective fact or truth (Atran & Medin 2008). More so regarding terrorists: If I naively believed what jihadis told me, I'd be dead. And by what imagination does fieldwork with terrorists, including escaping from killers in Sulawesi's jungles or in a Lashkar-e-Taiba mosque in Kashmir, qualify as more risk-averse than Lankford surveying others' data?

In full disclosure, I'm repeatedly pilloried for a passage in a *Science* article written over a decade ago: “no instances of religious or political suicide terrorism stem from lone actions of cowering or unstable bombers” (Atran 2003, p. 1536). Then, there were no documented cases of lone-wolf psychopathology among the anarchist bombers, Japanese kamikaze, and jihadis described. Later, based on my field studies and collaborations across Eurasia and North Africa, I noted in publications and congressional testimony that suicide attacker profiles began changing markedly after 9/11: from mostly married, middle class, fairly well-educated men in their 20s and 30s recruited out of country, to mostly unmarried, marginal, less-educated young men in their teens and early 20s enlisting in-country and abroad. Self-seekers engaged in small, mutually supportive clusters of friends and fellow travelers, with

little religious education but “born again” into radical Islam to find personal significance through a glorious cause, these were mostly young adults in transitional stages in life: students, immigrants, between jobs or girlfriends, away from family and seeking a new home (Atran 2008; 2011; Sageman 2008).

Groups differed. In Palestine, Hamas martyrdom volunteers were above the mean in education and socio-economic status, whereas Fatah’s al-Aqsa Martyrs Brigades were recruiting anyone they could (including children, wayward women, petty criminals) to compete with Hamas (70–80% of Palestinians consistently supported suicide attacks during the Second Intifada, with “joy” the most frequent accompanying emotion; Ginges et al. 2007). In Indonesia, Jemaah Islamiyah factions retained top religious and scientific echelons of select madrassas to plan operations (Magouirk & Atran 2008), but sought “lost” youth outside madrassas to detonate and die. In Iraq, Zarqawi’s al-Qaeda affiliate rushed young volunteers from Saudi Arabia and Yemen into suicide actions, but kept Algerian volunteers and others with previous fighting experience for sustained combat operations (Kingdom of Saudi Arabia 2007). In Afghanistan and Pakistan, Taliban funneled schoolboys from poor rural madrassas into suicide missions, whereas groups with international ambitions, such as Lashkar-e-Taiba, engaged people with skill in languages and cultures, computers, and GPS, for attacks in India and elsewhere (Atran 2010c).

Lankford ignores such group differences, presenting his own opportunity sample of 136 individuals as representative, including non-suicides such as Anders Breivik (a white supremacist imprisoned for killing Norwegian youth), Jim Adkisson (an anti-liberal imprisoned for attacking a Knoxville Church), and Nidal Hasan (a jihadi sympathizer imprisoned for shooting fellow soldiers). Moreover, 53 attacks are “unidentified,” including failed attacks and “multiple attacks” that succeeded “sometimes.” Selective interpretation of second-hand reports with more than one-third of the cases unidentified hardly qualifies as reliable, much less representative of thousands of suicide attackers identified since the 1980s (Pape 2010).

Besides this opportunity sample, and selective anecdotes about what a few rampage shooters and political terrorists purportedly said and did (rather than using systematically vetted sources such as court proceedings involving cross examinations), Lankford relies on two external studies. One is a dubiously relevant Secret Service evaluation of 83 persons who attempted political assassination, nearly all loners (rare among suicide terrorists until recently) with most having a history of mental illness. The other, by Merari et al. (2010), compares 15 “pre-emptively arrested” suicide attackers, 12 “regular terrorists,” and 14 “organizers of suicide attacks.” In personality tests, including some with questionable credibility pinpointing mental problems (Thematic Apperception, Rorschach), 6 failed suicide terrorists showed “suicidal tendencies” and 8 “depressive tendencies,” versus no suicidals and 4 depressives in the other two groups.

Now, people who failed in their life’s mission, constantly reminded of that failure in prison, may be prone to low self-esteem, depression, even suicidal thoughts. Moreover, small sample size precludes conclusions regarding frequency differences between groups. Rather than examine representativeness, methods, or counter-arguments (Byrm & Araj 2012), Lankford suggests that Merari et al. actually “*underdiagnosed* suicidality,” having “intentionally ignored the most obvious indicator that their subjects were suicidal ... they had planned to blow themselves up” (p. 50).

While personality can be a factor (Tobena 2011), Merari et al. conclude: “essentially, suicide attacks are a group phenomenon, and practically all of them have been planned and organized by groups rather than carried out by individuals on their own initiative” (Merari et al., 2010, p. 97; cf. Pedhazur & Perlinger 2006). Lankford grants that: “On the surface ... suicide terrorists usually work with [organizations], while the others almost always

act on their own” (Lankford 2013c, p. 112). But he sees deep cause in the “critical similarity between certain suicide bombers, rampage shooters, and school shooters” expressed by Kruglanski’s notion of “quest for personal significance” (p. 109), while omitting that for prospective martyrs “a crucial characteristic of the significance quest is its anchorage in [the group’s] ‘sacred values’” (Kruglanski & Gelfand 2013, citing Atran et al. 2007).

Space does not permit dissecting Lankford’s account of Mohammed Atta and other “in-depth cases,” but I urge comparison with long-term studies of how suicide actions evolved through group dynamics (including discussion of personalities: Sageman 2008; see also, ARTIS 2009; Atran 2010c). Lankford mentions “coercion” (as with Tamil Tigers), without distinguishing “pressure” from popular support (as in Palestine) and peer influence (as in the Madrid plot). Arguing physical coercion, he pretends to debunk as “total fabrication” depictions of Kamikaze as “courageous warriors” (pp. 132–133) based on cursory reading of a single reference. As Ohnuki-Tierney wrote me concerning Lankford’s claims in her name: “The Japanese military was notorious for corporeal punishment. But, they did not do so for the purpose of coercing them to be pilots;” rather, “coercion” ensued from indirect “peer group pressure—once having gone through training together, it was hard [to refuse]—‘I am saving my life; you guys go’. Hardly any died for the emperor, but some sought meaning ... that their death will bring the rebirth of Japan without capitalism.” (Personal communication, July 2013; Ohnuki-Tierney 2006, pp. 169, 197; cf. Tokkotai Senbotsusha 1990, on 340 army and naval academy volunteers).

Lankford maintains that “the suicide terrorist’s death ... does not increase likelihood of success nor the expected magnitude of destruction” (p. 45). Yet it gained Hezbollah and Hamas political prominence, and brought al-Qaeda global attention. In assessing damage from attempted suicide attacks in America (most of which failed or were unrelated to jihadis), he argues that 9/11 is the “exception” (p. 121). He disregards government data cited by Merari and others that suicide attacks constituted less than 1% of the total number of attacks, but caused more than 50% of the casualties in Israel-Palestine, and one-third of Iraqi casualties.

Lankford brushes off plausible strategic, ideological, group dynamical and other political, cultural, and social factors. (Why have Islamic Hezbollah and Hamas and the Marxist-Leninist PKK mostly abandoned suicide bombings?) His main prescription for “how to stop suicide terrorism” (pp. 151–175), by tracking and testing (many thousands of) potential suicidal personalities at home (and millions abroad), is likely a counterproductive diversion of time and resources. The book manifests a form of fundamental attribution error: the tendency—especially evident among those attached to the moral ideology of individual responsibility and independence of action—to overestimate effect of personality and underestimate situational effects in explaining social behavior (Norenzayan & Nisbett 2000).

Lankford’s notion that publicly perceived “true” heroic actions involving self-sacrifice and killing of group enemies (including non-combatants) are almost always cause for sorrow rather than celebration (p. 104) is wrong for nearly all known cultures across recorded history (Ehrenreich 1997). In qualifying suicide terrorists as “fake heroes” and cowards so afraid of life that they sacrifice nothing of worth when they die (as opposed to “real heroes” like winners of the Medal of Honor, possibly excluding the 27 awarded for massacring mostly Native American women and children at Wounded Knee), Lankford comforts the initial, ideologically driven assessment of much of our press, public, and political establishment.

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The over-determination of selflessness in villains and heroes

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Abstract: The suicidality hypothesis could be applied to other situations, such as cases in regular military organizations or in “terrorist” groups, where individuals put themselves in circumstances that are directly suicidal. Self-selection in these cases may be motivated by depression or short-term hopelessness. Both violent and charitable acts are over-determined, and a multiplicity of motives should be considered in explaining them.

In reviewing Adam Lankford’s book, *The Myth of Martyrdom* (Lankford 2013c), first, I have a couple of reservations:

1. Despite the commendable job done by the author, the data on suicide terrorists are necessarily limited.

2. Referring to “terrorist organizations” as wanting “attention” and “publicity” is puzzling. Lankford does not provide a definition of “terrorism,” but the red thread running through published definitions refers to violence against non-combatants. This may be a deliberate policy not only on the part of “terrorist organizations,” but also of states. At least one Israeli leader argued in 1981 that mass killing of civilians is fully justified when it produces the right outcome (Asad 2009).

Lankford’s review in the book should lead us to consider psychopathology, or subjective personal deficiency, as probable factors in acts of self-sacrifice. He is right in regarding claims to normality in all suicide bombers as untenable, having statistics and logic on his side. This is reminiscent of claims about the absolute normality of all religious converts (Beit-Hallahmi 2001). Sympathetic views of terrorists (suicidal or not) in the literature may reflect Western guilt over colonialism and exploitation, which ended only when the colonial subjects resorted to effective violence. Native violence was always regarded as criminal and depraved; the terminology of “terrorism” may be a recent version of that.

The suicidality hypothesis has much merit to it and could be applied in many other cases. Suicidal tendencies have been considered in “psychological autopsies” of seemingly accidental deaths, both military and civilian (Wrightsmann 2001). There are situations in regular military organizations or in “terrorist” (i.e., non-governmental) organizations where individuals put themselves in circumstances that are directly or potentially suicidal, not only when somebody jumps on a grenade, but when individuals volunteer for high-risk missions. When soldiers (or “terrorist” rebels) are ordered into action, their motivation, beyond obedience and loyalty, raises few questions. When individuals volunteer for specific missions where chances of survival are low, questions should be raised. Self-selection in these cases may be related to long-standing depression or short-term hopelessness.

The African National Congress (ANC), now the ruling party in South Africa, was considered a terrorist organization by the United States government as late as 2008, replicating many other cases in the history of anti-colonial struggles. Its military wing, co-founded by Nelson Mandela, carried out some indiscriminate bombings, which mostly killed Africans, as well as guerilla attacks against government targets. Most of these latter operations could only be described as “suicidal.” ANC fighters who volunteered for them knew very well that chances of surviving were very low, while those involved in indiscriminate bombings almost always survived (Kalley et al. 1999). We could hypothesize that volunteers for guerilla operations were more likely to suffer from dejection and self-doubt.

We should recall that the preservation of life and limb is not the highest value in any human culture. All cultures admire self-sacrifice for a cause, just like self-control over one’s bodily desires and

weaknesses. We admire those who climb Mt. Everest, or run marathons in a victory of “spirit” over “flesh”; we admire even more those whose acts benefit the whole community or nation. Patriotic self-sacrifice is always praised, but most patriots don’t want to die in war and most believers don’t want to be martyrs. Motivation for any significant human act is over-determined, and the principle of over-determination applies to all significant altruistic acts. Behind the declared selfless reasons, much might be hidden (Batson 2011).

The scope of Lankford’s analysis is limited by sympathy, respect, and fear. At the end of the Précis article, he refers to examining the psychological state of “Buddhist monks who have set themselves on fire,” but confesses that “If we dig too deep, I’m almost afraid of what we might find” (sect. 8, para. 6), thus admitting concern about potential criticism. Moral sympathies should not interfere with psychological analysis. It is possible, and necessary, to disentangle moral judgment, political sympathy, and clinical diagnosis.

The psychoanalytic tradition has not let respect stand in the way of interpreting self-sacrifice as related to potential psychopathology. It has examined religious traditions that offer believers various forms of renunciation, from martyrdom to acts of charity which involve self-debasement and risk (Beit-Hallahmi 1996; 2010; Beit-Hallahmi & Argyle 1997; Bradford 1990; Seelig & Rosof 2001). Psychoanalysis has become famous for uncovering pathology behind every good deed and debunking altruism. It has described the acts of self-sacrificing individuals as tinged with masochism (Fenichel 1945; Freud 1946).

We must treat such speculations with caution; however, we are drawn to them when witnessing true self-sacrifice. We can observe nuns, who, because of religious ideals, take care of terminal patients in hospices or of the severely retarded, those who will never get better. This means not dramatic heroism and total renunciation, but a heroic way of life, day by day. This way of life expresses an ideal of self-sacrifice (“kissing the leper”) which we can only admire, while wondering about the complex motives behind it. There are medical workers who work in hospices or with incurable cases, of course, but they have not taken vows to avoid pleasures and shun any other commitments.

Some widely admired moral heroes were self-tortured, self-critical, depressed, and even suicidal. Both Gandhi and Martin Luther King Jr., dead by assassination, attempted suicide and displayed problematic behaviors (e.g., Adams 2010). Janusz Korczak (the pen name of Henryk Goldszmit) was not only a brilliant writer, but earned a well-deserved reputation as a moral hero. He devoted his life to children, lived with them, never had a family of his own, and went with them to his death in the Holocaust, refusing to save his own life (Lifton 1997). His private writings reveal a deeply unhappy man oppressed by self-doubt and self-accusation.

Extraordinary acts stem from extraordinary motivations. A devaluation of the self, and of the world, often lead individuals to inaction. Sometimes these may result in attempts to transform the self or the world. Pathology is part of the equation which animates some we consider villains and others we consider heroes.

Martyrdom redefined: Self-destructive killers and vulnerable narcissism

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Abstract: Lankford shows that suicide terrorists have much in common with maladjusted persons who die by suicide. However, what differentiates suicidal killers from those who “only” commit suicide? A

key element may be vulnerable narcissism. Narcissism has been simultaneously linked to interpersonal aggression, achievement, and depression. These traits may explain the paradoxical picture of a person who may appear “normal” in some aspects, and yet hate himself and others so intensely as to seek mutual destruction.

In his book, *The Myth of Martyrdom*, Lankford (2013c) provides convincing evidence that suicide terrorists are psychologically maladjusted persons who share multiple risk factors (e.g., history of previous suicide attempts, depression) with other persons who die by suicide. Lankford’s proposal counters various experts who have maintained that these persons are “remarkably unremarkable,” and have even equated suicide bombers to elite military personnel.

However, a question that remains to be answered is, why do these suicidal killers not just commit suicide? Lankford suggests some societal factors such as social stigmas against conventional suicide, social approval of suicide terrorism, and the existence of sponsoring terrorist organizations. However, these factors are not wholly satisfactory as explanation. For example, in Palestine where suicide bombings are common, there are also increasing rates of “conventional” suicide (Dabbagh 2012). Also, as Lankford summarizes, there are many volunteers who are willing to conduct “conventional” terrorist attacks, but who value their lives too much to carry out suicide attacks. Hence, the question becomes: What intrapersonal factors allow some individuals to maintain a seemingly normal life, and yet be psychologically troubled enough to make long-term plans for terroristic attacks *and* want to kill themselves and others?

One answer might come by further exploring a point mentioned but not expanded upon by Lankford. In the book, he compares suicide terrorists with persons who commit murder-suicide (e.g., the Columbine shooters) for whom “delusions of grandeur” and the desire for “fame and glory” are prevalent (pp. 108–109). From a clinical and personality psychology perspective, these characteristics fall squarely in the domain of narcissism. Narcissism is characterized by an inflated, *unstable* sense of self-esteem that leads to aggression in the face of perceived or real personal slights or insult (e.g., Bobadilla et al. 2012; Bushman & Baumeister 1998). Narcissism has also been associated with traits like sensation seeking and risk taking (Vazire & Funder 2006), which, according to Lankford, are characteristic of “indirect” suicide terrorists who are expected to conduct the most “daring and elaborate attacks” (p. 147). Moreover, narcissism appears to have some adaptive qualities like achievement striving and attainment which may lend a veneer of normalcy and even some actual academic and professional achievement (e.g., Nidal Hasan).

Narcissism might not appear as an appropriate candidate personality constellation to explain suicide. After all, narcissism is commonly viewed as a pathological, extreme form of self-love, whereas feelings of self-hate are more prevalent among persons who die by suicide. However, clinical and research data suggest two types of narcissist: One commonly known as *grandiose*, where the person is characterized by extraversion and sociability, the other known as *vulnerable*, where the person “presents him/herself as timid, shy ... only to reveal in therapy the most elaborate fantasies of the grandiose self” (Masterson 1981, p. 8). Both subtypes of narcissism have been related to self-absorption, aggressive impulses, and entitled expectations at the expense of others (Bobadilla & Taylor 2012). However, whereas grandiose narcissism is marked by social assuredness and psychological well-being, vulnerable narcissism is characterized by introversion and fear of social judgment. Indeed, vulnerable narcissism is related to avoidant personality disorder (AVPD) which is marked by extreme social anxiety (Dickinson & Pincus 2003). Notably, AVPD traits were identified by Merari et al. (2010) as characteristic of Palestinian would-be suicide bombers but not of terrorist cell organizers and leaders, who were the most psychologically resilient and had personality traits (e.g., manipulateness) more likely to be characteristic of grandiose narcissism.

Self-destructive killing (including terrorism) requires the desire and capability for suicide *and* murder: in short, a unique mixture of self-loathing *and* antagonism. Vulnerable narcissism may adequately explain the paradoxical picture of persons who have a grandiose view of themselves but are simultaneously so demoralized that their suicidal ideation is channeled as “martyrdom” against real or perceived opponents. Biographical details of some prominent suicide killers exemplify these instances. Both Columbine shooters had an intense, but private, messianic contempt for others accompanied by pervasive self-loathing and feelings of inadequacy. In the months preceding the massacre, Klebold wrote in his diary: “I am God compared to some of these un-existable zombies” (Jefferson County Sheriff’s Office [JCSO] 2006, p. 478), while Harris mused “I feel like GOD and I wish I was, having everyone being OFFICIALLY lower than me. I already know I am higher ... in terms of universal Intelligence.” (JCSO 2006, p. 86). Simultaneously, Klebold wrote that he “hate[d his] life” due to his inability to find a girlfriend, being “intimidated”, “looking wierd [sic] & acting shy” (JCSO 2006, p. 475). Similarly, Harris—debatably labeled a psychopath (Cullen 2010)—consistent with vulnerable narcissistic feelings wrote how he “hated” his appearance, had “practically no self-esteem, especially concerning girls and looks and such” (JCSO 2006, p. 95). Finally, the shooters expressed a desire for revenge after *perceived* rejection or lack of admiration from others. Harris wrote “If people would give me more compliments all of this might still be avoidable” (JCSO 2006, p. 96). Likewise, white-supremacist Anders Breivik, before committing the worst act of terrorism in Norway’s history, e-mailed a manifesto that contained as part of its call to arms to “take a few hours on solarium to look fresher,” and “visit a male salon if possible and apply makeup” prior to an “operation” because “we must look our best for the shoot” (Breivik 2011). Breivik’s narcissism led him to seek plastic surgery, use steroids, and brag about sexual conquests, despite reports from people who knew him that he was socially awkward, and unable to find a girlfriend (Carbone 2011). Similar details can be gleaned from Mohammed Atta, who was painfully shy and socially inept, but contemptuous of Western customs and controlling to the point of extreme irritation if subordinates deviated in the slightest from his plans (Lankford 2013c).

In short, vulnerable narcissistic traits may help redefine “martyrdom” by delineating the psychological architecture of those who hate themselves and others so intensely as to seek mutual destruction. Importantly, these traits appear most relevant for “indirect” suicidal terrorists who are capable of planning and carrying out the most complex and deadly attacks.

Can self-destructive killers be classified so easily?

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Abstract: Lankford makes many useful points regarding the myths and shibboleths underlying our understanding of self-destructive killers and suicide bombers. He has collated an impressive data set on such offenders. However, his classification scheme is not built on sufficient evidence to support his proposed discrete categories of conventional, coerced, escapist, and indirect suicide terrorists. It would be straightforward to analyse the data, but it is unlikely that the resulting model would reflect that anticipated.

Chapter 7 of *The Myth of Martyrdom* (Lankford 2013c) proposes four types of suicide terrorist: conventional, coerced, escapist, and indirect. Lankford's evidence for this is inductive and anecdotal, or perhaps, in contemporary terminology, "qualitative." I would not personally wish to base my professional expertise on such modestly demonstrated (albeit confidently presented) views without stronger statistical evidence, and using such a model proactively and prematurely to screen for risk would surely breach Daubert criteria regarding evidence-based practice. Issues such as false positives (and false negatives) and how they affect the individuals so screened are lightly touched on, but insufficiently so, given the importance of ethics and human rights in the area (Saetnan 2007). That said, antisocial behaviour is maintained by cognitions as well as dispositions (Egan 2011; Egan et al. 2000), and while offenders often believe their unchallenged personal myths and self-serving rhetoric, practitioners need to see through these distractions. Moreover, the imaginations of offenders and the personality disordered may be populated by an interest in violence and the bizarre (Egan et al. 2003), and Lankford's book makes this violent ideation all too apparent. However, while disposition, interests, and cognitive constructs may correlate with antisocial behaviour, they remain insufficient to specifically identify future risk, and even the most strongly-researched risk-assessment instruments do not predict violence beyond 0.8 (Yang et al. 2010).

Nevertheless, the author's approach is creative, broad, and refreshing. Lankford notes that workplace and rampage shootings (and subsequent suicides) are far more common than suicide-bombings, and that for such nihilists death is preferable to life. The rhetoric of suicide-terrorists being like elite military squads willing to give their lives for their country is rightly challenged, as one seeks to keep one's skilled, expensively-trained military operatives alive, and conventional military endeavour is to minimise casualties (including those to the enemy). Distressed persons who decide they have nothing to lose but their lives may be more expendable, at least to the cynics who seek to exploit their distress for a violent purpose.

Another welcome corrective to received wisdom is Lankford's presentation of evidence that kamikaze pilots were not inherently willing to die: candidates were brutalised until they regarded death as an attractive escape (Ohnuki-Tierney 2007). Such brutalising also occurs in some madrassas, differentially victimising those lacking resilience or unable to acquire desired competencies, making suicidal death (re-constructed as "martyrdom") a release for some of those unable to cope. The processes by which the spirit of another person is broken are straightforward, should one have the psychopathy to do so, and similar methods are also used by some pimps to "condition" prostitutes (Kennedy et al. 2007). Victimised persons develop learned helplessness, and become submissive, compliant, and inclined to dissociate. Individuals can do many things they would not do otherwise in such a mental state, as those recruiting suicide-bombers probably well know.

After the 2004 Madrid bombings (which killed 191, and wounded 1,800) Al-Qaeda released a document declaring "You love life and we love death," and Lankford also challenges the nihilistic glorification of self-destruction. He notes that many "sacrificial" gestures are futile, and more like "escapist suicides." To call such an act "brave" grossly and consciously misrepresents the nature of courage (a matter covered in Chapter 5). "Suicide by cop" is another form of escapist-suicide, which, to this reader, provides strong grounds to avoid using lethal force with a potential target when possible, as homicidal miscreants are better punished by consciously living with the consequences and reminders of their actions for the longest period possible.

Lankford notes that faced with the consequences of their actions, surviving offenders may lack the mental resources to comprehend the enormity of their offences, and their experience of painful but salutary feelings may lead to their contemplating or committing suicide. He also makes the crucial point that antisocial

and violent acts are driven more by audacity than any virtue, because if you do not care about being caught or the consequences (e.g., if you seek to escape consequences by suicide or suicide by proxy), there are few limits on your behaviour. This reiterates the argument for, where possible, the use of non-lethal force in the containment of killers. We learn far more about rampage killers such as Anders Breivik, James Holmes, Fort Hood massacre initiator Nidal Hasan, or surviving Boston bomber Dzhokhar Tsarnaev, by keeping them alive and by not becoming complicit with opposing homicidal cults and subcultures by being homicidal ourselves. We also maintain moral authority despite the temptation to be as bad as the offender.

Appendix C of the book sets out four categories of suicide terrorist by their type, warning signs, level of training and experience, attack style, strategies for negotiation to facilitate surrender and arrest, and, strategies for interrogation. Content in the cells of the table often generalises across suicide categories; conventional and coerced suicide terrorists have psychopathologies associated with mental disorder, whereas escapist and indirect suicide terrorists fetishise death, and may well have more antisocial dispositions. This marries well with information extracted in an analysis of constructs used by British border controls to identify persons vulnerable to violent extremism (Egan et al., under review). I think it very likely that suicide terrorists can move across categories at different points in their violent extremist trajectories, but such flexibility and continuum thinking is not built into Lankford's model.

While a priori inductive models such as Lankford's appear comprehensive, they are often premature and insufficiently tested. Lankford rightly challenges received wisdom regarding the mental stability of suicide terrorists, spurious myths of martyrdom, and rampage killings that play on Western and cinematic notions of nihilism. But there is insufficient testing of his hypotheses. A small space analysis of individuals in his appendices A and B classified as having the attributes in his appendix C present or absent would soon test whether the four categories of suicide terrorist he identifies exist in the theoretical sense proposed. If not, it would define the structure of these important attributes for a revised and more conservative model of self-destructive killers more in keeping with reality.

Cognitive simplicity and self-deception are crucial in martyrdom and suicide terrorism

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Abstract: Suicide attacks and terrorism are characterized by cognitive simplicity, which is related to self-deception. In justifying violence in pursuit of ideologically and/or politically driven commitment, people with high religious commitment may be particularly prone to mechanisms of self-deception. Related megalomania and glorious self-perception are typical of self-deception, and are thus crucial in the emergence and expression of (suicide) terrorism.

Lankford (2013c) challenges the perspective of suicide terrorists being "psychologically normal" (and not truly suicidal) by stating that they are much like other individuals committing suicide, that is, affected by mental health problems, personal crises, coercion, fear of an approaching enemy, or hidden self-destructive

urges. On his view, suicide terrorists *are* suicidal and therefore not psychologically equivalent to those whose motivation is to sacrifice their lives for a certain cause or entity. He goes on to present interview records with suicide terrorists, including one with Mohammed Atta, the ringleader and one of the pilots of the 9/11 massacre, who (according to Lankford) struggled with severe psychological risk factors for suicide, including personal crisis. Lankford's general claim is that the primary motive for past terrorist attacks was not ideology and/or political or religious commitment, but rather, the suicidal personality that suicide terrorists share with conventional suicidal persons.

This approach to understanding the development of suicide terrorists' behavior and psychology underestimates a key phenomenon of the human mental architecture; that is, self-deception. Trivers (2011) argues that self-deception is a fundamental mechanism of the human mind. It is ultimately designed for the purpose of deceiving others by obfuscating the truth, thus making detection of deception by others more difficult. While deception is cognitively demanding and can therefore be detected, it may be adaptive to suppress information from the conscious and move it into the unconscious. Such a process is typically associated with the rationalization that the lie is true, and it happens without people's conscious awareness (von Hippel & Trivers 2011). One of the consequences is the reduction of the cognitive load of the deceiver, who then expresses overconfidence in a certain belief.

Religion is especially prone to being a vehicle for self-deception, as it is one of the ways to make people believe that they are "greater" than they actually are (Triandis 2009). It helps people to deal with uncertainty and with things they cannot explain. It is easier to adhere to the belief that a higher power is responsible for the happenings, and justifies certain behavior, than to deal with complex facts which would render them absurd. The case of Mohammed Atta is a typical example of self-deception as a major driver of suicidal terroristic behavior. Atta was reportedly after glory, but he did not admit that to himself, so he dressed his motives in religion (Triandis 2009). The cognitive simplicity in rationalizing the true motive behind Atta's action is obvious, and may even have been rewarding for him. Looking back, an observer may get the impression that self-deception had led Atta into a personal disaster with similar consequences for many (uninvolved) others. So why should the mechanism of self-deception (and hence overconfidence) have caused all this if there was no benefit associated with the consequences? In Atta's case, it was certainly satisfying for him to cherish the illusion that he was doing God's work (rendering him into a martyr), and this in particular distinguishes him markedly from others who commit conventional (or unconventional) suicide without being driven by ideology and/or religion.

Considering the costs and benefits of suicidal missions, the question arises as to why (according to Lankford) suicide terrorists should be much like others who commit conventional suicide, if motives were not markedly affected by the conviction that it were for a great good. Suicide terrorism is typically characterized by violence against an out-group, that is, individuals or groups that do not share the same ideology or commitment ("the unbelievers"). Targeting suicidal terroristic acts toward an out-group, including the strategic planning of it, doesn't make sense if it were not influenced by the overconfidence that such a mission will eventually pay off, not necessarily for the individual but (at least) for the aims of the in-group (though in the case of martyrdom it is both). With reference to Osama bin Laden's post-9/11 argument that the pay-off from suicide terrorists sacrificing their lives was the promise of an indirect "benefit" for the sake of their countrymen, Lankford seems to imply that such an adjuration cannot be the sole reason for a suicidal terroristic mission. However, since Hamilton's (1964) seminal work on inclusive fitness, it is well known that organisms can raise their overall genetic success by altruistic social behavior, thus increasing their genes in the next generation. In other words, on the genetic

level, there doesn't have to be an immediate reward for the individual; but the genetic benefit can also be achieved via one's in-group sharing more genes with the individual than with an out-group. Moreover, the definition of who forms the in-group versus who forms the out-group is particularly narrow in fundamentalism, and may thus explain why it is more pronounced in collectivist cultures with relatively simple and tight bounds.

Suicide terrorism is most often associated with Islam, and because of Lankford's examples of Mohammed Atta and the 9/11 attacks, we also discuss the link between self-deception and religious commitment in this context. However, it should be noted that terrorism is certainly not restricted to Islam but has occurred historically in Christianity, Judaism, and Hinduism as well. Our argumentation follows that of Kruglanski and Fishman (2006) who view terrorism as an "effective tool" in fighting a superior "enemy," and self-deception may be the cognitive mechanism that is used by an individual or a group to "justify" related actions. Such justification may especially affect individuals who see a large difference between themselves and the potential victims in terms of religion, social class, ethnicity, language, and ideology (Triandis 2009).

Suicide terrorism is characterized by cognitive simplicity and megalomaniac self-deception, both of which are intertwined and allow people to "rationalize" their actions. While this may be particularly true for people who are estranged from society, it also applies to many of those who believe that we (whoever "we" may be) must win the "war on terrorism" (Triandis 2009). In short, self-deception on what is "best" for the group occurs on both sides of the conflict, and it will continue until we face this fact and evaluate the complexity of terrorism in relationship to cultural diversity.

Weighing dispositional and situational factors in accounting for suicide terrorism

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Abstract: Lankford's book makes the important point that analyses of suicide terrorists often commit the error of overestimating the importance of situational causes of behavior and underestimating dispositional causes, such as underlying pathology. Personality and individual differences are important; suicide terrorists are *not* ordinary people driven by situational pressures. However, citation of empirical evidence is haphazard; the scholarly argument is not well-developed.

In 1977, the social psychologist Lee Ross coined the term "fundamental attribution error" to describe the putative tendency of people to overestimate the importance of dispositional causes of behavior, such as personality traits and political attitudes, and underestimate the importance of situational causes, such as social pressure or objective circumstances. Over the decades since, the term has firmly rooted itself into the conventional wisdom, to the point where it is sometimes identified as the basic insight of social psychology (Ross & Nisbett 2011). However, the actual research evidence purporting to demonstrate this error is surprisingly weak (see, e.g., Funder 1982; Funder & Fast 2010; Krueger & Funder 2004), and at least one well-documented error (the "false consensus bias" (Ross 1977a) implies that people *overestimate* the degree to which their behavior is determined by the situation. Moreover, everyday counter-examples are not difficult to formulate. Consider the last time you tried, in an argument, to change someone's attitude. Was it easier, or

harder than you expected? Therapeutic interventions and major social programs intended to correct dispositional problems, such as tendencies towards violence or alcoholism also are generally less successful than anticipated. Work supervisors and even parents, who have a great deal of control over the situations experienced by their employees or children, similarly find it surprisingly difficult to control behaviors as simple as showing up on time or making one's bed. My point is not that people never change their minds, that interventions never work, or that employers and parents have no control over employees or children; it is simply that situational influences on behavior are often weaker than expected.

Even so, it would be going too far to claim that the actual "fundamental" error is the reverse, that people overestimate the importance of situational factors and underestimate the importance of dispositions. A more judicious conclusion would be that sometimes people overestimate the importance of dispositional factors, and sometimes they overestimate the importance of situational factors, and the important thing, in a particular case, is to try to get it right. The book under review, *The Myth of Martyrdom* (Lankford 2013c), aims to present an extended example of an important context in which many authoritative figures get it wrong, by making the *reverse* of the fundamental attribution error (though the book never uses this term): When trying to find the causes of suicide terrorism, too many experts ascribe causality to the political context in which terrorism occurs, or the practical aims that terrorists hope to achieve. Instead, the author argues, most, if not all, suicide terrorists are mentally disturbed, vulnerable, and angry individuals who are not so different from run-of-the-mill suicides, and who are in fact highly similar to "non-terrorist" suicidal killers such as the Columbine or Sandy Hook murderers. Personality and individual differences are important; suicide terrorists are *not* ordinary people driven by situational forces.

Lankford convincingly argues that misunderstanding suicide terrorists as individuals who are rationally responding to oppression or who are motivated by political or religious goals is dangerous, because it plays into the propaganda aims of terrorist organizations to portray such individuals as brave martyrs rather than weak, vulnerable and exploitable pawns. By spreading the word that suicide terrorists are mentally troubled individuals who wish to kill themselves as much or more than they desire to advance any particular cause, Lankford hopes to lessen the attractiveness of the martyr role to would-be recruits, and also remove any second-hand glory that might otherwise accrue to a terrorist group that manages to recruit suicide-prone operatives to its banner.

Lankford's overall message is important. However, the book is less than an ideal vehicle for it. The evidence cited consists mostly of a hodge-podge of case studies which show that some suicide terrorists, such as the lead 9/11 hijacker, had mental health issues and suicidal tendencies that long preceded their infamous acts. The book speaks repeatedly of the "unconscious" motives of such individuals, without developing a serious psychological analysis of what unconscious motivation really means or how it can be detected. It rests much of its argument on quotes from writers that Lankford happens to agree with, rather than independent analysis. It never mentions the "fundamental attribution error," a prominent theme within social psychology that is the book's major implicit counterpoint, whether Lankford knows this or not. The obvious parallels between suicide terrorists and genuine heroes who are willing to die for a cause is noted, but a whole chapter (Ch. 5) attempting to explain how they are different fails to make a distinction that was clear to this reader. In the end, the book is not a work of serious scholarship. It is written at the level of a popular, "trade" book, in prose that is sometimes distractingly overdramatic and even breathless. Speaking as someone who agrees with Lankford's basic thesis, I wish it had received the serious analysis and documentation it deserves, as well as being tied to other highly relevant themes in social

psychology. Perhaps a future book, more serious but less engaging to the general reader, lies in the future. I hope so.

For, the ideas in this book are important. One attraction of the concept of the "fundamental attribution error," and the emphasis on situational causation in general, is that it is seen by some as removing limits on human freedom, implying that anybody can accomplish anything regardless of one's abilities or stable attributes. While these are indeed attractive ideas, they are values and not scientific principles. Moreover, an overemphasis on situational causation removes personal responsibility, one example being the perpetrators of the Nazi Holocaust who claimed they were "only following orders." A renewed attention on the personal factors that affect behavior not only may help to identify people at risk of committing atrocities, but also restore the notion that, situational factors notwithstanding, a person is in the end responsible for what he or she does.

Winning counterterrorism's version of Pascal's wager, but struggling to open the purse

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Abstract: Lankford's essential empirical argument, which is based on evidence such as psychological autopsies, is that suicide attacks are caused by suicidality. By operationalizing this causal claim in a hypothetical experiment, I show the claim to be provable, and I contend that its truth is supported by Lankford's data. However, I question his ensuing arguments about beauty and goodness, and thereby the practical value of his work in counterterrorist propaganda.

Lankford (2013c) presents a thorough and often compelling empirical argument that suicide attackers are motivated by a drive to kill themselves, rather than by a drive to martyr themselves. Along with this argument about truth, however, are less explicit arguments about beauty and goodness, and all three must be recognized to understand the theoretical and practical significance of the myth of martyrdom and Lankford's debunking of it.

Truth. Lankford's psychological autopsies offer fascinating glimpses into the lives and mental states of suicide attackers, and do paint a picture of troubled individuals at risk for suicide. But it is unclear whether such data show that suicidality is the *underlying cause* of suicide attackers' behavior, with ideology affecting merely the form and targets of the attacks. Moreover, it is unclear whether, in a scientific sense, Lankford's central causal claim is even provable.

A helpful approach to this problem is to operationalize the hypothesized cause-effect relation. If an "anti-suicidality" drug – perhaps soon to be actually available (Duval et al. 2013) – were surreptitiously administered to a random half of communities in a terrorist-prone region, the suicidal-terrorists prediction is that, over time, fewer suicide attackers would come from the treatment communities than from the control communities. Various analyses and control groups can be envisioned to address issues of necessity and multiple causation (see Lankford's "requirements" and "facilitators," p. 152), but this rudimentary hypothetical test alone shows that the causal link between suicidality and suicide attacks is provable. Furthermore, we can evaluate Lankford's core empirical argument by asking a follow-up Bayesian question:

Do his data make us expect that the described treatment effect would in fact be observed? I think they do, and by this standard, *The Myth of Martyrdom* succeeds as an argument for suicide attacks being caused by suicidality.

The veridicality of Lankford's causal claim has important practical implications. Understanding the psychology of suicide terrorists should enable us to "explain, predict, and prevent their attacks better than ever before" (p. 152), and Lankford offers several excellent suggestions. A straightforward additional preventative measure to consider would be to encourage the prescribing of antidepressants in terrorism-prone populations. Remarkably, even dispensing analgesics might help (DeWall et al. 2010; Randles et al. 2013)—not a counterterrorism measure likely to be considered without Lankford's revelation that suicidal terrorists typically fear life and desperately need "to escape unbearable pain" (p. 7).

Lankford suggests using Nock et al.'s (2010) implicit suicidality test to screen for suicide terrorists at airports, but this approach would be unnecessarily indirect. In the security context, suicidality is important because it sometimes portends an "attack," "killing," or "terrorism," and the implicit association procedure could just as well test directly for associations between any of these concepts and the self (see Greenwald et al. 1998). Thus, although Nock et al.'s (2010) test might be interesting as a demonstration of the suicidal-terrorists hypothesis, it would not be the best application of the implicit association test in terms of safeguarding the public.

Beauty and goodness. Where *The Myth of Martyrdom* shifts from arguing that suicide attackers are suicidal, to arguing that they are therefore not heroes, the debate about truth subtly becomes a debate about beauty, and ultimately, goodness. The suicidal-terrorists thesis showcases the ugliness of suicide attacks and the evilness of the terrorist organizations perpetrating them, and Lankford echoes Pascal in reasoning that even if his thesis were false, treating it as true would pay off in psychological-warfare terms (p. 172). However, the empirical validity of the suicidal-terrorists hypothesis does not establish the normative validity of Lankford's judgment that, whereas Secret Service agents are laudable heroes, suicide terrorists are vile cowards. No matter how viscerally compelling we may find this judgment, it is essentially an aesthetic one, and Lankford's attempt to substantiate its validity has several shortcomings.

First, heroes are not subjected to the same thorough psychological autopsies that proved so eye-opening in the case of suicide terrorists. If we can find suicidality beneath "terrorist ideology," then perhaps we would find authoritarianism, or megalomania, or some other less-than-noble quality beneath "heroic sacrifice."

Second, the trolley-problem data are not good evidence that taking lives is never heroic. The fact that moral intuitions about an action saving eight lives depend on whether it is described as "throwing a bomb on a person" or "throwing a person on a bomb" (p. 103) does not show that these intuitions are normatively valid. Rather, it shows that moral intuitions can be myopic (Waldmann & Dieterich 2007), and non-robust to framing manipulations.

Third, although Lankford's analysis of sacrifice versus suicide is insightful—the decision-time point alone suggests several lines of research—it fails to demonstrate that what appear to be qualitative motivational differences are not in fact differences of circumstance and opportunity. Becoming a Secret Service agent is, to be sure, a low-probability way of self-orchestrating one's death, but taking a bullet for the president might be one of the few available *and* meaningful ways to indulge a death wish, given the agent's situation and culture. Similarly, Lankford acknowledges the principle that "committing a suicide attack makes the most sense for those who are disabled and can no longer keep up with their comrades" (p. 86), and this would seem to doubly apply to those whose disability is suicidality. A suicide attack is a dubious and indirect way of "saving" one's comrades, but it might be one of the few meaningful *and* available ways to do so in the suicidal terrorist's situation and culture.

Fourth, Lankford's illuminating argument that suicide attackers, unlike heroes, help themselves (to die) but do not really

help their cause and comrades much, does not give enough weight to a crucial way in which suicide attackers do contribute. Like hunger strikers, self-immolators, and some pacifists, suicide terrorists provide their cause with a *symbolic* advantage, or in the case of "escapist suicides," protect their cause from a symbolic disadvantage. As Lankford laments, killing oneself in the name of a cause seems to give the cause added gravitas in the eyes of the enemy, and terrorists recognize this: "Our words are dead until we give them life with our blood" (p. 54).

Suicide terrorism and post-mortem benefits

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Abstract: Lankford claims that suicide terrorists are suicidal, but that their suicidal tendencies are often frustrated by injunctive social norms. Martyrdom represents a solution, and terrorist organizations exploit this. In this commentary, we claim that this argument has not been fully made and that such ideation in itself does not explain a willingness to engage in punitive actions against an enemy. We suggest the psychology of kinship as a possible missing factor.

Lankford's core conceit is that suicide terrorists are essentially little different from other suicidal people, having similar background characteristics such as depression, troubled childhoods, and social isolation (Lankford 2013c). He argues that screening of individuals for suicidal thinking and monitoring of those at risk would be useful counterterrorism strategies. While we consider that all approaches to this difficult issue should be welcomed, we do not feel that it is a complete account of the phenomenon and nor do we think it is fully supported.

The Myth of Martyrdom focuses mostly upon Islamic suicide terrorism, although Lankford does seek to generalize his claim to all suicide terrorists. He notes that within Islamic communities suicide is regarded as immoral, but martyrdom is not. Martyrdom thus provides a way out for some suicidal Muslims, and this can be exploited by terrorist organizations. Data on suicide within Islamic countries would have given some perspective to this argument. Lester has looked at what data there is and found that although percentage suicide rates are notably lower in Islamic countries, attempted suicides rates are equivalent to those in other countries. Moreover, he notes various inadequacies in the way in which deaths are reported in Islamic nations (Lester 2006). While this does not directly falsify Lankford's claim, it does suggest that Muslims can overcome religious and legal stipulations about suicide. If this is so, what other factors might lead to suicide terrorism rather than suicide?

Lankford bases his thesis on a large sample of more than 130 suicide terrorists, published in Appendix A, who, he argues, presented risk factors for conventional suicide. However, the majority of these cases have very minimal information, and the factors identified, such as loss of family members, personal victimization, and so forth, are at least as likely to make an individual angry and vengeful as they are to make that individual suicidal. Indeed, the factors he claims motivate the suicidal urge have a lot in common with the factors identified as motivating people into terrorism in general (McCauley & Moskalenko 2008; Moghaddam 2005), which muddies the water a little. The notion of suicide terrorism achieving certain socio-political ends is largely ignored by Lankford, as are the potential personal motivations of the suicide

terrorist. This would seem to be one point of possible differentiation between the suicidal in general and the suicide terrorist.

For Lankford, the socio-political ends are embodied in the terrorist organizations that isolate the loners at the mosque and turn them into terrorists. It is interesting that someone who is suicidal can be convinced to do this. Presumably the recruitment officers present the proposed suicide attack in terms of punishment and retribution for perceived wrongs inflicted by an enemy. Punishment is about realigning behaviour or changing it totally in order to produce something that is acceptable according to some ideology, in this case. But what would induce someone to do this when the effect will be post-mortem, should it occur? There has to be some method of tying the suicidal terrorist act to a future stake.

One possible future stake might be a notion of kinship. During the discussion of heroes who throw themselves on grenades, and the like, to save others, the claim is that this is a product of training. Close protection work is likely to engender feelings of a strong social bond and we suspect will play on general kin level psychology very effectively. This would account for a willingness to take such a great risk with one's direct fitness—it would be worth it if the person believed they were increasing their indirect fitness. This kind of behavior is typical in kin because of high relatedness, but we rely on a variety of proximate mechanisms to establish relatedness and identify kin (Lieberman et al. 2007). Such mechanisms are blunt instruments, and when employed among non-kinship groups, can lead to the adoption of kin-type relationships. For example, unrelated children growing up in close proximity within kibbutz structures treat each other as siblings, and this appears to reduce marriage and sexual contact between unrelated individuals, while increasing altruism between them (Lieberman & Lobel 2012). The mechanism here is simple familiarity, which mimics natural kin relations. Isolated individuals may be eager to be incorporated into a kinship-like group, and the underlying psychology of this desire, and the associated mechanisms of bonding, will potentially enable a suicide terrorist to claim a benefit for kin post-mortem, and engage in what has been termed costly altruism (Qirko 2009; 2013). More straightforwardly, Qirko (2013) notes that suicide terrorism relies upon organizational structures that replicate natural kin structures, use uniforms to achieve greater phenotypic similarity, and use language laced with kin referents. To simply claim that close protection personnel are trained into this behavior misses a great deal of complexity—why would people be capable of such learning? It also misses a point of potential similarity between Lankford's heroes and suicide terrorists: they are strongly bonded and those bonds are established through well-designed training. They are functionally brothers (and sisters) in arms.

To conclude, Lankford focuses upon the individual suicide terrorist and does not address the social context within which these terrorists operate. Within certain communities there are direct teachings and exhortations to such "martyrdom" activities, and this, combined with a strong sense of kinship, which is often a characteristic of religions, will make the costs seemingly bearable when set against future gains. Lankford's focus on the individual ignores the importance of social context and the complexity of the mechanisms required to obtain the necessary commitment for suicide terrorism, and as such, it is not a complete explanation.

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Abstract: Lankford criticizes the notion that suicide terrorists are "normal" and argues that they are suicidal. We have two misgivings about this. First, he puts sole focus on the personal side of suicidality and ignores the individual's context. Second, he fails to elaborate on the intent to harm others, which must also include the cultural, political, religious/ideological, and social-organizational factors of suicide terrorism.

In *The Myth of Martyrdom*, Lankford takes a controversial stand in arguing for suicidal motivations being key to explaining suicide terrorism (Lankford 2013c). His comparison of the various groups – suicide terrorists, conventional suicides, murder suicides, and unconventional suicides—is innovative and commendable. We shall comment on two main limitations of the book, however.

1. There are causes for the causes. Lankford provides an in-depth analysis of suicide bombers, arguing in the Précis that "mental health problems, personal crises, coercion ... or hidden self-destructive urges play a major role [in their behavior and psychology]" (target article, Abstract). We would thereby argue, that although some suicide terrorists may be suicidal, the act itself is very much dictated by contextual factors such as frustration with government and corruption, culture, ideology, religious beliefs, life mission, and so forth. If one calculates the prevalence rate of each of the factors Lankford mentions, the numbers are so high that ultimately they do not explain why only a few people become suicide bombers while many others with the same symptoms don't. But more importantly, why attribute the causes solely within the attacker (i.e., the individual), when the causes are primarily in the larger environments: social/organizational (e.g., pressure of the terrorist organization to carry out the suicide mission), political (e.g., "lover was killed by enemy soldiers," Lankford 2013c, p. 60), and cultural (e.g., unwanted premarital pregnancy in Islamic cultures, shame as a consequence of being unable to get pregnant and being divorced; see p. 59).

In fact, almost all risk factors for suicide that Lankford mentions in the book (Table 3.2, p. 61) are externally caused. Happenings in people's lives that may cause despair and may trigger the onset of mental illness inherently express their values – political, religious, cultural, ideological. Therefore, with suicide terrorism, it is not just individual pathology, it is also deeply contextual. The complaint by Joe Stack about lack of healthcare and insurance (Lankford 2013c, pp. 13–15) may sound political, but understanding the person's context of illness, leads to something truly personal. There is a common saying that what is deeply personal is political – and what is political is personal.

One example highlights the enormous influence of environmental variables in shaping the experiences (and probably mental health issues) of the targeted population. The International Committee of the Red Cross (ICRC 2004, p. 6) stated:

Arresting authorities entered houses usually after dark, breaking down doors, waking up residents roughly, yelling orders, forcing family members into one room under military guard while searching the rest of the house and further breaking doors, cabinets and other property. They arrested suspects, tying their hands in the back with flexi-cuffs, hooding them, and taking them away. Sometimes they arrested all adult males present in a house, including elderly, handicapped or sick people. Treatment often included pushing people around, insulting, taking aim with rifles, punching and kicking and striking with rifles.

Also, Lankford's diagnosis of Atta's clinical depression (Ch. 4) is hastily done. In identifying neurovegetative symptoms of depression, Atta's comment that "eating is boring" does not in itself indicate appetite or weight changes, the characterization that Atta "was reluctant to any pleasure" does not describe anhedonia or loss of interest in activities that gave him pleasure in the past, and nothing is known about Atta's insomnia or hypersomnia. Moreover, rigidity in personality cannot be equated with

The importance of cultural variables for explaining suicide terrorism

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depression. Finally, the experience of persistent sadness, hopelessness, guilt, and even fatigue cannot just be inferred from the descriptions of people. As the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* (DSM-V) also concurs, the diagnoses of Suicidal Behavior Disorder does not and should not include suicide terrorism if the act was “undertaken solely for political or religious objectives” (American Psychiatric Association 2013, p. 800).

2. Understanding homicide must include cultural, political, religious/ideological, and social-organizational explanations. For suicide terrorists, it is not enough to kill oneself, as some people with mental illness (e.g., mood disorders, schizophrenia, substance/drug abuse) do, but an equally compelling intent is to kill others too. We would argue that Lankford has missed the most important explanation for suicide terrorism—which is the power of the belief that, despite losing their lives, suicide terrorists believe they are gaining something more important, something that transcends human life (see, e.g., interviews with suicide bomber volunteers by Ghosh [2005] and Benjamin Ben-Eliezer, the former Israeli Defence Minister, in Levy-Barzilai [2002]). People who are suicidal may have similar reasons for hopelessness and helplessness, and for resorting to a permanent solution to temporary problems; but the desire to include other people in their death contains a consciously constructed message: the message of terror, of eliciting fear and achieving power, of attaining fame and “success,” of fulfilling a collective goal to “right a wrong,” of intense revenge and anger, and of performing what for them is the ultimate sacrifice.

The second criticism does not only refer to Lankford’s book, but to extant research on suicide terrorism. Many researchers refer to either individual psychological variables or social dynamics related to group pressure, leadership influence, or religious factors. To focus on only one or a few aspects falls short of providing a complete picture of the driving forces of suicide terrorists. Only a *cultural-psychological theory* which integrates phenomena at the micro- and macro-level can lead to a better understanding of suicide terrorism and explain regional differences. An analysis of suicide terrorists needs to take into account all of the following: individual psychological factors such as emotions (e.g., strong negative emotions due to experience of trauma or injustice, helplessness, and violence) and cognition (e.g., mechanisms to eradicate guilt or doubt by dehumanizing the enemy and deferring responsibility); social psychological factors (e.g., group cohesion and group pressure, isolation, ideological training including us-versus-them distinction); historic-political factors (e.g., “puppet regimes” and corruption, foreign occupation, deterioration of the living conditions); and cultural variables (e.g., religious world view, revenge as moral duty, anticipated rewards in heaven, media attention, honor and fame, and financial support and increased status for surviving family members). Only then will we get a cohesive and comprehensive picture of the phenomenon (see, e.g., Güss et al. 2007). The consideration of these groups of variables over time and how they intersect, will lead to a better understanding of, and interventions for, suicide terrorism.

The rationality of suicide bombers: There is a little bit of crazy in all of us

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Abstract: Despite Lankford’s descriptions of escapist suicide victims as being unstable, they were making rational decisions, based on their

current knowledge and values. Similarly, those who are allegedly indirectly suicidal are not different from other risk-takers. The psychological differences between those who engage in suicidal attacks and those who do not are less than most of us would prefer.

We want it to be the case that there are stark differences between suicide bombers, rampage killers, self-destructive terrorists, and the rest of us. In *The Myth of Martyrdom*, Lankford supports this reasonable desire by arguing that most suicide bombers and the like deliberately seek death as a way of escaping or managing desperate unhappiness (Lankford 2013c). However, he significantly weakens his own case by defining some suicidal behavior as escapist or implicit. Despite Lankford’s descriptions of those who commit escapist suicides as being “psychologically compromised” (see Précis target article, sects. 5 & 7), there is nothing in his narrative that would suggest that those who do so as a way of avoiding imprisonment, torture, or public humiliation are being anything other than completely normal and rational, based on the current knowledge and values of the persons electing death. Lankford claims that because “others would fight to survive” under the same circumstances, those who choose death over some other consequence must be “fundamentally” suicidal (p. 138 in the book).

We can compare these cases with those who commit assisted suicide, sign Do Not Resuscitate (DNR) orders, or refuse continued medical treatment—all rather mundane medical choices. There is no evidence in any of these types of choices that those who choose death would still do so if it were not for their current ill health or suffering. Not everyone in the same circumstances makes the same decision, and the actual reasons for deciding not to “fight to survive” vary tremendously (though, despite popular press, the level of physical pain one is enduring has little effect on this decision) (Rosenfeld 2000). Indeed, being able to choose the manner and time of death is often more important to those facing the decision than being able to spend more time being alive (Hardcastle & Stewart 2002). It is a gross simplification, to the point of falsehood, to claim that escapist suicides choose death as a function of “suicidal tendencies” (Lankford 2013c, p. 139), for the range of responses we find in the general population to threats of death, suffering, or loss of autonomy is both wide and complex.

Similarly, those who are allegedly indirectly suicidal do not appear to be fundamentally different from others who engage in risky behaviors but are not suicidal. Lankford cannot argue that those who pick out “riskier” targets are thereby more suicidal than those who do not, without circularity, unless one has some additional data that would suggest actual suicidal ideation. But Lankford’s notion of indirect suicidality belies any sort of suicidal thoughts, since being indirectly suicidal means that you hide your suicidal impulses from yourself.

Despite what Lankford claims, recent research shows that neither those who attempt suicide nor those who think about committing suicide exhibit high sensation-seeking traits, even though both groups tend to act impulsively when having negative emotions, and attempters also show poor premeditation skills (Klonsky & May 2010). It is in fact hard to correlate general impulsivity and suicidality, largely because both terms are so poorly defined and other psychological factors confound the studies (Dear 2000; Gvion & Apter 2011). Moreover, being impulsive flies in the face of the careful planning that suicide terrorists typically undertake. Most important, however, in studies that do examine which aspects of indirect self-destructiveness lead to suicide attempts, engaging in high-risk activities for momentary pleasures is not one of the traits (Stanton et al. 2003); instead, (perhaps not surprisingly) passivity and helplessness in the face of problems were most directly tied to suicide attempts (Tsirigotis et al. 2013).

In sum: I do believe that Lankford is correct in arguing against the dominant view that suicide attackers are radical idealists who are otherwise psychologically whole, but he overstates the suicidal impulses that these attackers may feel, at least in some categories

of assailant. Some are suicidal, to be sure, but just as with rampage shooters, others likely have different psychological disorders. And still others probably fall within the bell curve of “normal,” psychologically speaking. (Though it is still too early to tell, Dzhokhar Tsarnaev might be an example of this.) The social and psychological differences between those who engage in suicidal attacks and those who do not are less than most of us would prefer. Just as with the peaceful population, suicide terrorists likely suffer from a range of psychiatric difficulties and psychological challenges. Sadly, social isolation or alienation, depression, axis-B disorders, childhood abuse, a violent past, a history of addiction, and acute trauma are all common traits, and they do not really serve to differentiate suicide terrorists, rampage killers, and other self-destructive terrorists from the rest of us.

Suicidal protests: Self-immolation, hunger strikes, or suicide bombing

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Abstract: Following Lankford’s persuasive argument that suicide bombers are indeed suicidal, the next question to ask is why individuals choose one form of suicidal protest over others. Why choose suicide bombing rather than a hunger strike or self-immolation? Some suggestions are provided.

For a long time, the major scholars and commentators on the topic of suicide terrorism were political scientists and sociologists, and psychologists have been late in applying their discipline to the issue. An early article by Lester et al. (2004) argued that suicide bombers were, in all likelihood, similar to other types of suicidal individuals, and this was followed by confirming evidence in a book by Merari (2010) and now a convincing argument in *The Myth of Martyrdom* by Lankford (2013c). It is now clear that many suicide bombers fit the profile of typical suicidal individuals.

Research into the mind of suicide bombers has been hindered by the inability of researchers to interview them. As is the case in all suicide research, the methods of substitute subjects (Neuringer 1962) is used. Just as researchers study those who survive their suicidal actions (attempted suicides), so Merari (2010) interviewed those who did not set off their bombs or whose bombs failed to detonate as planned. It has been argued that completed suicides and attempted suicides are quite different (although overlapping) populations (Linehan 1986) and that we cannot learn about completed suicides by studying attempted suicides. Perhaps as a result of the countries in which suicide bombings occur and the absence of skilled suicidologists, no psychological autopsy studies have been carried out on successful suicide bombers. The result has been a reliance on reports of suicide bombers from journalists. Two things are noteworthy here. First, journalists are not trained in suicidology and, therefore, do not know what questions to ask and what kinds of information to search for. Second, journalists have been much more inquisitive into the past lives and motivations of female suicide bombers than those of male suicide bombers, and Lester (2011) was able, from these reports, to document the role of perceived burdensomeness (to their families) of female suicide bombers, the role of post-traumatic stress, and the oppression by their husbands and families forcing them into this role.

Let us assume, therefore, that many suicide bombers have many of the same characteristics and life histories as typical

suicides, as Lankford has forcefully argued. The next question that we have to consider is why suicide bombers chose this type of suicidal action. There *are* other options, even leaving aside the possibility of guerilla action in which individuals attempt to kill as many of their perceived enemies as possible and then escape to kill again.

One suicidal protest action that is possible is a hunger strike (Dingley & Mollica 2007). Recently, in 2013, many of the prisoners held at Guantanamo Bay by the United States are on hunger strike to protest their imprisonment. Bobby Sands was a member of the Irish Republican Army in Northern Ireland and was imprisoned by the British courts for his activities. He went on a hunger strike while in prison and died in H Block of HMP Maze (Long Kesh) prison on May 5th, 1981, at the age of 27. Lester (2014) analyzed the diary left by Bobby Sands during his hunger strike and found that it did not resemble the diaries left by those who died by suicide.

Another option is dying by suicide as a protest, most commonly by self-immolation (Biggs 2005). After centuries of self-immolations, the most noteworthy recent cases occurred in 1963 by the Vietnamese Buddhist monk, Thich Quang Duc, to protest the regime in South Vietnam; in 1965 by Norman Morrison in Washington DC to protest America’s involvement in the Vietnam War; and in 1968 by Jan Palach in Prague (Czechoslovakia) to protest the Soviet invasion of his country. Today, self-immolations have been documented in South Korea (Park & Lester 2009), and self-immolations are common across the Arab world (e.g., in Bahrain, Jordan, and Lebanon), in Andhra Pradesh in India where more than 300 young people have committed suicide (many by self-immolation) to demand local political control, and, most notably, in Tibet where more than 100 self-immolations have occurred in the last year to protest the Chinese oppression of native Tibetans. Indeed, it was the self-immolation of Tarek al-Tayeb Mohamed Bouazizi, a Tunisian street vendor, who set himself on fire on December 17th, 2010, that led to the “Arab Spring” and the recent revolutions in many Arab countries.

We then confront the next question following Lankford’s persuasive argument. What determines the choice of suicidal protest – hunger strike, self-immolation, or suicide bombing? An obvious determinant is the availability of methods for protest. Incarcerated prisoners have high rates of suicide, even on death row (Tartaro & Lester 2009), but ways of protesting are severely limited, leaving hunger strikes as perhaps the only option other than rioting. It is also noteworthy that self-immolation is a common way of protesting for priests, as has occurred recently in Tibet, and in Vietnam in the 1960s. However, the majority of those engaging in self-immolation as protest are not priests, but ordinary citizens.

There are, of course, no studies comparing these three types of action, and certainly not studies using the same type of investigation. However, the most obvious difference is the apparent role of anger. Hunger strikes and self-immolations attempt to change public opinion by the simple act of dying by one’s own hand and the resulting publicity. Suicide bombers, however, are seeking to kill and injure others while also dying themselves. Thich Quang Duc and Norman Morrison were angry at their governments, but suicide bombers focus this anger onto individuals of the nation or culture at which they are angry. The brothers from Chechnya (Dzhokhar and Tamerlan Tsarnaev) who killed bystanders at the Boston marathon on April 15, 2013, focused their anger, not on Russia or the United States, but on civilians watching a sporting event. From a psychological point of view, what events and experiences in their childhood, adolescence, and adulthood, which personality traits, and which neurophysiological processes led them to make this choice?

It is often said that answering one question leads to many more questions. Lankford’s excellent book answered one question and now leads us to ask more.

Suicide terrorism, moral relativism, and the situationist narrative¹

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Abstract: Lankford challenges two popular views of suicide terrorists: first, that they are psychologically normal and, second, that they are heroic, not unlike professional soldiers. I augment Lankford's critique by tracing these views to a simplistic situationist narrative and to a careless form of moral relativism to which many scholars adhere. Conceptual weaknesses of these positions are briefly discussed.

In the *Myth of Martyrdom*, Lankford (2013c) calls into question two popular views of suicide terrorists: One is that they are psychologically normal, and the second is that they are not cowardly but, in fact, heroic, and not unlike professional soldiers. The first view has long struck me as implausible on Bayesian grounds: Most people don't try to kill innocent bystanders, and only a slim proportion of those that do also plan to kill themselves in the process. The second view is weak on more than evidentiary grounds, reflecting a careless form of moral relativism that glosses over important differences between suicide terrorists and soldiers. I commend Lankford for challenging both of these views with careful analysis. At minimum, his effort should spur further discussion, data collection, and analysis, and militate against the further consolidation of a premature consensus.

Let me start with the latter view, namely, that suicide terrorists are heroic actors, not unlike professional soldiers who act out a sense of duty, accepting the prospect of personal harm in order to serve a higher cause (e.g., Hafez 2006; Pape 2005; Pastor 2004). Of course, there are superficial resemblances between the two groups. Suicide terrorists often form deep social bonds with their fictive kin (Atran 2003), and soldiers, likewise, have a deep commitment to their comrades in arms. Indeed, commitment to one's primary military group is one of the main reasons soldiers give for their continued commitment in theatre (Stouffer et al. 1949; Vaughan & Schum 2001), and soldiers' willingness to accept the risk of death in the line of duty is predicted by the degree to which they regard their peers as honorable and virtuous (Mandel & Litt 2013). Soldiers accept that they may be killed in the course of duty. Superficially, suicide terrorists appear to share a comparable heroic commitment, but, as Lankford points out, this is false. Soldiers hope to return home alive. They put themselves in harm's way, even though they want to avoid personal harm. Often, they increase their risk of being killed in order to avoid harming innocent bystanders. In stark contrast, suicide terrorists plan to die at a time of their choosing, usually with the aim of killing unsuspecting noncombatants. Given that they do not risk death while hoping to live, their acceptance of death appears about as heroic as their choice of target.

But what about the argument that suicide terrorists sacrifice their lives for higher causes – wouldn't that make them heroic or honorable? Most examples of honor given by soldiers involve situations in which the soldier adhered to a deeply held moral principle and “did the right thing” even though his or her actions caused the soldier to violate the orders of superior officers, resulting in significant personal costs, including loss of rank honor or even dishonorable discharge (Barrett & Sarbin 2008). The behavior of Army Lieutenant-Colonel Georges Picquart in the Albert Dreyfus case is exemplary. The personal costs incurred by Picquart were not motivated by hatred of a perceived oppressor – he was deeply committed to the military that he was accused of betraying. Rather, his acceptance of the costs was motivated by his empathy for the victim (Dreyfus). The suicide terrorist's

“moral calculus” is quite different. In most cases, the perpetrator has no profound ideological commitment to a cause (Atran 2003). Rather, important drivers include a sense of attachment to one's fictive kin (as Atran [2010a] notes, often one's soccer or coffee-shop buddies), and perhaps a sense of fear or coercion by the dominant member of the perpetrator's social group. Other motives include moral outrage and a desire for retribution. And, as Lankford's analysis now adds, it appears that most suicide terrorists are also deeply unhappy, hopeless, or depressed people who feel that life has little to offer them. Thus, the image of the suicide terrorist that emerges is one of an individual who accepts death out of hopelessness and who is willing to kill others out of a mix of peer pressure and hatred. This is neither honorable nor heroic, except perhaps under the sloppiest assumptions of moral relativism. A fairer analogy seems to be the bully – secretly insecure, willing to victimize others for egocentric reasons, and unable to empathize with his victims.

Scholars, however, tend to recoil from negative dispositional assessments of suicide terrorists because many are sympathetic, if not committed, to a situationist narrative aimed at countering “lay dispositionism” (Mandel 2012). The situationists point out that people are prone to committing the “fundamental attribution error” (Ross 1977b). That is, too often, observers neglect the causal influence of situational factors over actors' behaviors and they too-readily assign causality to the actor's dispositions. In the context of evil, this takes the form of dispositional attributions to insanity, cowardice, or even monster-like qualities.

However, the form of situationism advanced as an alternative is hardly more nuanced. The key elements of the “situational sermon” (as Zimbardo [2004, p. 47] referred to it) are that evil-doers are (a) normal, banal individuals (i.e., not monsters), (b) essentially good people (if not for malevolent situational factors, they would act benignly), but (c) ones who have been caught in the grips of malevolent situational forces. Accordingly, we are implored to practice “attributional charity”: “This means that any deed, for good or evil, that any human being has ever performed or committed, you and I could also perform or commit – given the same situational forces” (Zimbardo 2004, p. 48). Of course situations matter, but in this perspective, there is no room for interactionism (i.e., the study of the interactive effects of situational and dispositional factors), personal responsibility, or even legal culpability – people are exchangeable and situational variables account for 100% of behavioral variance. As discussed elsewhere (Mandel 1998), this narrative establishes the perfect alibi for perpetrators, especially when scholars are willing to generalize from a few iconic, yet un-replicated, studies of situational forces to sweeping theories about the psychological origins of collective violence. In this regard, the suicide terrorist appears to be the situationist's latest victim.

NOTE

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How many suicide terrorists are suicidal?

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Abstract: Suicide terrorists in recent decades total approximately 3,500. Lankford finds risk factors for suicide for about 40 of these cases. Given that many with risk factors for suicide never attempt suicide, a reasonable estimate might be that one percent of suicide terrorists are suicidal.

The Myth of Martyrdom (Lankford 2013c), offers a startlingly simple message: suicide bombers are suicidal. They want to die to escape personal problems the way a patient with end-stage cancer wants to escape pain. Dying in an attack on the enemy provides a socially acceptable form of suicide, and earlier analyses of suicide bombing have erred in seeing the bomber's cause as the cause of the bomber's act.

The author understands that his thesis is far from the mainstream of terrorism research. Referring to himself, Lankford muses that "A young professor should not be able to uncover the secret motives of suicide terrorists in just a few years, while the rest of the world essentially failed to do so in the decade that followed 9/11" (p. 11).

Lankford takes several tacks in advancing his thesis.

First, he argues that suicide bombers are suicidal because they orchestrate their own deaths. "As a starting point for a more sophisticated theory, this book takes the view that, by definition, all suicide terrorists are suicidal" (p. 10). This shortcut is quickly left behind, however, in order to engage issues relating to the motivations of suicide bombers. Lankford argues that suicide bombers are not heroes because heroes – the soldier who falls on a grenade, the Secret Service officer who takes a bullet for the president – act to save others rather than to harm others, and act on trained reflexes with no intention of dying.

This is an odd argument in two ways. There are heroes, like Audie Murphy, who are awarded the United States Medal of Honor for extraordinary risk-taking in attacking and killing the enemy. And it is not obvious why the individual who acts without thinking is more heroic than one who chooses death.

Lankford further argues (p. 122) that U.S. suicide terrorists ($n = 12$) are similar to U.S. rampage shooters ($n = 18$) and to U.S. school shooters ($n = 16$). In Lankford's codings of these cases, the great majority of all three groups have mental health problems, most die in the course of their attacks, and many are socially marginalized or suffering from school or work or family problems. In this portrait, suicide terrorists are not heroes but troubled loners with mental health problems.

Of course the small numbers make statistical conclusions difficult. And, although the suicide terrorists are identified by name, the rampage shooters and school shooters are not identified. Readers must trust that the author has included all relevant cases and that definitions of *social marginalization*, *family problems*, *work/school problems*, and *mental health problems* were consistently and reliably coded across the three groups.

Another issue here is that rampage shooters and school shooters are predominantly lone actors, without group or organizational support, whereas suicide terrorists are volunteers or recruits for an organization that arms them and selects their target. One might learn more about lone-actor terrorists by comparing them with predominantly lone-actor school attackers and assassins (McCauley et al. 2013), but it is unlikely that suicide bombers, embedded in an organization, have the same motives as lone-actor rampage and school shooters.

Finally, Lankford's thesis must stand or fall with evidence about the motivations of suicide bombers. Willing to die for a cause is martyrdom. Wanting to die to escape human travail – suicide – is condemned by major religions and, to varying extents, by the social norms of most cultures. Although motivation can be difficult to ascertain, it is straightforward to count the numbers of suicide bombers.

In Israel and the Occupied Territories, between 1981 and 2008, Palestinian suicide bombers numbered 216 (Merari 2010). Tamil Tiger suicide bombers numbered 378 between 2006 and 2008 (Ministry of Defence, Democratic Socialist Republic of Sri Lanka 2011). Suicide bombers in Iraq numbered 1,779 between 2003 and 2010 (Seifert & McCauley, in press). In Afghanistan, between 2001 and 2011, suicide bombers numbered 736 (Bhattacharya 2011); in Pakistan, between 1995 and 2012, suicide bombers numbered 369 (Pakistan Body Count 2012). Some of these numbers may seem surprising. Palestinian

suicide bombers are few in relation to suicide bombers in other countries, and half of suicide bombers are in Iraq. The total across countries for the past 35 years is 3,478; countries and years not included in this rough count make 3,500 a minimal estimate of the number of suicide bombers in recent decades. This is the size and breadth of the phenomenon of interest.

Lankford raises the question, how many of the 3,500 were suicidal? His Appendix A ("Partial list of suicide terrorists with risk factors for suicide") contains 142 cases, but only 40 have enough detail to be cited in a chapter. These 40 cases are not representative of the 3,500 in terms of country origins (no cases from Iraq vs. 20 expected). And the causal value of the risk factors identified for these 40 cases can be questionable, because many individuals with risk factors for suicide never attempt suicide.

But let us suppose for a moment that all 40 cases were persuasively shown to be suicidal. What should we conclude about the 3,500 suicide bombers? One possibility is to estimate that about 1% of suicide bombers are suicidal. Lankford believes that something close to 100% are suicidal. Readers will have to decide which is the more reasonable estimate.

Given the uncertain evidence that suicide bombers are suicidal, it is worth asking why this book has attracted attention. I believe that the appeal of Lankford's thesis is psychological and political. Psychologically, it is reassuring to think that our enemies are not so committed to their cause as they seem. They do not generate martyrs for their cause, they only channel suicides to masquerade as martyrs. Their commitment to their cause is no stronger than our commitment to our cause; they are not going to outlast us. Politically, it is reassuring to think that "As a form of psychological warfare, [this book] could be used to smear the reputations of suicide terrorists by portraying them as weak, cowardly, and suicidal" (p. 172). The enemy won't be listening to this, but it can play well with U.S. voters. It has always been easy to see terrorists as crazy (McCauley & Segal 1987).

Organizational structures and practices are better predictors of suicide terror threats than individual psychological dispositions

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Abstract: Terror organizations tend to rely on a limited number of practices to reinforce commitment to suicide on the part of recruits. Therefore, given the many difficulties associated with identifying individuals willing to become suicide terrorists, understanding the organizational contexts in which most suicide terrorism takes place is likely to be more useful than psychological profiling for predicting future attacks.

Undoubtedly, some suicide terrorists are unstable, depressed individuals who want to die under the cover of martyrdom – not heroes who seek to sacrifice for others. Lankford's argument, however, is that all suicide terrorists are suicidal, and that we must therefore understand their individual life histories and psychological dispositions in order to better predict when and where future attacks are likely to occur (Lankford 2013c). Both halves of this argument are problematic, the first because support for his contention that suicide terrorists have a death wish is weak, and the second because understanding the organizational contexts in which most suicide terrorism occurs is likely to be more useful than psychological profiling for predicting future attacks.

As Lankford points out, mental health professionals have difficulty identifying potential suicides under the best of circumstances, and suicide terrorist recruits and their organizations rarely describe their actions in anything other than heroic terms. It is therefore unsurprising that researchers tend to report few clear instances of depression, instability, or other potential markers of suicidal tendencies among suicide terrorists (e.g., Atran 2003; Pape 2005). To make his case, then, Lankford is often reduced to suggesting that suicide terrorists must be suicidal simply because they are willing to die. For example, he argues that Merari's (2010) research team members ignored "the most obvious indicator that their subjects were suicidal: the fact that they had planned to blow themselves up" (Lankford 2013c, p. 50). In addition, he categorizes terrorists without apparent suicidal motivations as "indirectly" suicidal – that is, unconsciously seeking to die – apparently because a "hardwired survival instinct" should prevent stable individuals from engaging in high-risk behaviors (unless they are ignorant of the dangers). But non-suicidal individuals often engage in high-risk behaviors, and biases in information processing and decision making are aspects of normal psychology that can lead to under-assessments of health and mortality risks (e.g., Andersson & Lundborg 2007; more generally: Ditto 2009; von Hippel & Trivers 2011). Further, an overarching survival instinct is unlikely to exist, as it is reproduction, and not survival for its own sake, that matters in terms of natural selection, and instincts appear to relate more to specific dangers associated with our evolutionary history than to death in general (Buss 1997; Navarrete & Fessler 2005).

In fact, there are several models of altruism through which inclinations to sacrifice can be understood as part of normal human evolved psychology. One is kin selection theory, which explains how genes associated with behaviors that reduce individual fitness can nevertheless spread if the behaviors result in fitness benefits for genetic relatives (Hamilton 1964; Park 2007). Hence, although associated mechanisms of kin dispersal and recognition will vary, dispositions to sacrifice for (some) others are likely normal in many species (Emlen 1995; 1997), including humans (e.g., Madsen et al. 2007). A related model, induced altruism through kinship deceit, describes how such dispositions can also lead to sacrifice for the benefit of non-relatives through the manipulation of kin-recognition cues (Trivers 1985). This model, too, may apply to humans if fictive kinship is reinforced through the manipulation of human kin-cues such as association, phenotypic similarity, and kin terms (e.g., Johnson 1986; 1989).

Thus, under certain circumstances, psychologically healthy individuals may be disposed to sacrifice their lives to benefit kin or non-kin with whom fictive kinship bonds are shared. In suicide terror contexts, altruistic dispositions are often reinforced through organizational structures and practices. Although leery of contextual explanations for suicide terrorism, Lankford does discuss the typical role of sponsoring organizations in facilitating suicide terrorist logistics (bombs and targets) and generating social approval for suicide terror as a strategy. He also notes instances of organizational coercion of suicide recruits. However, he overlooks the fact that organizations often rely on specific practices to reinforce commitment to the costly sacrifices they demand. Given the obvious difficulties associated with uncovering the psychological states and motivations of individuals, it makes more sense to focus on the structure and dynamics of the organizations of which these individuals are members to better identify potential suicide terror threats. For example, Atran has investigated the degree to which terrorist activity takes place in "networks of family and friends who die not just for a cause, but for each other" (Atran 2013, online publication), and thus in the context of both real and "imagined" kinship. And as I have attempted to show, where relationships among suicide terrorists and their organizations and communities are less personal, even otherwise dissimilar organizations appear to share similar practices plausibly associated with the manipulation of human kinship recognition mechanisms to attempt to reinforce

fictive kinship bonds among members (Qirko 2009; 2013). Terrorist organizations also often make use of other commitment-reinforcing practices, including offering material and status rewards to human bombers' relatives, appealing to afterlife rewards, and requiring recruits to execute public oaths and wills that make backing out difficult (Merari 2005).

In short, we can argue about the degree to which suicide bombers are healthy or suicidal, but as Lankford admits, "in many cases, human behavior is far too complex to be rigidly sorted into predetermined boxes" (p. 3). The decision of a suicide terrorist to sacrifice his or her life must be influenced by a combination of psychological, experiential, ideological, and circumstantial factors. Prediction will therefore be very difficult, and screening (such as Lankford suggests via computer tests in Nock et al. 2010) virtually impossible. However, because suicide terror organizations require effective techniques to reinforce commitment, the range of typical group structures and practices associated with these organizations will tend to be narrower than that of the motivations of recruits. Profiling groups rather than individuals should be more effective in preventing future attacks.

The morality of martyrdom and the stigma of suicide

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Abstract: While primarily identifying similarities between suicide terrorists and other suicidal individuals, Lankford also notes differences in how their actions are morally evaluated. Specifically, "conventional" suicide is stigmatized in a way that suicide terrorism is not. We identify the root of this condemnation, showing that suicide is intuitively considered impure and disgusting, and discuss implications of this purity-based stigma.

Although Lankford (2013c) is primarily focused on the important psychological similarities between suicidal individuals and suicide terrorists, he also notes one important *difference*: they are morally evaluated in divergent ways. In particular, Lankford notes that millions of people worldwide believe that suicide terrorism is sometimes justified (see also Atran 2003; Ginges et al. 2009). This contrasts sharply with the strong prohibitions that are often leveraged against "conventional" forms of suicide, particularly in Islamic countries. Because suicide terrorism is often celebrated rather than condemned, it potentially manifests as a more socially and religiously acceptable alternative means for suicidal Muslims to kill themselves – a "way out" of the stigma associated with conventional suicide (Lankford 2013c).

In this commentary, we argue that Lankford is correct to identify conventional suicide as marked by a distinctive stigma. In addition, we go beyond this claim to elucidate the nature of this stigma, showing that it stems from deep-seated psychological roots rather than mere cultural proscriptions. We point to a large body of research demonstrating that moral beliefs are deeply informed by evolutionarily shaped intuitions (e.g., Haidt 2012), which largely operate independently of religious beliefs (Bloom 2012). Given that harsh condemnations of suicide have persisted across cultures and throughout history (Durkheim 1897/1979; Gallup 1978; Joiner 2010), there is reason to believe that negative moral evaluations of suicide arise independently of codified scriptural laws.

Our elucidation of the cognitive basis of suicide blame is informed by Moral Foundations Theory (Graham et al. 2011;

Haidt 2012), which identifies a plurality of natural psychological systems from which moral judgments emerge. Although proscriptions against harm are the most prototypical moral concerns (Gray et al. 2012), they cannot account for the full range of the moral domain. For example, certain harmless actions (e.g., atheism; eating a dead dog; same-sex marriage) are denounced because they are deemed defiling and impure (Brandt & Reyna 2011; Haidt et al. 1993; Koleva et al. 2012). These purity-based moral judgments involve neural, emotional, and computational signatures that are qualitatively distinct from those underlying harm-based evaluations (Parkinson et al. 2011; Rozin et al. 1999; Young & Saxe 2011). For example, moral judgments about purity issues are closely associated with the emotional reaction of disgust, while moral judgments about harm issues are closely associated with anger (Rozin et al. 1999; Russell et al. 2013; Seidel & Prinz 2013).

The identification of the basic moral foundations of harm and purity suggests that even when suicide terrorism is condemned rather than praised, it will never be denounced in the same way as conventional suicide. In particular, while suicide terrorism is considered immoral because of the harm it causes, our recent research demonstrates that conventional suicide is (perhaps surprisingly) considered immoral because of purity-based concerns. Specifically, regression analyses conducted on participants' evaluations of a series of obituaries – rated according to how morally wrong each death was, how angry it made them feel, how disgusted it made them feel, how much harm had been done, and how impure the victim became – demonstrated that individual differences in the moral condemnation of suicide were predicted by ratings of *disgust* and *impurity* rather than anger and harm. When we ran the same regression analyses on homicide obituaries, we instead found that harsher moral judgments were predicted by ratings of harm. Our finding that suicide is a purity-based concern has been replicated several times, and this result holds true even among participants who are non-religious and politically liberal, suggesting that beliefs about the wrongness of suicide are cognitively natural rather than culturally instilled (Rottman et al. 2014; in press).

The distinctive purity-based nature of suicide blame and its accompanying disgust reaction have important implications. In particular, the condemnation of suicide is likely to be enduring and linked to negative assessments of the suicidal person's character (Russell & Giner-Sorolla 2011), as well as perhaps leading to extreme dehumanization (Harris & Fiske 2006; Haslam 2006). This contrasts with moral judgments of suicide terrorism, for which the locus of condemnation is the harmful act rather than an individual's nature, and which produces the shorter-lived emotion of anger (Giner-Sorolla & Maitner 2013; Skitka et al. 2004). In addition, given that people have strong natural intuitions that the self is fundamentally comprised of a soul that persists beyond death (Bering 2011; Bloom 2004; see also Emmons & Kelemen, in press), the belief that a suicide victim defiles his very essence in perpetuity is no small matter.

Based on the discrepant moral evaluations of suicide and suicide terrorism, Lankford (2010; 2013c) suggests that “martyrdom” could be made more disgraceful by exposing potential suicide terrorists as deserving the stigmatization of conventional suicide. Although we appreciate that this recommendation could plausibly help to deter potential suicide terrorists, we close with a note of concern about this normative advice. Publicly denigrating potential suicide terrorists for being suicidal would likely exacerbate the purity-based stigma against non-murderous suicidal individuals, as well as worsening the already intensified and complex grieving process for those who have lost loved ones due to suicide. Because of the disproportionately greater number of deaths caused by conventional suicides as compared to suicide terrorism, this would be a concerning outcome. If suicide terrorists are truly suicidal, as Lankford claims, then a much more productive solution would be to increasingly provide helpful resources for individuals at risk for suicide.

The myth of the myth of martyrdom

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Abstract: Lankford asserts that suicide terrorism is attributable to suicidality. We argue in this commentary that this assertion is not well supported theoretically or empirically. In addition, we suggest that failure to acknowledge religious beliefs as motivationally causal for suicide terrorism may place innocent people at risk of murder in the service of political correctness and multiculturalism.

Lankford asserts that suicide terrorists are suicidal individuals who *just happen* to use terrorist organizations to execute their death wish (Lankford 2013c). We propose in this commentary that this assertion is false and, moreover, may be dangerous insofar as it distracts from a more important causal factor: religious belief. Methodological inconsistencies and unsubstantiated assertions may generate an unfounded confidence that “we may understand suicide terrorists better than they understand themselves. Which means we should be able to stop them” (p. 149).

Lankford declares that we cannot trust what suicide attackers and their families say, but then supports his arguments by doing just that: directly quoting them. This double standard reflects a methodological problem that renders the evidence Lankford presents as anecdotal cherry-picking. For example, Lankford discounts failed suicide terrorist Wafa's explicitly stated desire to kill dozens of Jews, but accepts as reliable her statements that she did not care about politics or which terrorist organization sponsored her attack (p. 25). Lankford comments that 9/11 hijacker al Nami's family “feared a bipolar disorder” (p. 88), apparently corroborating Lankford's assertion that the terrorist was suicidal. Thus, despite his assertion that we cannot take terrorists or their families at their word, Lankford does precisely that.

Lankford argues that the suicide terrorists' primary motive is suicidality. He avoids implicating religious beliefs as a cause of suicide terrorism, asserting that mention of religious motivation for these attacks promotes the terrorists' agenda (pp. 38–39). Yet, beliefs about martyrdom and a glorious afterlife are crucial in motivating suicide terrorism. All one has to do is listen to what the terrorists say, *verbatim*. There are countless examples of suicide terrorists announcing their goal: Kill many infidels, incidentally sacrificing their physical bodies, to reach paradise. Here are samples from YouTube:

- “God would have given me paradise... It is written in the holy Quran to do jihad against the infidels” (Charlesmartel686, 2007, video times 1:55, 4:55).
- “Yes, I will [kill via suicide bombing]... Even if it includes my family... Those who are not taking part in Jihad are not innocent...” (Umer123khan, 2009, video time 1:21)
- “I wanted to be a martyr for God... God would have given me happiness in paradise.” (Rehov, 2009, video time 3:05).

Harris (2005) and Dawkins (2001) note what might otherwise be obvious but for political reasons is not often stated: Religious beliefs motivate suicide terrorism. Currently, these are typically Islamic beliefs, which include explicit concepts of martyrdom and jihad that explain the character of suicide terrorism. Suicide bombers often receive extensive training and deploy calculated attacks that require sophisticated mental capacities and incredible courage. Dawkins raises the issue of identifying the source of this courage, and much of what we know about Islam suggests that it would be dangerous to disregard the direct link between doctrines of Islam and suicide terrorism. Lankford warns that a sponsoring terrorist organization on U.S. soil, “regardless of its ideology,” would be successful because 34,000 Americans commit suicide

each year (p. 166). Local terrorist organizations are a danger – not because thousands commit suicide, but because political correctness favors pandering to religions, especially those easily offended.

The claim that, “[W]e may understand suicide terrorists better than they understand themselves” (p. 149), may be presumptuous and does not reflect a clear understanding of modern psychology. It may not be reasonable to pose hypothetical situations that require the reader to pretend to be in the suicide terrorist’s situation (e.g., pp. 1–2, 6, 46) because there are contextual factors (e.g., religious indoctrination) not available to the reader. Such mental exercises might be especially questionable if, as Lankford claims, suicide terrorists are not psychologically normal, whereas most readers are. It also might not be appropriate to speculate on what would be *better* to do (in hindsight) to maximize casualties (see, e.g., p. 25) or what others would have done in the “exact same circumstances, regardless of the odds or options” (p. 138), because that was not part of the suicide attacker’s psychology. Perhaps the person who knows best what was going through his mind is *that* person. Finally, the many references to ill-defined concepts and phenomena in the book – for example, “at some deeper level they know their high-risk behavior will eventually end their lives, and they are comforted by this fact” (p. 147); “even in the most desperate of situations, human beings have an amazing capacity for hope” (p. 138); “If you would really do *anything* to succeed ... that’s not a sign of courage or commitment. It’s a sign that you lack the character and principle required for true heroism” (p. 104) – are not consistent with theoretical and empirical advances of modern psychological science.

Lankford uses emotional, hyperbolic language to promote or support claims and assertions: “The truth is out there... So let’s keep digging” (p. 63); “We need to know how to recognize the next Mohammad Atta – before it’s too late” (p. 88). Furthermore, beyond asserting that “they simply don’t know what they’re talking about” (p. 170), Lankford frames his arguments such that those who disagree with him are spreading terrorist propaganda (e.g., pp. 38–39, 49); labeling suicide terrorists as “sacrificial” or as “martyrs” “plays directly into the hands of the terrorist leaders, increasing the power of their propaganda” (p. 8).

Lankford states that “setting the record straight is not just important for educational purposes – it’s also the best chance we have to deter future suicide terrorists” (p. 173). We agree, but there is no need to expose what is well-documented: Suicide terrorists are motivated by their religious beliefs. Lankford asserts that once suicide attackers recognize they will be judged mentally ill they will “think twice” about volunteering (p. 174). This claim does not take into account the psychological stranglehold that religious indoctrination commands.

Lankford’s *Myth of Martyrdom* exposes the myth of the myth. His claim that the cause of suicide terrorism is the attackers’ suicidality and that this insight is the key to stopping terror, is not substantiated theoretically or empirically. A failure to acknowledge religious beliefs as a motivating cause for suicide terrorism may place innocent people at risk of murder in the service of political correctness and multiculturalism.

Individual differences in relational motives interact with the political context to produce terrorism and terrorism-support

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Abstract: The psychology of suicide terrorism involves more than simply the psychology of suicide. Individual differences in social dominance orientation (SDO) interact with the socio-structural, political context to produce support for group-based dominance among members of both dominant and subordinate groups. This may help explain why, in one specific context, some people commit and endorse terrorism, whereas others do not.

We agree with Lankford (2013c) that one cannot understand suicide terrorism without considering individual factors as well as contextual ones, and must distinguish perpetrator from audience effects. Nevertheless, although being willing to kill oneself is a necessary condition for executing suicide bombings, this need not imply that what really drives suicide bombers, rampage shooters, and other self-destructive killers is simply suicidality proper, conveniently disguised as political terrorism in cultural and religious contexts that ban individual suicide. Firstly, in the case studies he uses to make the latter point, Lankford not only seeks to estimate reliable predictors of suicide – such as prior suicide attempts, expressed death wishes, and debilitating depression – but also includes many “soft” risk factors such as the deaths of parents or siblings in childhood, unemployment, divorce because of infertility, and even disciplinary problems in school. Without knowing the base rates of both kinds of factors among the general population, it is impossible to evaluate the degree to which they lead people to commit suicide, let alone suicide terrorism, particularly when considered in the often war-torn, occupied settings from which Lankford draws many cases.

Just as a suicidal mental condition is insufficient to drive suicide terrorism, so it may likely be unnecessary. The case of Anders Behring Breivik – who shot 77 teenagers at a political youth camp after seeking to blow up the Norwegian governmental building – demonstrates the uncertainty of clinical judgments based on interpretations of written or limited data records. Although Lankford concludes that Breivik was clearly suicidal because his writings named the plight of conservative “brothers and sisters” being pushed toward suicide, and because he anticipated dying during his terror mission, a final forensic-psychiatric assessment (following extensive clinical interviews and 24 hour observations) not only concluded that Breivik was not psychotic, but found absolutely no evidence that he was suicidal (NTB, Norwegian News Agency 2012). Breivik expressed fear of getting killed by the police on being taken captive.

What clearly is necessary for committing any such acts of terrorism is the willingness to kill civilian others. We agree that this homicidal intent is likely fueled by rage and that cultural and ideological endorsement facilitates suicide terrorism. But both respond to the political reality in which a community finds itself. For example, Pape (2005) argues that suicide terrorist attacks in Lebanon ebbed and flowed with the absence and presence of the Israeli occupation (whereas suicidal intent presumably remained fairly stable). Dismissing this as simply being the result of increased access to weapons and enemy targets ignores the role of the political context in fueling rage towards an enemy group: relationally motivated moral outrage (Rai & Fiske 2011) that *they* are subordinating, humiliating, discriminating against, victimizing, persecuting, and killing *us*, or threatening to do so, culminating in the intended killing of perceived enemy civilians.

Such political context effects may play a role even in cases of *remote identification* with group members suffering at times of conflict or oppression (Sheehy-Skeffington 2009). For example,

we recently found that support for a variety of terrorism-related statements among Muslim citizens living in Denmark, ranging from general understanding of terrorism to personal willingness to use violence to defend Islam, was predicted by perceptions of general Muslim suffering and was mediated by the anger this suffering evoked (Obaidi et al., in preparation). These *victimization-by-proxy* effects were even stronger among Danish-born than among foreign-born Muslims (Sidanius et al. 2013), and held even when controlling for the effects of personal experiences of discrimination – a structural factor indicated in radicalization among British Muslims (Travis 2008).

In understanding how individual factors play into these processes, such that some people in a specific context endorse or commit acts of terrorism while others in the same context do not, we must go beyond the biographical and psychopathological to the relational and ideological/political. The degrees to which people like, want, and seek relationships that are communal, hierarchical, or egalitarian underpin many psychological phenomena (Thomsen 2010). One particularly potent dimension of relational motives is social dominance orientation (SDO): the motivation to create and maintain between-group dominance hierarchies (Pratto et al. 1994; 2006).

Individuals high in SDO support hierarchical intergroup structures, in which some groups dominate others, whereas individuals low in SDO favor intergroup equality. These motives, and the cultural context that embeds them, influence both the societal endorsement of suicide terrorism, and the attitudes of those willing to commit it themselves. For example, by looking at the *negative* relationship between SDO and support for terrorism against the West among Lebanese and Syrians, our work has demonstrated that *counter-dominance* is an important ideological motivation undergirding support for terrorism against dominant groups (Henry et al. 2005; Levin et al. 2003; Pratto et al. 2014).

Conversely, among members of dominant majority groups in the West, the desire for group-based dominance *increases* support for violence, wars of conquests, and terrorist acts in retaliation against a threatening group or country (Ho et al. 2012; Thomsen et al. 2008). Further supporting the crucial interaction of individual relational motives and the structural context, the effect of group identification on terror support among *subordinate groups* (e.g., of Arab identification among Lebanese) is particularly strong among those who are *low* in SDO, whereas identification with *dominant groups* (e.g., national identification among Americans) particularly increases support for violence among those *high* in SDO (Kteily et al., in preparation; Levin et al. 2003; Thomsen et al., in preparation). Again, Breivik's self-described radical identification with a Christian in-group and desire to preserve its dominance would fit this picture.

In sum, we concur that it is crucial to consider both the person and the situation in understanding suicide terrorism. Research and theory in the social dominance tradition explicates how individual differences in relational motives interact dynamically with the socio-structural context in shaping people's attitudes towards actions of group-based violence. Just as social psychology involves more than the situation, and individual differences are more than the psychopathological, so the psychology of suicide terrorism is more than simply the psychology of suicide.

Normative seeds for deadly martyrdoms

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Abstract: Even if Lankford's biographical examination of perpetrators of suicidal attacks serves to alert us on the role played by individual factors in their recruitment, psychological frailties, distress, or coercion do not exhaust the causal pathways to deadly martyrdom. Normative personality attributes must be explored further in order to ascertain plausible roots of murderous sacrifice. We have advanced (Tobeña 2004b; 2009; 2011) a template of normative temperamental traits that could lead activists to the threshold of volunteering for murderous missions.

By accruing traces of psychological frailties in suicidal attackers through their diaries, manifestos, or recollections, in *The Myth of Martyrdom* Lankford has uncovered 130 cases that may fulfill criteria of “conventional suicide” due to mental problems, bereavement after significant losses, and other personal crises (Lankford 2013c). That figure is not compelling as a base rate from a worldwide total of around 3,000 of these attacks, over the last two decades (wits.nctc.gov/reports/analytical). The shortcomings of retrospective enquiries to uncover psychopathology are a weakness that also affects the detailed “psychological autopsies” of prominent attackers such as Mohamed Atta, which Lankford performs by applying DSM IV criteria (American Psychiatry Association 2000) on similar inputs. He compares the profiles of perpetrators in all attacks categorized as “suicidal” on U.S. homeland between 1990–2010, including terrorist actions and rampage, and school/workplace shooters who killed many bystanders before killing themselves or sought to be terminated (“suicide by cop”). There are parallels as well as discrepancies among the profiles, but oddities of the grouping criteria preclude any conclusion. The exceptionality and peculiarities of these “domestic” terrorist acts makes them an implausible model for sustained campaigns of suicidal missions at “hot spots” across the world.

Despite these shortcomings, Lankford warns that psychological disturbances, deep crises, and glory-craving or self-deprecating traits should be scanned as potential factors in some suicidal attacks. The fraction of attackers with such traits, however, remains not fully known, and, anyhow, erasing the notion of altruistic martyrdom is unjustified. We think that attributes within the normal tapestry of human character must be explored to ascertain the roots of exceptional acts of murderous sacrifice in war. Most suicidal attacks occur within the context of insurgency campaigns during transnational or local confrontations. After dissection of incidents, consequences, and chronological trends across regions and organizations, there is still no firm explanation for the willingness to engage in suicide missions (Gambetta 2006; Gill 2012; Pape 2005), though observed regularities permit a swift tactical depiction: Suicide attacks are a cost-effective weapon for insurgents in asymmetrical contests, if a suitable recruitment line is fostered and defection rates are low (Berman 2009; Piazza 2008). Waves of suicidal launchings have appeared and disappeared in recent times, with no clear answers regarding why they have arisen at particular points and why some individuals are eager to abruptly put an end to their future. The requirement of their mission (death by exploding themselves, as weapon carriers) imposes a burden only mirrored by “no-escape” lethal missions, in ordinary wars.

Pro-communal altruism to the point of ultimate sacrifice is a trait that appears to operate behind such engagements (Berman 2009; Bernhard et al. 2006; Tobeña 2004a; 2011). Combined with parochialism (hostility towards out-groups), it may function as a source of martyrdom candidates from crops of normative people (Choi & Bowles 2007; Ginges & Atran 2009). In this view, a substantial segment of volunteers for murderous martyrdoms would not be unhealthy or tortured “outliers,” but gullible souls with a “beneficent” pro-communal disposition that nevertheless fails to prevent them from turning scores of out-group targets into victims. The strategic goals of rebellion provide the setting in which the personalities of volunteers feeding the pipelines for sacrifice (motivated radicals), need to be differentiated from the attributes of their inducers

(commanders, trainers, helpers), because these handlers rarely give their lives for their group.

We have developed a template (Tobena 2004b; 2009; 2011) for the normative traits that could lead engaged activists near the threshold for volunteering for murderous missions. Strength of partisanship, degree of fanaticism, intensity of commitment, and vengeful mood are high within rebellious bands, without distinctions between commanders, dispatchers, and operational activists. These attributes respond to indoctrination and tend to be homogenous in tightly knit groups. Temperamental traits can be more closely linked to the different roles that each individual assumes within a bellicose group. Altruistic parochialism seems an essential precondition for lethal violence toward foes, although it cannot be the full story. Such tendency should be analyzed in conjunction with traits fueling the agonistic and high-risk lifestyles led by volunteers entering combative bands pursuing territorial, profit-making feuds or political-religious goals (Tobena 2004b).

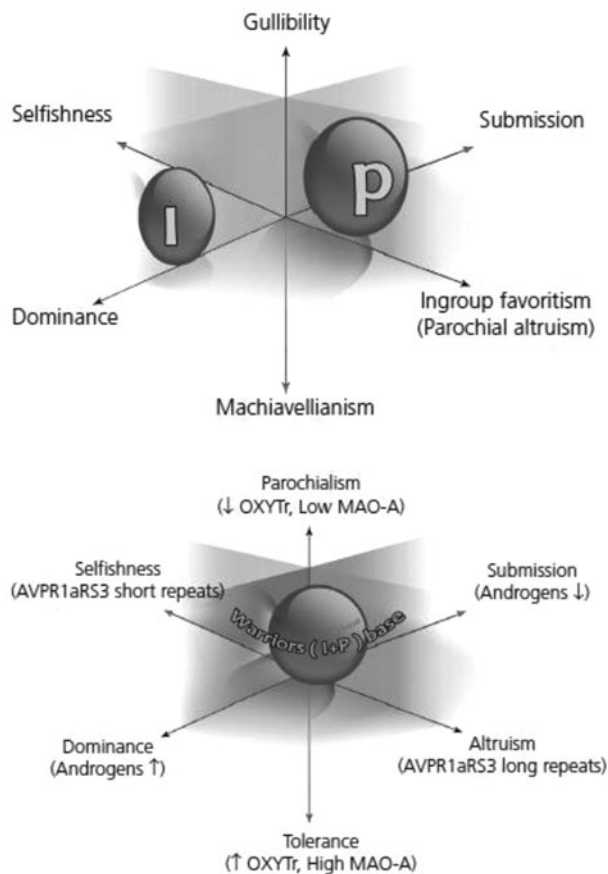


Figure 1 (Tobena & Vilarroya). A temperamental workspace to distinguish warriors' proneness to martyrdom. *Top*: Hypothetical space for agonistic clusters defining combative activists across three temperamental traits: dominance–submission, Machiavellianism–gullibility, and selfishness–altruism. *Bottom*: Neurohormonal and genetic polymorphisms that may foster temperamental attributes encompassing distinctive clusters of warriors. Relative distributions along these biological traits would distinguish between generous warriors (*P*) and selfish warriors (*I*) who put themselves near or far away, respectively, from the high-risk/martyrdom frontier.

I = inducer; P = performer; OXYTr = oxytocin receptor; MAO-A = monoamine oxidase A; AVPR = vasopressin receptor variants. Arrows denote activity.

From Tobena, A. (2004b). *Mártires mortíferos: Biología del altruismo letal*. Valencia (Spain): PUV-Bromera Ed., with permission of the publisher.

Bold, ambitious, dominant, adventurous, and callous young males form a characteristic cluster of band recruits in both apes and humans (Wrangham et al. 2006). Combatants in insurgencies and rebellious factions, whether male or female, share these masculine tendencies (Van Vugt 2009). By adding to such agonistic attributes the dimensions of *selfishness versus altruistic groupishness* and *Machiavellianism versus gullibility*, distinctions could be drawn between leaders and followers.

Figure 1 depicts a space outlined to distinguish between potential clusters of inducers and perpetrators of murderous martyrdoms. We selected these dimensions because there is a solid tradition of measuring dominance and leadership versus submission/conformity in personality research (De Neve et al. 2013; Van Vugt et al. 2008), as well as the continuum of Machiavellianism versus gullibility/honesty (Bereczkei et al. 2013; Takahashi et al. 2012; Wilson et al. 1996). Such space is a conjectural frame and other traits such as *callousness (vs. empathy)*, *aggressiveness*, *narcissism*, *religiosity*, or *messianism* may be required. Neurohormonal signatures or particular genetic markers related to these dimensions (see Fig. 1), should be explored in activists in the same way as has been done in ordinary people and in partisanship preferences (De Dreu et al. 2010; 2011; Ebstein et al. 2009; Hatemi & McDermott 2012; Knafo et al. 2008; Mertins et al. 2013; Reuter et al. 2011; Settle et al. 2009; Zhong et al. 2010). Establishing neuroimaging profiles among the more informative clusters seems also mandatory (Baumgartner et al. 2012; Bruneau et al. 2012; Morishima et al. 2012). This approach could be more productive than postulating hidden “self-destructive tendencies” for the bulk of attackers who defy being classified as “mentally unhealthy,” “tormented,” “coerced,” or “escapist”¹ suicides. Clusters with normative traits may help in discerning, among engaged activists, the distinctive profiles of those who do not exclude self-immolating options.

In sum, declaring lethal martyrdom a myth may be tempting for counterterrorism propaganda, but needs better data to be a solid assertion. Lankford's restoration of individual factors in suicidal terrorism can be useful, however, if it erodes the relevance assigned to purely contextual triggers (Atran 2003; Gambetta 2006; Sageman 2004). We concur that individual traits have been wrongly discarded (Tobena 2004a) and data from different approaches have opened seminal paths (Benmelech et al. 2012; Merari et al. 2010; Victoroff et al. 2011). Combined with biographical dissections, they could grant a finer depiction of the role that nuances of human temperament (and mood vagaries) play in extreme decisions during warlike confrontations.

NOTE

1. A note on Madrid 11-M (2004) suicidal “escapists”: Lankford uses the Madrid, March 11th, 2004 suburban train bombings (resulting in 199 deaths and 1,000 wounded) in his discussion of “escapist” suicidal attacks as a nodal instance of this “type” of murderous suicide. Those bombings, performed by a self-organized *jihadi*st clique helped by local delinquents (Rodríguez 2004), are usually excluded from worldwide records of suicide attacks because the perpetrators left the explosive backpacks on the trains and ran. They continued afterwards with their normal lives and occupations for several weeks, to the point of celebrating feasts with their families, over the weekends, at the rural hut where the bombing logistics had been laid out. The terrorist cell, however, had a further agenda of a series of actions with the aim (recorded on videos) of changing Spain's alignment as a United States ally in Iraq's war, and with suicide as an option: three weeks and a half later, seven members blew themselves up, killing one officer and destroying a residential condominium when they were surrounded by police. Those who escaped the ambush blew themselves up later in Iraq (Atran 2010a; Rodríguez 2004). Lankford uses a cherry-picking approach which pervades his entire research, selecting notes and traces left by three members of the band who might conform, perhaps, to the picture of “troubled,” “marginal,” or “tumultuous” *jihadists* ready to use suicide as a “glorious” escape when the enemy arrives, but he excludes the rich biographies and whereabouts data of other, prominent members of that cell who do not conform, at all, with such a portrait (<http://www.elmundo.es/documentos/2004/03/espana/atentados11m/index.html>, Atran 2010a).

Inferring cognition from action: Does martyrdom imply its motive?

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Abstract: Drawing inferences about the decision utilities of suicide terrorists from their final action is tempting, but hazardous. Direct elicitation of those utilities would be more informative, but is infeasible. Substituting examination of archival materials for elicitation makes the assumption that leaders and bombers have similar utilities. Insight regarding the beliefs of terrorist leaders might be available from observations of recruitment strategies.

Lankford (Précis target article, sect. 1) alludes to the “fundamental attribution error,” which is that the behavior of others is caused by internal disposition rather than external circumstances. We would like to call attention to another common error of attribution, albeit one that lacks a catchy name. That error is labeling someone’s behavior as “irrational” without knowledge of their decision utilities (Weiss & Weiss 2012). It is all too easy to assert that a choice one views as foolish must have been the product of faulty reasoning. Those who would label suicide bombers as cognitively deficient are in danger of committing the error.

It is also hazardous to infer motive from observed action. For example, if you were to see a man enter a restaurant, it would be tempting to impute hunger. While that may be the most likely explanation, he might actually have been meeting friends or business colleagues, or selling restaurant supplies, or complaining about last night’s meal. He might have been seeking shelter from adverse weather conditions. Even seeing the man eat does not guarantee that hunger was the driving force behind the decision to enter the restaurant.

To understand a decision, an analyst needs to know what the options under consideration were, and also to know the utility parameters assigned to the various consequences inherent in those options (Weiss et al. 2010). Pulling the fatal trigger is one of the options in the package under consideration by a potential suicide bomber. The anticipated consequences attached to the trigger option include not only death for oneself and the targets, but also publicity and political gain for the cause, a label of heroism, or release from everyday cares and social connections. Anticipated consequences for the walk-away option include the converse outcomes, along with various possible punishments. These lists are speculative on our part; authoritative lists could come only from those facing the decision. Values, and especially salencies, attached to the consequences may well fluctuate with mood and circumstance. And of course, the lists may vary across decision makers.

None of the researchers involved in the martyrdom versus depression debate, including Lankford (2013c), is positioned to possess that information; nor are we. Absent the information, one can only speculate; and the debate may be couched in terms of that speculation. Those who argue for martyrdom envision high salience for gains for the cause, whereas Lankford pictures high salience for release from a life seen as not worth living.

Can the information needed for understanding the suicide decision be obtained? Eliciting utilities is challenging even when respondents are cooperative (Fischhoff 1991). People do not always know their own minds (Nisbett & Wilson 1977), and may not be sufficiently numerate to convey their feelings quantitatively. For terrorists, antagonism toward interrogation and deceptive intention may be even more formidable barriers to elicitation.

Furthermore, pre-decisional access is likely to be limited by the potential bomber’s secrecy concerns, and post-decisional access to successful bombers is by definition impossible.

Appreciating the difficulties, Keeney and von Winterfeldt (2010) attempted to comprehend the goals of terrorists by examining archival sources, rather than via personal elicitation. They examined documents available on the Internet, including how-to guides and manifestos written by Al Qaeda theoreticians. Although this information is valuable for formulating defensive strategies, it is not necessarily true that the utilities of individual terrorists are similar, nor that they correspond to those of their intellectual leaders. Indeed, one might expect the values of people considering an immediate and ultimate sacrifice for the cause (or in Lankford’s view, a suicide) to differ considerably from those engaged in long-term planning.

The psychological distance between leaders and followers is accentuated by Lankford’s chilling revelations regarding how handlers brutalize candidates. In the language of decision making, the handler attempts to control the options package, limiting the prospective bomber’s options to those with negative utilities. Recruits who cannot bring their own positive options into the mix are then poised to choose a package that includes death as one of the likely consequences.

If information about the recruitment process were available, it might serve to inform the debate. We draw an analogy to employment settings, wherein a focus on selection suggests that management regards particular abilities as crucial, kinds of expertise that are not widely shared within the applicant pool. On the other hand, an extensive training program suggests that management expects qualified candidates to be able to acquire the requisite skills. Accordingly, we might judge a terrorist organization that tries to make bombers out of folks who express negative ideations (despair, worthlessness, etc.) to share Lankford’s view that suicide terrorism is, indeed, suicide. In contrast, an organization that looks for true believers, regardless of mental health, acts as though it expects martyrs to be the ones who become successful suicide bombers. First-hand descriptions of what takes place during attempted recruitment would constitute valuable data, and might be available from those who chose not to enlist. Do recruiters inquire about personal issues, or do they emphasize the duty of the faithful? These data would tell us what terrorist leaders think motivates a suicide bomber. Those leaders are likely to be better informed than scholarly analysts.

Author’s Response

Evidence that suicide terrorists are suicidal: Challenges and empirical predictions

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Abstract: *The Myth of Martyrdom: What Really Drives Suicide Bombers, Rampage Shooters, and Other Self-Destructive Killers* proposes that suicide terrorists are psychologically and behaviorally similar to other people who commit suicide, due to a range of individual, social, and situational factors. Some commentators agree, while others are skeptical, given the lack of information about many attackers’ lives. However, the book’s position is not simply based on individual case studies; it is also

supported by other independent assessments, the confirmation of empirical predictions, the paucity of contradictory evidence, and new applications of evolutionary theory. It is undisputed that human beings behave as the author suggests; it is unknown if they behave as the conventional wisdom suggests. Those who argue that suicide terrorists are psychologically normal and altruistically sacrificing their lives for an ideological cause should bear the burden of proof for those claims.

R1. Introduction

One of the most common reactions I get to my findings is disbelief. Not disbelief that suicide terrorists are suicidal, but that so many experts would insist otherwise. Some people assume that I must have created straw men to argue against. But as I outline in the Précis (target article), in retrospect, it is easy to understand why most scholars initially believed that suicide terrorists are psychologically normal, not suicidal, and that they are driven by self-sacrifice. For years, it seemed as if the best scientific evidence really pointed in that direction. I initially believed it as well.

Fortunately, more information about suicide terrorists is available than ever before, in part due to the brave fieldwork of scholars such as **Atran**. Unfortunately, some commentators have clung to their previous assumptions, but overall, I am thrilled with the response to my book (Lankford 2013c). I very much appreciate the other scholars reading it and offering a wide range of thoughtful reactions. My fiercest critics have answered the call, proving they are not filled with straw, but with intelligence and skill.

At the same time, there are equally strong scholars who agree with my argument and made valuable extensions of their own. They include **Beit-Hallahmi**, **Bobadilla**, **Funder**, **Gibbs**, **Lester**, and **Mandel**. I list them here in hopes that they will forgive me, because I am going to focus more on the critics. I hope this will not serve to discourage future supporters, lest they receive second billing! But for now, it seems better to first address the question of whether or not suicide terrorists are suicidal, before we move on to applications of this knowledge.

In the forthcoming discussion, I will not dedicate much space to correcting mischaracterizations of my arguments or to quibbles about a few specific cases. There were thoughtful rationales behind virtually all of my decisions, and if readers wish to contact me with inquiries, they are welcome to do so.

Instead, I will focus on the behavioral issues at hand, which are a matter of objective reality. Are suicide terrorists similar to other people who commit suicide, in terms of their behavior and psychology? If my harshest critics are right and the answer is no, then my book is a work of fiction, and we can go back to embracing the conventional wisdom. If we are each somewhat right and somewhat wrong, then I have documented something important, but other explanations are needed as well. If I am right and the answer is yes, then the book stands at the forefront of a paradigm shift in the way suicide terrorists are understood, and may have major implications for even larger behavioral issues, such as the evolved nature of self-sacrifice and survival instincts among human beings. It is important to bring this objective reality into clearer focus, sooner, rather than later.

R2. What does it mean to refer to someone as “suicidal”?

Before we get to the behavioral issues, we should touch upon confusions about language. **Atran**, **Gray & Dickins**, and **Güss & Tuason** all imply that I have committed the fundamental attribution error—ignoring the role of social, situational, and organizational factors—perhaps because of their assumptions about what is meant by the word “suicidal.” This is a curious critique, because I discussed the risks of the fundamental attribution error in the Précis. It would be unusual for someone to point out a hole, then fall in it anyway. In turn, **Weiss & Weiss** suggest that labeling suicide terrorists “suicidal” implies that their behavior is “irrational” or “cognitively deficient.” And **Hardcastle** questions labeling people “suicidal” if they commit suicide to escape painful or frightening situations, because their decisions may be rational, given the circumstances.

When I refer to suicide terrorists as “suicidal,” I am simply arguing that, once all of the relevant variables are considered, the psychology and motives of these attackers are similar to those of people who intentionally kill themselves by pills, poison, razor blade, rope, bullets, jumping from high elevation, provoking suicide by cop, and several other methods. Many people who commit suicide are greatly influenced by social and situational factors, and many of them clearly demonstrate rationality while conceiving, planning, and executing their suicides. We should expect the same of suicide terrorists.

The better we understand variations of suicide, the better we will understand variations of suicide terrorism. Do highly educated people commit suicide? Of course. Cornell University recently experienced a rash of six suicides in 6 months. Do small towns sometimes experience statistically improbable suicide clusters? Yes. Despite a population of less than 800, Robbinsville, North Carolina saw five suicides within a year. Do small groups of friends sometimes create suicide pacts? Yes. A few years ago, seven Chinese teenagers agreed to jump off a building together. For each of these suicidal examples, there may be corollaries for suicide terrorism. And in some cases, suicide terrorists may be suicidal but behave in virtually unprecedented ways, given the virtually unprecedented levels of social approval for their particular form of suicide (Lankford 2010). Ultimately, if suicidal people and suicide terrorists kill themselves for similar underlying reasons, we should use similar labels to describe them.

R3. How many individuals must be studied to make accurate generalizations?

There have been thousands of suicide attacks over the past several decades—between 3,000 and 3,500, depending on the source (see **McCauley**; **Tobeña & Vilarroya**)—but only 136 individuals appear on the “partial list of suicide terrorists with risk factors for suicide” that I present in my book’s Appendix A. The list has continued to grow since the book was published, but it remains a relatively small percentage of the total. And several commentators have suggested that some of those on my list should not be counted. **Atran** dismisses 53 because their names

were not identified, and questions others. McCauley goes even further, reducing the overall list to 40 because only those individuals were featured in case studies within the book. Having divided 40 by 3,500, he then concludes that a “reasonable estimate might be that one percent of suicide terrorists are suicidal.”

I respect healthy skepticism, for which there is a long tradition in the sciences. But too much skepticism can create unrealistic demands for evidence and keep us from the truth. Approximately one million people commit conventional suicide each year (World Health Organization 2013). If we ignored these individuals’ behavior in orchestrating their own deaths, for how many cases could researchers accurately document suicidal motives? Suicidal people are often very effective at convincing those around them that nothing is wrong. So if the result was just ten thousand, would that mean that only one percent of all people who commit conventional suicide are actually suicidal? Or would it simply highlight the challenges when seeking this type of evidence?

Given so many unknowns, a very reasonable question emerges: How many suicide terrorists must one study in order to make accurate statements about suicide terrorists in general? I am not sure an exact answer exists. Atran, McCauley, and Tobeña & Vilarroya believe that I have not studied nearly enough cases. They want to see more data, and as far as that goes, who doesn’t? I salivate for new evidence, no matter what it will show. But in the meantime, informed assessments of my argument cannot be based solely on the total number of individual cases studied; they must also account for the nature of the sample, the presence of other supporting evidence, the confirmation or rejection of empirical predictions, and the presence of contradictory evidence.

My sample was not random, but as I explain in the Précis, I tried hard to make it representative. McCauley claims that I failed to include any attackers from Iraq; he is simply mistaken. But even more important than geography is behavior. If a specific type of suicide terrorist exists who is behaviorally different from those I have analyzed, I would encourage my critics to waste no time in identifying them, so that they can be included as well.

R4. What other supporting evidence suggests that suicide terrorists are suicidal?

Beyond the individuals I studied, I also found many independent corroborations of my findings. Security officials in Iraq have reported that in recent years, a significant percentage of suicide bombers in their country have been “mentally challenged” or “suffering from psychological disorders,” and that in some cases, arrested terrorist dispatchers have openly admitted it (Qaisi 2012). As an Iraqi terrorist expert declared, “It is common knowledge that suicide operations are often conducted by individuals who have lost interest in life” (Qaisi 2012, para. 14). Similarly, Berko (2012) recently interviewed a Palestinian journalist who suggests that the myth of martyrdom is widely recognized, at least behind closed doors. “After a suicide bombing attack they say she was a heroine, but in secret or over coffee in a cafe they say ‘She was a bad woman and had problems.’ *Everyone knows and no one says anything; it’s a conspiracy of silence.* It’s amazing” (p. 7).

Weiss & Weiss propose that if suicide terrorists are suicidal, terrorist recruiters would be sure to know. In some cases, this may be true—although getting them to admit it could prove difficult. However, as referenced in the Précis, previous accounts from both a Palestinian suicide bomber dispatcher and a Palestinian Authority General indicate that recruiters seek people who are depressed, desperate, sad, and who feel like “Life has no meaning but pain” (Berko 2007; Stern 2003). And a female Palestinian terrorist who was imprisoned for escorting suicide attackers to their deaths summarized that many “think death is better than living the way they do” (Berko 2012, p. 25). Similarly, in Iraq, arrested terrorist dispatcher Samira Ahmed Jassim admitted to authorities that she was part of a plot in which male terrorists would rape local women, and then send the “broken women” to her for deployment. She apparently did this successfully with more than 28 attackers—perhaps as many as 80 (Siemaszko 2009).

In Afghanistan, Pakistan, and elsewhere, security officials report that terrorist organizations use heroin addicts for suicide attacks and that forensic tests of some attackers’ bodies have confirmed the presence of the drug (Fair 2007; Yusufzai 2011). Of course, drug use is a well-established risk factor for suicide (Maris et al. 2000). And in other cases, the Taliban has deliberately prepared teenagers for suicide bombings with beatings and malnutrition. As Obaid-Chinoy (2010) reports, based on her interviews of terrorist recruiters and would-be suicide bombers, “The Taliban want these children to hate the world that they currently live in.”

These assessments directly support my findings, but they were made independently and would exist whether I wrote my book or not.

R5. Empirical predictions for determining if suicide terrorists are suicidal

In the book, I use case studies to illustrate conceptual points. But as Funder suggests, a sophisticated reader who just wants the important ideas might prefer a “more boring” but direct approach. Sela & Shackelford similarly advocate for a more traditionally framed argument. Fortunately, as Gibbs points out, the book contains many implicit empirical predictions that can be made explicit.

R5.1. When would volunteering for a suicide attack make strategic sense?

Many suicide terrorists genuinely volunteer to blow themselves up without being coerced. If they are primarily motivated by the desire to serve the cause, we would expect their decision to be based on at least some gut-level cost/benefit analysis of the value of their potential sacrifice. Subscribing to a radical ideology does not eliminate one’s ability to reason, and committed terrorists would not want to harm their cause by needlessly wasting their lives (Atran 2010b; Merari 2010; Uyayri 2000). You do not need advanced knowledge of statistics to realize that it would be counterproductive to spend a thousand dollars on an overpriced weapon, or to spend your life on an overpriced attack.

The individual truly committed to maximizing his or her utility for the cause would only volunteer to die based on

the belief that the expected value of the suicide attack would outweigh the expected value of all future contributions. A suicide attack only makes strategic sense if you can accomplish more by dying tomorrow than you could during the rest of your life, plus your future death. So, if suicide terrorists are indeed primarily motivated by their desire to serve the cause, we would expect a few things. (1) Suicide attacks would be launched only when the expected value (probability of success multiplied by impact of attack) is very high. (2) Suicide attacks would be launched only when a non-suicide attack method, such as a remotely detonated bomb or time bomb, would not be similarly effective. On the other hand, if suicide attacks are often launched (a) when the expected damage to the enemy is relatively uncertain or relatively small, or (b) when another attack method could be similarly effective, that would strongly suggest that suicide terrorists are suicidal.¹

So which empirical prediction is more reflective of reality? If all suicide terrorists attempted high-impact strikes on the scale of September 11, 2001, which would leave thousands dead and have a tremendous effect on geopolitics, it might be easier to believe their strategic logic for volunteering. But that is hardly the case. As Atran rightly points out, the average suicide attack is significantly more destructive than the average non-suicide attack. However, reports indicate that between 40% and 50% of suicide bombers in Afghanistan end up killing only themselves (Byman & Fair 2010; Robinson 2007). And as Atran (2010b) acknowledges, research shows that in Israel “up to mid-2004, some 527 suicide attacks were attempted; 132 of them were successful, killing [just] 859 noncombatant civilians” (p. 361). That calculates to a 75% failure rate, and fewer than two enemy fatalities per attempted suicide attack. Other statistics indicate that globally, even when only accounting for suicide attacks that were successful, nearly 70% of them from 1981 to 2011 resulted in ten or fewer fatalities (CPOST 2011).

To put these figures in perspective, consider that most suicide attacks are against vulnerable civilians. Do we really believe that many psychologically normal people, having dedicated their lives to an ideological cause, would rationally calculate that they need to sacrifice their lives tomorrow for an attack that will probably fail, and even if it were successful, would likely kill ten or fewer civilians?

The vast majority of suicide terrorists are not dying for some terrific tactical opportunity to change the outcome of their war. I would argue that virtually any committed terrorist with combat training and a semiautomatic firearm could kill ten or more civilians at some later date—with much lower likelihood of failure, plus the chance to escape, survive, and attack again—if it were really worth it to the cause. For comparison's sake, mass shooter Adam Lanza, a 20-year-old with severe mental health problems and no military training or organizational support, was able to kill 27 people. That made him a more effective killer than 88% of successful suicide terrorists (CPOST 2011). And similar attacks are possible anywhere. In 1994, a mass shooter named Baruch Goldstein, acting alone, killed 29 and wounded 125 on the West Bank.

Fink & Trivers wisely suggest that terrorists' calculations of expected benefits could be warped by self-deception. They could genuinely believe that every proposed attack will be far more successful or impactful

than is actually realistic. But the key is that if suicide terrorists were psychologically normal, their self-deception and exaggerated expectations would seem unlikely to be more pronounced when they assessed the benefits of a suicide attack tomorrow than when they assessed the benefits of their alternative contributions, future conventional attacks, or future options for a suicide attack. This form of self-deception seems likely to function as a constant.

It must also be emphasized that many suicide attackers, such as the July 7, 2005, London transportation system bombers, blow themselves up when they potentially could have just dropped off remotely detonated bombs or time bombs in a backpack and walked away. And then they could have better served the cause by attacking again on the next day, and then again the day after that.

For psychologically normal people, these decisions defy basic common sense, which is one reason why the vast majority of terrorists never volunteer for suicide attacks, despite their powerful commitment to the cause.

R5.2. How would organizations transform ordinary people into volunteer suicide terrorists?

Decades of research have shown that with the proper application of social psychological techniques, it is possible to get relatively ordinary people to carry out acts of torture, mass killing, and genocide (Browning 1998; Johnson 1986; Milgram 1963; Waller 2002; Westermann 2005; Zimbardo 1972). By now, we have a good understanding of how it is typically accomplished.

Two principles seem quite clear. First, although some degree of social influence may be possible over outsiders, organizations exert far more powerful influence over people once they have entered the organization (Grossman 1995; Johnson 1986; Waller 2002). It is at this point that the transformation of ordinary people into violent agents of the system really begins. Second, psychological influence is a gradual process that evolves over time. Individuals who end up fully committed usually get there after a series of incremental and escalating commitments (Burger 1999; Freedman & Fraser 1966). They rarely jump in the deep end right away.

These same strategies are employed by terrorist leaders during their recruitment, training, and indoctrination of many future members (Burton & Stewart 2008; Gunaratna 2002; Stern 2003; Warius & Fishman 2009). These principles are also consistent with both Moghaddam's (2005) notion of “the staircase to terrorism,” and McCauley and Moskaleiko's (2008) “pyramid of radicalization.” As McCauley and Moskaleiko (2008) accurately describe for non-suicide terrorists, “Typically an individual's progress into a terrorist group is slow and gradual, with many smaller tests before being trusted in more important missions, and with many non-violent tasks before being asked to use a gun or bomb” (p. 419). Again, this is how organizational commitment is typically forged.

Therefore, if suicide terrorists are psychologically normal people who become willing to sacrifice their lives because of their powerful commitment to the cause, we would expect the following: (1) Individuals would not decide to volunteer for a suicide attack until after organizational entry. (2) Individuals who ultimately became suicide

terrorists would have a history of steadily increasing involvement in other terrorist activities and attacks. Their final service to the organization would be the culmination of their fully forged commitment; something that started small and gradually grew stronger and stronger over time. By contrast, if many suicide terrorists (a) decide to volunteer for a suicide attack prior to organizational entry, or (b) have limited or nonexistent histories of prior involvement in terrorist activities and attacks, that would strongly suggest that they are suicidal.²

There is little doubt about where the evidence falls. It appears that the vast majority of volunteer suicide terrorists decide to die on their own, and then partner up with a terrorist organization to obtain the explosive device. They are “self-selected,” as I emphasize in Chapter 2, or “self-seekers” as Atran phrases it.

For many or most of them, the suicide attack is their first and only participation in a terrorist attack. Their commitment to the cause does not evolve as genuine psychological commitment usually does: gradually and incrementally. Instead, they only demonstrate an interest in one aspect of terrorist participation: carrying out an attack that will end in their own death.

Skeptics might argue that terrorist organizations are different from the vast majority of organizations in human history, and they do not need to wait for organizational entry before transforming ordinary people into volunteer suicide attackers. After all, widespread terrorist propaganda leads hundreds of millions of people to sympathize with terrorist causes, so it could also prompt individuals or small groups of friends to essentially self-radicalize and decide to become suicide terrorists, then seek out organizational support.

But this possibility would provide even more reason to doubt the conventional wisdom about those who volunteer for suicide attacks. As Funder wisely observes, “analyses of suicide terrorists often commit the error of overestimating the importance of situational causes of behavior and underestimating dispositional causes, such as underlying pathology.” By what rationale could we primarily attribute the behavior of suicide terrorists to social and situational psychology, if—when exposed to a certain stimulus, along with hundreds of millions of other people—fewer than 300 blow themselves up each year? In this scenario, would the stimulus be the best primary explanation for the behavior, or would it be the traits of the individual or small group?

R5.3. How would organizations maximize the publicity benefits of having psychologically normal suicide attackers?

Gibbs, Güss & Tuason, and Weiss & Weiss accurately point out that terrorist organizations can potentially benefit from the publicity generated by their suicide attackers, which can be used to rally popular support. But this greatly depends on the public reputations and motives of these so-called “martyrs.” As former terrorist leader Sheikh Yusuf ibn Salih al-Uyayri declared in his influential essay, “The Islamic Ruling on the Permissibility of Self-Sacrificial Operations: Suicide or Martyrdom,” the attacker’s intention must be “sincere and pure—to raise the Word of Allah, and benefit the Jihad” (p. 56). Otherwise, he warned, “the deed is worthless” (Uyayri 2000, p. 57).

If suicide terrorists are psychologically normal and solely influenced to volunteer by social psychological factors, terrorist organizations should have no more trouble finding high-quality recruits who would eventually blow themselves up than Milgram (1963) had finding successful businessmen who would deliver electric shocks, or Adolf Hitler had finding straight-A students who would become Nazis. So we would expect terrorist organizations to attempt to maximize the publicity benefits by only sponsoring individuals whose reputations are above reproach. After all, these individuals would become the literal “poster boys” for the organization: their faces would be on the murals, calendars, key chains, posters, postcards, pennants, and websites used for recruiting purposes.

As Atran (2010b) details, terrorist leaders recognize this logic and claim to operate in this manner. He was personally told by a senior Hamas organizer that “our youth are running to martyrdom. With so many, we must carefully select, case by case, who has courage and purity of heart” (p. 353). Atran (2010b) was also told that they screen out anyone who fails to meet the highest of standards: “If a youth knocks saying he wants to be a martyr to get sex in paradise or money for his family, we slam the door” (p. 364).

And when he personally interviewed Hamas spiritual leader Sheikh Hamed al-Betawi, Atran (2010b) was told “Those who undertake martyrdom actions are not hopeless or poor, but are the best of our people, educated, successful” (p. 362). Poster boys. “Who wants to be a martyr?” Atran (2010b) asked him. “Our martyrs are the purest of the pure,” Betawi replied. “Learned often in mathematics or engineering, even the arts, they are not hopeless. They are full of personal possibilities. But they have even greater hope for their people. Yehia Ayash was an engineer when he led the Izz al-Din al-Qassam Brigades [Hamas military wing]. Qais Adwan was president of the Student Council at Al-Najah University, which has twelve thousand students. Mohamed Al-Hanbali was a student at the College of Engineering, and his father is a millionaire. His father said to him, ‘I will marry you to the most beautiful girls in Nablus.’ And his son replied, ‘No Father, I will marry in heaven, my mission is to defend my people and my religion’” (pp. 363–64).

At first, this sounds like possible evidence that some suicide terrorists are psychologically normal. But on a whim, I googled Ayash, Adwan, and Hanbali – and I did not discover that they were suicidal. I discovered that they never became suicide terrorists at all! They each made the same common-sense decision that other relatively normal people make when they want to fight for the cause: Instead of volunteering to blow themselves up for an attack typified by uncertainty of success and minimal impact, they realized they could accomplish more by continuing to live. So they became bomb makers and suicide attack dispatchers.

It is unclear whether Betawi intentionally mislead Atran (2010b) or not. But it seems crystal clear that Atran was asking about who wants to become a suicide bomber, and it is precisely in this context – a chapter about suicide terrorism titled “Martyrdom 101” – that he presents this information in his book.

More broadly, it is apparent that terrorist organizations do not only sponsor suicide attackers whose reputations are above reproach, as would be expected if these attackers

were psychologically normal and solely volunteering due to social psychological techniques. If that were true, it would have been impossible for me to find the 136 individuals listed in my book's Appendix A—especially given the limited information available. Instead, these organizations have often relied on volunteers who have admitted to being suicidal or who were struggling with widely known mental health problems, personal crises, or trauma—along with raped women, beaten teenagers, heroin addicts, and other coerced souls—despite the public relations risks. Why? Because they had to. They did not have some long line of newly minted poster boys waiting to blow themselves up.

R6. What contradictory evidence exists?

In the past, many scholars have argued that suicide terrorists are not suicidal, and some of the commentators have cited them quite liberally. I believe that in the book, I have already shown that the previous scholarship on this subject is greatly limited by misunderstandings about suicide terrorists and the nature of suicidal behavior. If there is something persuasive that I have missed, I encourage my critics to point it out. For, in the meantime, even the evidence from my challengers increasingly seems to support my position.

For instance, Brym (2007) once declared that “virtually all suicide bombers are psychologically stable” (p. 40). More recently, Brym and Araj (2012) have acknowledged that despite the inevitable limitations of what symptoms family members may recognize, those they interviewed provided evidence that 24% of the suicide bombers in their recent study “manifested outward signs of depression or experienced personal crises that could have led to depression” (p. 437).

Similarly, a decade ago, Atran (2003) insisted that “Overall, suicide terrorists exhibit no socially dysfunctional attributes (fatherless, friendless, or jobless) or suicidal symptoms. They do not vent fear of enemies or express ‘hopelessness’ or a sense of ‘nothing to lose’ for lack of life alternatives” (p. 1537). Now, however, Atran acknowledges that after 9/11, suicide terrorists were largely drawn from people whom I could easily imagine becoming suicidal after experiencing crises or coercion: “children, wayward women, petty criminals,” “‘lost’ youth,” “funneled schoolboys from poor rural madrassas,” “unmarried, marginal, less-educated young men,” and “young adults in transitional stages in life: students, immigrants, between jobs or girlfriends, away from family seeking a new home.” To me, this last description—“between jobs or girlfriends, away from family seeking a new home”—sounds like just another way of saying jobless, loveless, or homeless.

Atran's fieldwork has also helped expose the suicidality of some suicide terrorists. I had no idea, for instance, that Mohammed Herbawi's mother personally told Atran (2010b) that she thought overwhelming stress may have led to her son's suicide attack: “Maybe it was too hard on him, all of it” (p. 408). Nor did I know that well before Jamal Ahmidan died in a suicidal explosion in Madrid, he regularly abused alcohol and hard drugs, sometimes broke down in tears lamenting his guilt over past crimes, and would tell friends in reference to a likely drug overdose, that “If I die, I deserve it” (Atran 2010b, p. 185).

Again, there are more than 90 million people who believe that suicide attacks are justified, and tens of thousands of rank-and-file terrorists, but in recent years, fewer than 300 suicide attackers have blown themselves up annually. Something makes that tiny minority behaviorally different.

I have offered an explanation and supported it in a multitude of ways. If the skeptics believe the difference is courage or willpower, they must provide evidence that suicide attackers are braver or stronger-willed than other terrorists and terrorist sympathizers. If they believe the difference is altruism, as Tobeña & Vilarroya suggest, they must provide evidence that suicide attackers tend to be more altruistic than other terrorists and terrorist sympathizers. If they believe the difference is strength of ideology, as Sela & Shackelford claim, they must provide evidence that suicide attackers believe more powerfully in God or paradise or the political cause than their counterparts. And if they believe the difference is exclusively social or situational factors, as Atran and McCauley contend, they must provide evidence that suicide terrorists are influenced by social or situational factors that do not lead to voluntary, coerced, or escapist suicides, and then also show that other terrorists and terrorist sympathizers are not similarly exposed to these factors. We share a common desire for the truth, so if a better explanation than mine exists, I encourage someone to go and find it.

R7. Why do the potential evolutionary benefits of self-sacrifice for kin fail to explain suicide terrorists' behavior?

Gray & Dickins, Fink & Trivers, and Qirko each raise the possibility that kin selection could explain suicide terrorists' behavior. It could also potentially explain the behavior of kamikaze pilots and others who claim to sacrifice their lives for a greater good. This notion is based on the seminal work of Hamilton (1964), who proposed that a gene producing the behavioral tendency to sacrifice one's life to save close kin could prosper in the gene pool because the death of the sacrificer would be offset by the survival of multiple relatives who carry copies of that same gene.

There are a few problems with extending this to suicide terrorists. The first is that it is inconsistent with the rest of their behavior. If they were genuinely attempting to sacrifice their lives to save their family members, we would expect them to say so. We would expect there to be widespread stories of heartfelt goodbyes between suicide attackers and their families, where the rationale for the necessary sacrifice was explained, and hugs and tears exchanged. This would be similar to what happens when soldiers go off to war, only more so. In cases where personal goodbyes would be too painful, we would expect suicide terrorists to leave behind letters expressing similar reasoning and sentiments.

But the reality appears to be quite different. Suicide terrorists rarely tell their families what they are planning; more often, they just disappear one day, never to return. Most of the time, their parents are left devastated and struggle with overwhelming pain and regret (Atran 2010b). In some cases, the families never get answers about what happened to their loved one, and suffer years of uncertainty. When letters are occasionally left behind,

they tend to be filled with generic terrorist propaganda or pleas for forgiveness, rather than explanations of how the sacrifice would directly benefit the family.

Sacrificing your life to help your family only makes sense if you believe that your family would be better off with you dead. You would have to believe that the pain and anguish they would suffer from your death, perhaps for years, plus all future contributions you could make to help them in the coming decades, would be outweighed by the benefits of your death. Empirical research suggests that people who come to this type of conclusion are generally struggling with perceived burdensomeness and are at high risk of committing conventional suicide (Joiner et al. 2002; Joiner 2005). Along these lines, **Lester** has documented evidence of perceived burdensomeness among female suicide bombers.

Qirko suggests an additional possibility: that suicide terrorists sacrifice their lives to save fictive kin, such as their brotherhood of fellow terrorists. However, as discussed earlier, many suicide attackers are not even part of a terrorist organization when they first decide that they want to blow themselves up. To them, members of the organization are essentially strangers, not some close-knit surrogate family. Furthermore, in cases where small groups of friends all decide to carry out suicide attacks, the notion that they are committing self-sacrifice for fictive kin makes even less evolutionary sense, because no one is saved; they all end up dead. As **Mandel** rightly suggests, these suicide pacts among small groups of fictive “brothers” are likely characterized by increased coercive peer pressure to die and increased fear of shame and dishonor for anyone who objects.

Although theories of kin selection and inclusive fitness might seem more applicable to the kamikaze pilots of Japan, I argue that as with certain suicide terrorists, coercive pressures led to their suicides. **Atran** is skeptical, and seems to believe that I attribute their coercion exclusively to physical punishment. That would be a significant oversimplification; at its core, coercion is a psychological strategy for which physical pain is just one potential tool. Ultimately, people commit coerced suicides because they feel pressure to do so and fear the anticipated consequences of resistance or refusal. These consequences can certainly include things like shame and dishonor.

Fully exposing the sacrificial myths of the kamikaze might require a book-length treatment. But if scholars continue to believe the kamikaze pilots were voluntarily sacrificing their lives for the cause, then let us briefly put that position in perspective. Japan is the culture of *seppuku* – suicide by self-disembowelment – which for hundreds of years was practiced by men and women who would kill themselves to supposedly die with honor rather than live with shame. It is also a culture with a notorious tradition of mass suicide.

Advocates of the conventional wisdom about the kamikaze would have us believe that Japan is arguably the most suicide-prone culture in human history, and also the culture most famous for heroic acts of self-sacrifice, and that these two facts are a *complete coincidence* – unrelated to one another. The polite way to label that view would be “highly statistically improbable.” In addition, they would presumably have us believe that in Okinawa in 1945, the Japanese military handed out grenades to their own citizens and ordered them to kill themselves, because suicide was

considered better than surrender – but that the same military during the same time period would not coerce its own members to commit suicide, even when direct military benefits were possible.

The evidence I have uncovered (to be published at a future date) increasingly suggests that much like suicide terrorists and kamikaze pilots, many self-immolators are suicidal, due to a combination of individual, social, and situational factors. As **Lester** rightly points out, most people who self-immolate are not actually monks, despite common depictions to the contrary. And of course, even monks can become suicidal. **Beit-Hallahmi** insists that we should be not restrained by fear of criticism when tracking down the truth about these socially defined heroes, and that accurate psychological assessments should be our primary goal. I fully agree. As he explains, there is a great deal of psychological research that suggests that many behaviors commonly perceived as self-sacrifice are actually driven by hopelessness, devaluation of the self, devaluation of the world, and suicidal desires.

Along these lines, in the Précis, I propose that mentally healthy human beings with time and options may have a “hardwired survival instinct” that keeps them from committing intentionally fatal self-sacrifice. **Qirko** suggests that this phrase is an oversimplification, and he is correct. It would have been more precise to use the plural, “hardwired survival instincts,” because we have so many different genetic tendencies that have evolved to keep us alive. It is for this reason that in *The Selfish Gene*, Dawkins (1976) refers to organisms as “survival machines.”

Nevertheless, intentional self-sacrifice sometimes does occur in nature, and in these cases it is indeed because of kin selection and the benefits for one’s genes, as Hamilton (1964) explained. My favorite example comes from worker honeybees, which essentially commit suicide attacks when they sting nearby threats to the hive. This is self-sacrifice by nature’s design. The sacrificial venom injection process that costs the worker bees their lives also makes their stings more effective, and thus increases their ability to protect their kin.

It would be easy to make the logical leap that if suicide attacks are normal for honeybees, they could be normal for human beings as well. However, there are many important differences between honeybees and other self-sacrificing insects, on the one hand, and mammals, on the other. As I will detail in a future paper (currently in progress), evidence from biologists increasingly suggests that although many mammals take significant risks to protect their kin, protect their territory, and pursue other goals, very few mammals, if any, have evolved to commit intentional self-sacrifice. In the most extreme circumstances, they actually appear to have a behavioral tendency to let their offspring die, if necessary, in order to prioritize their own survival – which then allows for future reproductive opportunities and future contributions to more kin.

And so we come full circle. The broader explanation for why most or all mammals do not seem to commit intentional self-sacrifice appears similar to the explanation for why most terrorists do not carry out suicide attacks. Intentional self-sacrifice comes at too much of a cost to be worthwhile. Even for those who are “fully committed” to their genetic prospects or the cause, such acts would eliminate all opportunities for future contributions. For the non-pathological mouse, monkey, lion, gorilla, or human,

there may be too much uncertainty that the benefit of intentionally dying to help your genes or ideological cause tomorrow would outweigh the benefits of helping your genes or ideological cause in all of your remaining days. Even if skeptics question these contentions, I believe they would have to acknowledge that it is primarily among insects, not mammals, that we see an evolved tendency for fatal self-sacrifice.

Ultimately, it is undisputed that human beings behave in the manner I contend: killing themselves and others for personal reasons, while claiming to be motivated by some higher purpose. It is unclear whether any human beings actually behave in the manner that the conventional wisdom presumes: planning in advance to intentionally die for an ideological cause, despite being mentally healthy and having the time and opportunity to seek alternatives.

R8. How can this knowledge be applied to counterterrorism strategies?

A new psychological understanding of suicide terrorists should prompt new ways of stopping these attackers. In the book, I suggest that we should be able to predict and prevent suicide attacks more effectively than ever before. It would have been easier just to stop there, and to leave the burden of applied psychology to someone else; but that would have seemed like intellectual dereliction of duty.

That is why, in Appendix C, I tried to apply my research on conventional, coerced, escapist, and indirect suicide terrorists to counterterrorism strategies. For each type, I outline warning signs, level of training and combat experience, attack style, strategies for on-site negotiation of surrender and arrest, and strategies for interrogation. **Egan** observes that overall, my approach is “creative, broad, and refreshing,” but notes that some suicide terrorists may defy simple categorization, and suggests that these recommendations have not been sufficiently tested. I agree on all points – especially the first! But joking aside, Appendix C is labeled “behavioral *expectations* and security countermeasures” specifically because I wanted to call attention to its largely untested nature.

If my son or daughter was on the front lines and at risk of contact with a suicide bomber, I would recommend this typology as an absolute “must-read.” I believe it is based on a more accurate understanding of suicide terrorists’ psychology than security officials have ever had before. At the same time, rigorous testing and future refinement of its recommendations are definitely warranted – I would never dispute that for a second. Along these lines, **Boba-dilla** suggests that vulnerable narcissism may be particularly common among the indirectly suicidal types who are likely to commit the most risky and dangerous attacks, so that could certainly be another important warning sign. And as **Thomsen, Obaidi, Sheehy-Skeffington, Kteily, & Sidanius** (**Thomsen et al.**) outline, social dominance orientation or counter-dominance could help explain some of these types of suicide terrorists’ behavior as well.

In the book, I also offer recommendations for identifying suicide attackers before they strike. **Atran** and **Qirko** each suggest that recognizing at-risk individuals may be too challenging to be worthwhile. Instead, Qirko argues that targeting terrorist organizations for destruction should be a

higher priority; it seems like a more efficient way to stop large numbers of suicide attackers who depend on organizational support. I completely agree with this prioritization and would simply add that we should do both. The benefits of defeating violent terrorist organizations have always been self-evident. Developing new counterterrorism strategies does not require that we discard the old ones.

More broadly, I propose that by exposing the myth of martyrdom and widely publicizing that suicide terrorists are suicidal, we could potentially leverage existing stigmas against suicide to deter future volunteers. This recommendation is explained in detail in Chapter 8 of the book and elsewhere (see Lankford 2013b). **Rottman & Kelemen** agree that this may be effective – social stigma often functions as a powerful deterrent, as demonstrated by widespread prohibitions against behaviors like cannibalism and pedophilia, and the relative scarcity of those practices. But Rottman & Kelemen also raise a very important concern: emphasizing this stigma could potentially exacerbate the shame felt by people struggling with suicidal thoughts. I fully agree that this is a difficult challenge, and think the goal should be to support useful stigmas against suicide and suicide terrorism, while also reducing counterproductive stigmas against mental health treatment. Asking for help should be considered a sign of strength and no reason for shame; struggling with adversity day after day should be considered brave and admirable perseverance. But giving up on life altogether should be considered socially unforgivable – especially if you masquerade as a holy martyr.

Ultimately, as **Gibbs** and **Rottman & Kelemen** suggest, improving the psychological treatment available to the populations from which most suicide terrorists come seems like something we can all agree upon. It could potentially lead to a reduction in the number of volunteers for suicide attacks. And even skeptics who doubt this benefit could find little fault with a more mentally healthy world.

NOTES

1. The absence of strategic logic would strongly suggest that volunteer suicide terrorists are suicidal, but the presence of strategic logic would not necessarily prove their mental health. As with mass shooters, some suicide terrorists may be suicidal yet attempt high impact attacks because they are genuinely homicidal as well, and therefore want to kill as many victims as possible. Others may be suicidal yet attempt high impact attacks because of the strategic decisions made by the terrorist leaders deploying them, regardless of the individual attacker’s personal priorities.

2. Some suicide terrorists may have been psychologically normal upon organizational entry, but then later have become suicidal after they were full-fledged members, due to similar factors that spark suicidality among members of military organizations, such as post-traumatic stress disorder (see Lankford 2011a).

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[The letters “a” and “r” before author’s initials stand for target article and response references, respectively]

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