### HARDLY EXISTENTIAL: TERRORISM AS A HAZARD TO HUMAN LIFE

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ABSTRACT Many politicians, leaders, opinion-makers, scholars, bureaucrats, and ordinary people routinely hold that the threat presented to the United States by terrorism is existential in nature. This paper deals with the nature of the challenge presented by terrorism, particularly the international or transnational terrorism that is of most concern to people in the West, and with the losses in human life terrorists have been able to inflict. It then places the issue in broader context, comparing the risk terrorism presents with other hazards to human life that have variously been considered acceptable or unacceptable. It is abundantly clear that under present conditions terrorism, as a hazard to human life in the United States, the United Kingdom, Canada, and Australia, is hardly existential. Indeed, applying widely-accepted criteria established after much research by many international regulators and decision-makers, the risks from terrorism are low enough to be deemed "acceptable."

An impressively large number of politicians, leaders, opinion-makers, scholars, bureaucrats, and ordinary people routinely hold that the threat presented to the United States by terrorism—and particularly by Al-Qaeda—is existential in nature, that the terrorist challenge is cosmic, enduring (or even endless), and, to use John McCain's favorite word, transcendental. Some, like Homeland Security czar Michael Chertoff even consider the struggle against terrorism to be a "significant existential" one, contrasting it, apparently, with insignificant ones.<sup>1</sup>

In a major 2009 report, the Department of Homeland Security devotes only four paragraphs to "the nature of the terrorist adversary." Moreover, none of this shows much depth, and the image projected by the DHS is of an enemy that is "relentless, patient, opportunistic, and flexible," shows "an understanding of the potential consequence of carefully planned attacks on economic transportation, and symbolic targets," seriously threatens "national security," and could inflict "mass casualties, weaken the economy, and damage public morale and confidence."

That description may fit some terrorists--the 9/11 hijackers among them--but not, it seems likely, the vast majority. This paper deals with the nature of the challenge presented by terrorism, particularly the international or transnational terrorism that is of most concern to people in the West, and with the losses in human life terrorists have been able to inflict. It then places the issue in broader context, comparing the risk terrorism presents with other hazards to human life that have variously been considered acceptably or unacceptably likely.

# The transnational terrorist adversary

Al-Qaeda is the chief concern when dealing with homeland security issues because it is the "only Islamic terrorist organization that targets the U.S. homeland," as pointed out by Glenn Carle, a 23-year veteran of the Central Intelligence Agency, where he was deputy national intelligence officer for transnational threats. Somewhat more broadly, Middle East specialist Fawaz Gerges notes that, over time, mainstream Islamists—the vast majority within the Islamist political movement—have given up on the use of force. That is, the jihadis who are still willing to apply violence constitute a tiny minority. But he also notes that the vast majority even of this small group primarily focuses on various "infidel" Muslim regimes (as well as on Israel) and consider those among them who carry out violence against the "far enemy"—mainly Europe and the United States—to be irresponsible and reckless adventurers who endanger the survival of the whole movement. Al-Qaeda, then, is a fringe group of a fringe group.

Some other terrorist organization or a millennial one could in the future generate designs to harm the West directly. But for now, certainly, the al-Qaeda organization stands substantially alone.

From al-Qaeda's standpoint, the 9/11 attacks, its biggest venture by far in inflicting damage on the "far enemy" proved to be substantially counterproductive. Notes Patrick Porter of Britain's Joint Services Command and Staff College, the group has a "talent at self-destruction," and one disillusioned former al-Qaeda associate says, "al-Qaeda committed suicide on 9/11 and lost its equilibrium, skilled leaders, and influence." Their activities, beginning with 9/11—or even with the African embassy bombings of 1998—have also turned many radical jihadists

<sup>&</sup>lt;sup>1</sup> Harris and Taylor 2008.

<sup>&</sup>lt;sup>2</sup> DHS 2009, 11. On this issue, see also Mueller forthcoming.

<sup>&</sup>lt;sup>3</sup> Carle 2008.

<sup>&</sup>lt;sup>4</sup> Gerges 2005, 1-3, 27-28, also 161-62. See also Scheuer 2002, 169-77.

against them, including some of the most prominent and respected.<sup>5</sup>

To begin with, by this action, the group massively heightened concerns about, and outrage over, terrorism around the world. Recalls Gerges, "less than two weeks after September 11, I traveled to the Middle East and was pleasantly surprised by the almost universal rejection—from taxi drivers and bank tellers to fruit vendors and high school teachers—of Al Qaeda's terrorism." Indeed, the key result among jihadis and religious nationalists was a vehement rejection of al-Qaeda's strategy and methods. 6

Moreover, no matter how much they might disagree on other issues (most notably on America's war on Iraq), there is a compelling incentive for states—including Arab and Muslim ones—to cooperate to deal with any international terrorist threat emanating from groups and individuals connected to, or sympathetic with, al-Qaeda.

Important in this process was the almost immediate move, after 9/11, of the Pakistan government from support of the Taliban regime in neighboring Afghanistan to dedicated opposition. More generally, there has been a worldwide, cooperative effort to deal with the terrorist problem. The FBI may not have been able to uncover much of anything within the United States since 9/11, but quite a few real or apparent terrorists overseas have been rounded, or rolled, up with the aid and encouragement of the Americans. Given what seems to be the limited capacities of al-Qaeda and similar entities, these cooperative international policing efforts may not have prevented a large number of attacks, but thousands of "suspects" have been arrested around the world, and doubtless at least some of these were dangerous. Although these multilateral efforts, particularly by such Muslim states as Sudan, Syria, Libya, and even Iran, may not have received sufficient publicity, these countries have had a vital interest because they felt directly threatened by the militant network, and their diligent and aggressive efforts have led to important breakthroughs against al-Qaeda.<sup>7</sup>

This post-9/11 willingness of governments around the world to take on terrorists has been much reinforced and amplified as they reacted to subsequent, if sporadic, terrorist activity in such places as Pakistan, Saudi Arabia, Turkey, Indonesia, Egypt, Spain, Britain, Morocco, and Jordan. The phenomenon is hardly new: in 1997, for example, terrorists attacked a Luxor temple in Egypt, killing 68 foreigners and Egyptians, and it triggered a very substantial revulsion against the perpetrators that critically set back their cause.<sup>8</sup>

Thus, the terrorist bombing in Bali in 2002 galvanized the Indonesian government into action and into extensive arrests and convictions. When terrorists attacked Saudis in Saudi Arabia in 2003, that country seems, very much for self-interested reasons, to have become considerably more serious about dealing with internal terrorism, including a clampdown on radical clerics and preachers. Some inept terrorist bombings in Casablanca in 2003 inspired a similar determined crackdown by Moroccan authorities. The main result of al-Qaeda-linked

<sup>&</sup>lt;sup>5</sup> Porter 2009, 300. Turned many: Bergen and Cruickshank 2008; Wright 2008.

<sup>&</sup>lt;sup>6</sup> Taxi drivers: Gerges 2008, 70-71. Rejection: Gerges 2005, 27, 228, 233, also 270; Gerges 2008, 71.

<sup>&</sup>lt;sup>7</sup> Gerges 2005, 232, and, for a tally of policing activity, 318-19; see also Pillar 2003, xxviii-xxix; Lynch 2006, 54-55; Sageman 2008, 149; Cole 2009, 163. For an able discussion of the Taliban-Pakistan connections before 9/11, see Rashid 2000.

<sup>&</sup>lt;sup>8</sup> Gerges 2005, 153; Sageman 2004, 47. For a discussion of a similar phenomenon during the war in Algeria during the 1990s, see Botha 2006. On the generally counterproductive effects for terrorists of targeting civilians, see Abrahms 2006, Mack 2008.

suicide terrorism in Jordan in 2005 was to outrage Jordanians and other Arabs against the perpetrators. Massive protests were held, and in polls the percentage expressing a lot of confidence in Osama bin Laden to "do the right thing" plunged from 25 to less than one. In polls conducted in 35 predominantly Muslim countries, over 90 percent condemn bin Laden's terrorism on religious grounds.<sup>9</sup>

If this weren't enough, al-Qaeda has continually expanded its enemies list in its declarations to the point where it has come to include not only Christians and Jews, but all Middle Eastern regimes; Muslims who don't share its views; most Western countries; the governments of India, Pakistan, Afghanistan, and Russia; most news organizations; the United Nations; and international NGOs. The group's "literalist, narrow ideology," notes Porter, "warrants aggression against anyone who fails to meet its rigid standards" with the result that, while claiming to be "the knight of Islam," it mostly "persecutes and impoverishes Muslims." Indeed, it is clear the group didn't even get along all that well with the Taliban when it was in residence in Afghanistan in the 1990s. 11

This has also been the experience in Iraq. Al-Qaeda's Zawahiri once described the war there as "the greatest battle of Islam in this era." However, the mindless brutalities of his protégés—staging beheadings at mosques, bombing playgrounds, taking over hospitals, executing ordinary citizens, performing forced marriages—eventually turned the Iraqis against them, including many of those who had previously been fighting the American occupation. In fact, they seem to have managed to alienate the *entire* population: data from polls conducted in Iraq in 2007 indicate that 97 percent of those surveyed opposed efforts to recruit foreigners to fight in Iraq, 98 percent opposed the militants' efforts to gain control of territory, and 100 percent considered attacks against Iraqi civilians "unacceptable." In Iraq as in other places, "al-Qaeda is its own worst enemy," notes Robert Grenier, a former top CIA counterterrorism official. "Where they have succeeded initially, they very quickly discredit themselves." 12

In sum, with 9/11 and subsequent activity, bin Laden and gang seem mainly to have succeeded in uniting the world, including its huge Muslim portion, against their violent global jihad. In 2008, CIA director Michael Hayden was willing to go on the record to note that there had been a "significant setback for al-Qaeda globally—and here I'm going to use the word 'ideologically'—as a lot of the Islamic world pushes back from their form of Islam."<sup>13</sup>

In evaluating al-Qaeda's present capacity to inflict damage and its likelihood of doing so,

<sup>&</sup>lt;sup>9</sup> Indonesia: Sageman 2004, 53, 142, 173. Saudi Arabia: Gerges 2005, 249; Sageman 2004, 53, 144; Meyer 2006. Morocco: Sageman 2004, 53-54. Jordan polls: Pew Global Attitudes Project, "The Great Divide: How Westerners and Muslims View Each Other," 22 June 2006,

http://pewglobal.org/reports/display.php?ReportID=253; see also Lynch 2006, 54-55. Religious grounds: Gerges 2008, 75. In sum, says Gerges, although al-Qaeda may retain local affiliates in Saudi Arabia, Yemen, Jordan, Pakistan, and elsewhere, "they are shrinking by the hour and bleeding profusely from the blows of the security services with substantial logistical support from the United States" (2005, 249). See also Pillar 2003, xxiv.

<sup>&</sup>lt;sup>10</sup> Enemies list: Bergen 2007, 19. Porter 2009, 298.

<sup>&</sup>lt;sup>11</sup> Brown 2010.

<sup>&</sup>lt;sup>12</sup> Zawahiri: Mack 2008, 15. Mindless brutalities: Woodward 2008. Iraq polls: Mack 2008, 15-17. Grenier: Warrick 2008. See also Bergen and Cruickshank 2007; Jenkins 2008, 191.

<sup>&</sup>lt;sup>13</sup> Warrick 2008. See also Gerges 2005, ch. 5.

a good place to start is with analyses provided by Marc Sageman.14 A former intelligence officer with experience in Afghanistan, Sageman has carefully and systematically combed through both open and classified data on jihadists and would-be jihadists around the world.

Al-Qaeda central, he concludes, consists primarily of a cluster left over from the struggles in Afghanistan against the Soviets in the 1980s. Currently they are huddled around, and hiding out with, Osama bin Laden somewhere in Afghanistan and/or Pakistan. This band, concludes Sageman, probably consists of a few dozen individuals. Joining them in the area are perhaps a hundred fighters left over from al-Qaeda's golden days in Afghanistan in the 1990s.

These key portions of the enemy forces would total, then, less than 150 actual people. Other estimates of the size of al-Qaeda central generally come in with numbers in the same order of magnitude as those suggested by Sageman and Gerges. Egyptian intelligence, for example, puts the number at less than 200, while American intelligence estimates run from 300 to upwards of 500. 15

Sageman's remarkable and decidedly unconventional evaluation of the threat resonates with other prominent experts who have spent years studying the issue. One of them is Gerges, whose book *The Far Enemy*, based on hundreds of interviews in the Middle East, parses the jihadist enterprise. As an additional concern, he suggests that Sageman's third group may also include a small, but possibly growing, underclass of disaffected and hopeless young men in the Middle East, many of them scarcely literate, who, outraged at Israel and at America's war in Iraq, may provide cannon fodder for the jihad. However, these people would present problems mainly in the Middle East, not elsewhere. <sup>16</sup>

Al-Qaeda central may operate something resembling "training camps," but these appear to be quite minor affairs—in part because of the danger that they will be infiltrated by foreign agents. It also seems to assist with the Taliban's distinctly separate, far larger, and very troublesome insurgency in Afghanistan and Pakistan. Overall, however, one might wonder whether al-Qaeda central has really done much of anything since 9/11 except issue threats. Although the terrorist organization designed, equipped, and executed several large attacks before 9/11, every al-Qaeda-"linked" terrorist attack since seems to have been perpetrated by unaffiliated or, at best, "franchised" groups. <sup>17</sup>

# The adversary within

Beyond the tiny band that constitutes al-Qaeda central, there are, continues Sageman, thousands of sympathizers and would-be jihadists spread around the globe who mainly connect in Internet chat rooms, engage in radicalizing conversations, and variously dare each other to actually do something.<sup>18</sup>

All of these rather hapless—perhaps even pathetic—people should of course be considered to be potentially dangerous. From time to time they may be able to coalesce enough

<sup>16</sup> Gerges 2005 and personal communication.

<sup>&</sup>lt;sup>14</sup> This discussion stems from Sageman 2008, from conversations with Sageman, and from a talk on the book he gave in Washington as televised on C-SPAN in early 2008 (ably summarized in Ignatius 2008).

<sup>&</sup>lt;sup>15</sup> Wright 2008.

<sup>&</sup>lt;sup>17</sup> Libicki et al. 2007, 67, 70. The authors suggest an attack in Taba, Egypt in October 2004 may have been run by al-Qaeda, but, as they note (p. 46), Egyptian officials have ruled that out based on confessions and evidence at the scene.

<sup>&</sup>lt;sup>18</sup> On this point, see also Hoffman 2006, 271-72.

to carry out acts of terrorist violence, and policing efforts to stop them before they can do so are certainly justified. But the notion that they present an existential threat to just about anybody seems at least as fanciful as some of their schemes.

In 2002, intelligence reports were asserting that the number of trained al-Qaeda operatives in the United States was between 2,000 and 5,000. In this spirit, FBI Director Mueller assured a Senate committee on 11 February 2003 that al-Qaeda had "developed a support infrastructure" in the country, and had achieved "the ability and the intent to inflict significant casualties in the US with little warning." By 2005, however, after years of well-funded sleuthing, the FBI and other investigative agencies noted in a secret report that they had been unable to uncover a single true al-Qaeda sleeper cell anywhere in the United States, a finding (or non-finding) publicly acknowledged two years later in a press conference and when the officer who drafted that year's National Intelligence Estimate testified that "we do not see" al-Qaeda operatives functioning inside the United States. 20

Indeed, they have been scarcely able to unearth anyone who might even be deemed to have a "connection" to the diabolical group. In testimony on 11 January 2007, Director Mueller, who, despite his earlier bravado, has yet to uncover a true al-Qaeda sleeper cell, suggested that "We believe al-Qaeda is still seeking to infiltrate operatives into the U.S. from overseas." But even that may not be true. Since 9/11, well over a billion foreigners have been admitted to the United States legally even as many others have entered illegally. Even if border security was so good that 90 percent of al-Qaeda's operatives were turned away or deterred from trying to enter, some should have made it in--and some of those, it seems reasonable to suggest, would have been picked up by law enforcement by now. It certainly seems either that the terrorists are far less diabolically clever and capable than usually depicted or that they are not trying very hard.

It follows that any terrorism problem in the United States and the West principally derives from rather small numbers of homegrown people, often isolated from each other, who fantasize about performing dire deeds. Indeed, in his 2007 testimony, Mueller, even while suggesting that al-Qaeda was still seeking to infiltrate operatives into the country, stressed that his chief concern within the United States had become homegrown groups.

Because terrorism of a considerably destructive nature can be perpetrated by a very small number of people, or even by a single individual, the fact that terrorists are few in number does not mean there is no problem, and from time to time some of these people may actually manage to do some harm, though in most cases their capacities and schemes--or alleged schemes--seem to be far less dangerous than initial press reports suggest. Conceivably, they might even someday rise to the cleverness of the 9/11 plot. Far more likely to be representative, however, is the

<sup>&</sup>lt;sup>19</sup> 2002 reports: Gertz 2002. Testimony by Mueller can be found through www.fbi.gov/congress/congress.htm.

<sup>&</sup>lt;sup>20</sup> 2005 report: Ross 2005. Press conference: Isikoff and Hosenball 2007. Officer: Gertz 2007. In 2005, FBI Director Robert Mueller testified that his top concern was "the threat from covert operatives who may be inside the U.S." and considered finding them to be his top priority; however, they had been unable to find any (Priest and White 2005).

<sup>&</sup>lt;sup>21</sup>During 2008, for example, nonimmigrant admissions to the United States alone totalled 175 million (Monger and Barr 2009). Not all of these, of course, enter at international airports; the total includes people repeatedly going back and forth across the borders with Canada and Mexico.

experience of the would-be bomber of shopping malls in Rockford, Illinois, who exchanged two used stereo speakers (he couldn't afford the opening price of \$100) for a bogus handgun and four equally bogus hand grenades supplied by an FBI informant. Had the weapons been real, he might actually have managed to do something. However, it was his idea to explode the grenades in garbage cans in order to "create shrapnel." Since grenades are essentially made of shrapnel, his approach would be comparable to trying to shoot somebody through a wooden board in hopes they would be impaled by flying splinters. At any rate, he clearly posed no threat that was existential (significant or otherwise) to the United States, to Illinois, to Rockford, or, indeed, to the shopping mall.<sup>22</sup>

Or there is the case of Najibullah Zazi, arrested in September of 2009. "Since the terrorist attacks of Sept. 11, 2001," notes the *New York Times* with considerable understatement, "senior government officials have announced dozens of terrorism cases that on close examination seemed to diminish as legitimate threats." <sup>23</sup> However, terrorism analysts and officials triumphantly claimed that Zazi is different, and call it the "most serious" terrorism plot uncovered in the United States since 2001 and one that elevates the domestic terrorism threat to a "new magnitude." <sup>24</sup> Bruce Riedel, an Obama terrorism adviser, proclaimed that the plot was evidence that "al-Qaeda was trying to carry out another mass-casualty attack in the United States" like 9/11 and that the group continues to pose a threat to the country that is "existential." <sup>25</sup> This, then, was the big one.

However, assuming all the information put out by the government about the Zazi plot is accurate, the existence of the United States is unlikely to be expunged anytime soon. Recalls his step-uncle affectionately, Zazi is "a dumb kid, believe me." A high school dropout, Zazi mostly worked as doughnut peddler in Lower Manhattan, barely making a living. Somewhere along the line, it is alleged, he took it into his head to set off a bomb and traveled to Pakistan where he received explosives training from al-Qaeda and copied nine pages of chemical bombmaking instructions onto his laptop. <sup>26</sup> FBI Director Robert Mueller asserted in testimony on 30 September 2009 that this training gave Zazi the "capability" to set off a bomb.

That, however, seems to be a substantial overstatement because, upon returning to the United States, Zazi allegedly spent the better part of a year trying to concoct the bomb he had supposedly learned how to make. In the process, he, or some confederates, purchased bomb materials using stolen credit cards, a bone-headed maneuver guaranteeing that red flags would go up about the sale and that surveillance videos in the stores would be maintained rather than routinely erased. Moreover, even with the material at hand, Zazi *still* apparently couldn't figure it out, and he frantically contacted an unidentified person for help several times. Each of these communications was "more urgent in tone than the last," according to court documents.<sup>27</sup>

Clearly, if Zazi was able eventually to bring his alleged aspirations to fruition, he could have done some damage, though, given his capacities, the person most in existential danger was surely the lapsed doughnut peddler himself.

<sup>&</sup>lt;sup>22</sup>Lawson 2008. Sprintering analogy: Karl Mueller, personal communication.

<sup>&</sup>lt;sup>23</sup> Johnston and Shane 2009.

<sup>&</sup>lt;sup>24</sup> Johnson 2009. See also Johnston and Shane 2009.

<sup>&</sup>lt;sup>25</sup> Riedel: Lehrer NewsHour, PBS, October 16, 2009.

<sup>&</sup>lt;sup>26</sup> Wilson 2009.

<sup>&</sup>lt;sup>27</sup> Johnson 2009.

The situation seems scarcely different in Europe and other Western locations. Michael Kenney has interviewed dozens of officials and intelligence agents and analyzed court documents, and finds that Islamic militants there are operationally unsophisticated, short on know-how, prone to make mistakes, and poor at planning, and they have a limited capacity to learn.<sup>28</sup> Another study documents the difficulties of network coordination that continually threaten operational unity, trust, cohesion, and the ability to act collectively.<sup>29</sup>

### The extent of terrorist violence: deaths

The most noteworthy consequence of terrorism, of course, is in the destruction of human life. There are a number of ways to estimate and evaluate the extent of the violence terrorists have been able to perpetrate against people.

For several decades, the United States State Department collected data on international or transnational terrorism, defining the act as premeditated, politically motivated violence perpetrated by subnational groups or clandestine agents against noncombatant targets (civilians and military personnel who at the time of the incident are unarmed or not on duty) that involve citizens or the territory of more than one country. The data cover the period 1975-2003. 30 The number of people worldwide who die as a result of transnational terrorism by this definition is 482 a year. The yearly probability of being killed in a transnational terrorist attack--the annual fatality risk--is thus this figure divided by the world's population of 6.8 billion or one in 14.1

<sup>&</sup>lt;sup>28</sup> Kenney 2009.

<sup>&</sup>lt;sup>29</sup> Eilstrup-Sangiovanni and Jones 2009.

<sup>&</sup>lt;sup>30</sup> After 2003, the State Department changed its definitions so that much domestic terrorism--including much of what is happening in the war in Iraq--is now included in its terrorism count (see National Counterterrorism Center, Report on Incidents of Terrorism 2005, 11 April 2006, ii-iii). Current numbers, therefore, are not comparable to earlier ones. However, when terrorism becomes really extensive in an area we generally no longer call it terrorism, but rather war or insurgency. Thus, the Irish Republican Army was generally taken to be a terrorist enterprise, while fighters in Algeria or Sri Lanka in the 1990s were considered to be combatants who were employing guerrilla techniques in a civil war situation--even though some of them came from, or were substantially aided by, people from outside the country. Insurgents and guerrilla combatants usually rely on the hit-and-run tactics employed by the terrorist, and the difference is not in the method, but in the frequency with which it is employed. Without this distinction, much civil warfare (certainly including the decade-long conflict in Algeria in the 1990s in which perhaps 100,000 people perished) would have to be included in the "terrorist" category. And so would most "primitive warfare," which, like irregular warfare more generally, relies mostly on raids rather on set-piece battles (see Keeley 1996; and for more on the distinction between terrorism and civil war, Mueller 2004, 18-20). That is, with the revised definition, a huge number of violent endeavours that have normally been called "wars" would have to be recategorized. Indeed, the concept of civil war might have to be retired almost entirely. Most of the mayhem in the American Civil War did take place in setpiece battles between uniformed combatants, but that conflict was extremely unusual among civil wars in this respect--the rebels in most civil wars substantially rely on tactics that are indistinguishable from those employed by the terrorist. Moreover, any genocide, massacre, or ethnic cleansing carried out by insurgents in civil wars would now have to be reclassified as an instance of terrorism. When people in the developed world worry about terrorism, however, they are not particularly concerned that sustained civil warfare or insurgency will break out in their country. They are mainly fearful of random or sporadic acts of terrorism carried out within their homeland. For this concern, the original State Department definition, not an expanded one stemming from the sustained violence in Iraq, seems to be the most appropriate.

million.

Astronomer Alan Harris has assessed the lifetime likelihood of being killed by transnational terrorism. He begins with these State Department figures for transnational terrorism and then doubles them to 1000 per year under the assumption there would be another 9/11 somewhere in the world every several years. Over an 80 year period under those conditions some 80,000 deaths would occur which would mean that the lifetime probability that a resident of the globe will die at the hands of international terrorists is about one in 85,000 (6.8 billion divided by 80,000). If there are no repeats of 9/11, the lifetime probability of being killed by an international terrorist becomes about one in 130,000. This, he points out, is about the same likelihood that one would die over the same interval from the impact on the earth of an especially ill-directed asteroid or comet.<sup>31</sup>

Another approach is to focus on the kind of terrorism that really concerns people in the developed world by restricting the consideration to violence committed by Muslim extremists outside of such war zones as Iraq, Pakistan, Israel, Chechnya, Sudan, Kashmir, and Afghanistan, whether that violence be perpetrated by domestic terrorists or by ones with international connections. Included in the count would be terrorism of the much-publicized sort that occurred in the United States in 2001, in Bali in 2002 and 2004, in Saudi Arabia, Morocco, and Turkey in 2003, in the Philippines, Madrid, and Egypt in 2004, and in London and Jordan in 2005. Three publications from think tanks have independently provided lists or tallies of such violence committed in the several years after 2001. 32 The lists include not only attacks by al-Qaeda but also those by its imitators, enthusiasts, look-alikes, and wannabes, as well as ones by groups with no apparent connection to it whatever. Although these tallies make for grim reading, the total number of people killed in the years after 9/11 in such incidents comes to some 200 to 300 per year. That, of course, is 200 to 300 too many, but it hardly suggests that the destructive capacities of the terrorists are monumental. For comparison, during the same period more people—320 per year--have drown in bathtubs in the United States alone. 33 Or there is another. rather unpleasant comparison. Increased delays and added costs at airports due to new security procedures provide incentive for many short-haul passengers to drive to their destination rather than flying, and, since driving is far riskier than air travel, the extra automobile traffic generated has been estimated to result in 400 or more extra road fatalities per year.<sup>34</sup>

But it can be argued that what really worries people is the threat of terrorism in their country, and not some worldwide statistic. Useful for assessing this is the Global Terrorism Database, developed by the U.S. National Consortium for the Study of Terrorism and Responses to Terrorism (START). It contains country-by-country information for more that 80,000 terrorist incidents—both domestic and transnational—that have taken place throughout the world between 1970 and 2007. Its definition of terrorism is "the threatened or actual use of illegal force and violence by a nonstate actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation" and includes many incidents of "terrorism" that may more sensibly be designated as "vandalism" committed by such non-murderous groups as the Animal

<sup>&</sup>lt;sup>31</sup> See also Schneier 2003, 237-42.

<sup>&</sup>lt;sup>32</sup> Cordesman 2005, 29-31. Jenkins 2006, 179-84. "Jihadi Attack Kill Statistics," IntelCenter, 17 August 2007, 11 (www.intelcenter.com).

<sup>&</sup>lt;sup>33</sup> Stossel 2004, 77.

<sup>&</sup>lt;sup>34</sup> Blalock et al. 2007.

#### Liberation Front.

A country-by-country summary of fatalities for the United States, the United Kingdom, Canada, and Australia is shown in Table 1.<sup>35</sup> There were 3,292 fatalities from terrorist incidents within the United States during that 38-year period. However, the 9/11 attacks in 2001 represented almost all of these and most of the rest come from the attack by a domestic terrorist, Timothy McVeigh, on the Murrah Federal Building in Oklahoma City in 1995: 3,194 in total. In all, this generates an annual fatality risk for the period of one in 3,500,000.

One might also look at the potential consequences of the set of terrorist attacks authorities claim to have foiled between 2001 and 2007 in the United States. Table 2 lists these, and for each we have provided an estimate of the number of lives saved for each foiled plot. The While it can be argued that some estimates of lives saved could be higher, not all of these threats would have caused maximum (worst case) fatalities, and therefore a best estimate is reasonable. Further, not all threats and their intended targets were proven as some suspects are still awaiting trial. Nonetheless, Table 2 shows that the total estimated lives saved as a result of thwarting these planned terrorist attacks over the years (assuming each had been successful) is 1,500, approximately half of the casualties inflicted by the 9/11 attacks and some 250 per year.

The highest overall terrorism fatality risk in any of the four countries has been suffered in the United Kingdom where 3,340 perished during the period from terrorism—close to the same number found for the United States. The sectarian strife in Northern Ireland between republican and loyalist paramilitaries represents the overwhelming majority—nearly all, in fact—of the terrorist incidents and fatalities. Yet even this fatality risk is less than one in a million. Considering only Great Britain (England, Scotland and Wales), there were 438 fatalities (including the 1988 Lockerbie bombing) over 38 years resulting in an annual fatality risk of one in 5,200,000. The annual fatality risk in Northern Ireland alone for the period is very high at one in 43,000. Yet even at the height of violence, terrorism in this troubled region did not result in "mass casualties" as we are conditioned to fear today—only five attacks killed more than ten people, the worst being 28 fatalities from the 1998 Omagh high street bombing. Most fatalities were the result of "assassinations" of individuals with pistols or other firearms.

The Canadian annual fatality risk is comparable to the U.S., but as with the U.S., this is attributable nearly entirely to a single event--the 1985 mid-Atlantic bombing of an Air India Flight 182 by Sikh terrorists that departed from Montreal.

Australia has the lowest fatality rate--there has been no significant terrorist incident there at all. However, bombings in Bali killed 88 Australians in 2002 and another four in 2005. The Australian Prime Minister John Howard expressed the sentiment of many Australians when he

<sup>&</sup>lt;sup>35</sup> Fatality data are based on GTD terrorist incidents that satisfied the following criteria: (i) The act must be aimed at attaining a political, economic, religious, or social goal; (ii) There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims; (iii) The action must be outside the context of legitimate warfare activities; and (iv) There is essentially no doubt as to whether the incident is an act of terrorism.

<sup>&</sup>lt;sup>36</sup> The August 2006 transatlantic plot to detonate liquid explosives on up to 10 commercial aircraft is not included as this plot was disrupted by British police and security services and was not a direct threat to the American homeland.

<sup>&</sup>lt;sup>37</sup> This would also be the number the underwear bomber of 2009 would have been able to kill had he been successful.

said that the 2002 Bali bombing "shocked our nation to the core," while New Zealand's Prime Minister Helen Clark referred to the 2002 attack as "Australia's September 11." So although these attacks occurred outside of Australia, they were viewed (rather expansively) as being in its "backyard." If these deaths are included in the count, the Australian fatality risk becomes one in 7,100,000.

February 3, 2010

# **Acceptable Risk**

Are these probabilities of being killed by terrorists unacceptably high, or is it something that is negligible and that we in society are willing to accept? That is, just "how safe is safe enough?" When does a risk become "acceptable"?

Deliberations, many of them very contentious, about acceptable and unacceptable risk have been conducted worldwide for several decades over a wide range of issues such as pesticide use, pollution, and choosing sites for nuclear power plants. For example, in an important 1980 case, Justice Stevens of the U.S. Supreme Court set out the basic parameters of consideration: "Some risks are plainly acceptable and others are plainly unacceptable. If for example, the odds are one in a billion that a person will die from cancer by taking a drink of chlorinated water, the risk clearly could not be considered significant. On the other hand, if the odds are one in a thousand that regular inhalation of gasoline vapors that are 2 percent benzene will be fatal, a reasonable person might well consider the risk significant and take the appropriate steps to decrease or eliminate it." In the process of such considerations, a substantial consensus has been reached over the years, giving evidence of a fair degree of agreement about risk acceptability.

Unacceptable risk is often denominated *de manifestis* risk, literally meaning a risk of obvious or evident concern, a risk so high that no "reasonable person" would deem it acceptable. A widely cited *de manifestis* risk assessment comes from the 1980 United States Supreme Court decision that ruled on the efforts of the Occupational Safety and Health Administration (OSHA) to establish risk criteria for worker inhalation of gasoline vapors containing Benzene. It concluded that an annual fatality risk of one in 40,000 is unacceptable applying the thinking process that Stevens suggested. Typically, risks considered unacceptable or *de manifestis* are those found to be more likely than one 10,000 or one in 100,000.

At the other end of the spectrum are risks that are considered "acceptable" or *de minimis*, and there is a fair degree of agreement about that range of risk as well. For example, after extensive research and public consultation, the United States Nuclear Regulatory Commission (NRC) has established risk acceptability for operating permits for nuclear power plants. <sup>41</sup> It has concluded that the risk to an individual or to the population in the vicinity of a nuclear power plant of prompt fatalities that might result from reactor accidents should not exceed 0.1% of the sum of prompt fatality risks resulting from other accidents to which members of the U.S. population are generally exposed, and that the risk of cancer fatalities should not exceed 0.1% of the sum of cancer fatality risks resulting from all other sources. This is equivalent to holding that the annual fatality risk should not exceed one in 2,000,000 per year for risks resulting from

<sup>&</sup>lt;sup>38</sup> Howard: Sydney Morning Herald, October 18, 2002. Clark: Associated Press, October 14, 2002.

<sup>&</sup>lt;sup>39</sup> Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 655 (1980).

<sup>&</sup>lt;sup>40</sup> Travis et al. 1987. Stewart and Melchiers 1997, ch. 7.

<sup>&</sup>lt;sup>41</sup> Safety Goals for the Operation of Nuclear Power Plants; Policy Statement, U.S. Nuclear Regulatory Commission, Federal Register, 1986, 51, 30028.

accidents, and one in 500,000 per year for risks from nuclear power plant operations.

In Britain, the Health and Safety Executive came up with a similar number in 2006 when it set about establishing safety policy for nuclear facilities. It concludes that the individual risk of death to a person off the site should not exceed one in 1,000,000 per year. At the same time, the Nuclear Safety Commission of Japan established safety targets mandating that the annual fatality risk resulting from an accident of a nuclear installation of individuals of the public should not exceed one in 1,000,000 per year. And in Australia, potentially hazardous industries are permitted in the state of New South Wales only if they present an annual fatality risks of less than one in 1,000,000 per year for residential areas.

In addition, a review of 132 U.S. federal government regulatory decisions associated with public exposure to environmental carcinogens found that regulatory action always occurred if the individual annual fatality risk exceeded one in 700,000. <sup>45</sup> Perhaps the most surprising aspect of this study was the consistency among OSHA, the Environmental Protection Agency, the Consumer Product Safety Commission, and six other federal agencies in determining the acceptable level of risk.

Established regulatory practices in several developed countries suggest, then, that risks are deemed "unacceptable" if the annual fatality risk is higher than one in 10,000 or perhaps higher than one in 100,000. Risks are deemed "acceptable" if the annual fatality risk is lower than one in 1,000,000 or one in 2,000,000. Between these two ranges is an area that might be considered "tolerable" risk.

These considerations provide a viable, if somewhat rough, guideline for public policy, and they have been substantially accepted for years, even decades, by public regulatory agencies after extensive evaluation and considerable debate and public discussion. Clearly, hazards that fall in the "unacceptable" range should generally command the most attention and the most resources. Those in the "tolerable" range may also be worthy of consideration, though obviously the urgency is less and only relatively inexpensive measures to further reduce the risk should be pursued. Those hazards in the "acceptable" range would generally be deemed to be of little or even of negligible concern—they are risks we can live with—and further precautions would scarcely be worth pursuing unless they are quite remarkably inexpensive.

In all cases, measures to reduce risk must satisfy essential cost-benefit considerations. Proposed measures to reduce risks in the unacceptable range are likely to do so quite readily, those in the tolerable range would do so less easily, and those in the acceptable range only rarely.

### Terrorism as an acceptable risk

If the Department of Homeland Security wants to apply a risk-based approach to decision-making, as it claims frequently, risk acceptance criteria developed for other hazards—including a wide variety of low probability/high consequence events such as nuclear power plant accidents, chemical process plant accidents, and public exposure to environmental carcinogens—

<sup>&</sup>lt;sup>42</sup> Safety Assessment Principles for Nuclear Facilities, Health and Safety Executive, Merseyside, UK, 2006, 100-103.

<sup>&</sup>lt;sup>43</sup> Safety Goals, Nuclear Safety Commission of Japan, 2006, www.nsc.go.jp/NSCEnglish/topics/safety\_goals.htm.

<sup>&</sup>lt;sup>44</sup> Risk Criteria for Land Use Safety Planning, Hazardous Industry Planning Advisory Paper No. 4, Department of Planning, Sydney, Australia.

<sup>&</sup>lt;sup>45</sup> Travis et. al. 1987.

would seem to provide appropriate context for such considerations. To this end, Table 3 supplies the annual fatality risks for a wide variety of hazards, including terrorism.

As can be seen, almost all annual terrorism fatality risks are less than one in a million, and therefore they generally lie within the range deemed by regulators internationally to be "safe" or "acceptable" and therefore require no further regulation. <sup>46</sup> In this, they are similar to the risks of using home appliances (200 deaths per year in the U.S.) or commercial aviation (130 deaths per year). The risk is at least half that of being killed in a natural disaster, and nearly a thousand times less than being killed in an accident.

The same general conclusion holds when all the damage inflicted by terrorists—not only the loss of life, but direct and indirect economic costs as well—are aggregated. As a hazard, terrorism, at least outside of war zones, does not inflict enough damage to justify substantial increased expenditures to deal with it. Applying approaches widely accepted and often required by government agencies when evaluating safety proposals, these expenditures fail a cost-benefit test. <sup>47</sup>

For these conclusions to require reexamination, terrorists would have to become *vastly* more capable of inflicting damage than they have so far shown themselves to be. To border on becoming "unacceptable" by established risk conventions—that is, to reach an annual fatality risk of one in a 100,000—the number of fatalities from terrorist attacks in the U.S. and Canada would have to increase thirty five-fold, in Britain (excluding Northern Ireland) more than fifty-fold, and in Australia more than seventy-fold. For the United States, this would be equivalent to experiencing attacks as devastating as those on 9/11 at least once a year or eighteen Oklahoma City bombings every year.

However, there seems to be little evidence terrorists are becoming any more destructive, particularly in the West. In fact, it anything, there seems to be a diminishing, not expanding, level of terrorist activity and destruction at least outside of war zones. <sup>48</sup> As Andrew Mack concludes, there is "no evidence of any substantial increase in the fatality toll since data on both domestic and international terrorism began to be collected in 1998." Indeed, the two datasets he examines that have statistics going back to that year both "reveal a decline in deaths from terrorism."

It is abundantly clear, then, that under present conditions terrorism, as a hazard to human life in the United States, the United Kingdom, Canada, and Australia, is hardly existential. Indeed, applying widely-accepted criteria established after much research by many international regulators and decision-makers, the risks presented by terrorism are low enough to be deemed "acceptable."

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<sup>&</sup>lt;sup>46</sup> See also Bogen and Jones 2006, 56; Gardner 2008, 250-51.

<sup>&</sup>lt;sup>47</sup> Stewart and Mueller 2009.

<sup>&</sup>lt;sup>48</sup> For the an analysis concluding that the likelihood terrorists will come up with nuclear weapons or devices is vanishingly small, see Mueller 2010, ch. 13.

<sup>&</sup>lt;sup>49</sup> Mack 2008.

**Table 1. Terrorism Fatalities and Annual Fatality Risks (1970-2007)** 

Country	Location	Year	Fatalities	Annual fatality risk
UNITED STATES	Location	1 Cui	1 didnities	HSK
9/11: World Trade Center	New York	2001	2,751	
Murrah Federal Building	Oklahoma City	1995	165	
9/11: Pentagon	Washington	2001	184	
9/11: UA Flight 93	Pennsylvania	2001	40	
LaGuardia Airport Bombing	New York	1975	11	
Others	11011 2011	17.0	141	
TOTAL			3,292	1 in 3,500,000
TOTAL (1970-2000)			309	1 in 30,000,000
TOTAL (2001)			2,982	1 in 101,000
TOTAL (2002-2007)			1	1 in 1.8 billion
UNITED KINGDOM				
Pan Am Flight 103	Lockerbie	1988	270	
Omagh Bombing	Omagh	1998	28	
Kings Cross Station	London	2005	27	
Pub Bombings	Birmingham	1974	21	
Tavistock Square	London	2005	14	
Liverpool Street Station	London	2005	8	
Edgeware Road Station	London	2005	7	
Others (Northern Ireland)	Zondon	2000	1,723	
Others (Great Britain)			98	
TOTAL (UK)			2,196	1 in 1,100,000
TOTAL (Northern Ireland)			1,758	1 in 43,000
TOTAL (Great Britain)			438	1 in 5,200,000
CANADA				
Air India Flight 182	Atlantic	1985	329	
Others	1 maintic	1703	32) 7	
TOTAL			336	1 in 3,800,000
ALICTRALIA				
AUSTRALIA			25	1 : 22 200 000
TOTAL (including Poli Rombings)			25 117	1 in 33,300,000
TOTAL (including Bali Bombings)			117	1 in 7,100,000

Sources: Global Terrorism Database. Population data: US (308 million), UK (62 million), Great Britain (2 million), Canada (34 million), Australia (22 million).

 $\begin{tabular}{ll} Table 2. Terrorist Plots that United States Authorities Claim They Have Foiled and Expected Lives Saved, 2001-2007 \end{tabular}$ 

Date	Description	Estimate	Comments
		of lives saved	
Dec 2001	"Shoe bomber" Richard Reid foiled as a	200	prompt action by flight
	suicide bomber on an American Airlines		attendants and passengers
	flight from Paris to Miami.		averted the plot, not the security services.
May 2003	Iyman Faris convicted of planning to	100	average death toll for bridge
	destroy the Brooklyn Bridge.		collapse is not high as
			evidenced by the Minneapolis I35W bridge collapse in 2007
			with 13 fatalities.
Aug 2004	Two men convicted of plotting to attack	200	cf. VBIED attacks on Murrah
C	the New York Stock Exchange and other		Federal Building in Oklahoma
	financial institutions in New York.		City in 1995 killed 187 people,
		100	1993 bombing of WTC killed 6.
Aug 2004	Two men convicted of plotting to blow up	100	cf. 2005 London underground
	a subway station in New York.		bombings killed 39 subway commuters.
Aug 2005	Four men indicted for allegedly conspiring	100	high level of armed security at
O	to attack Los Angeles-area military targets.		U.S. military bases.
June 2006	Seven men indicted for allegedly plotting	200	cf. VBIED attacks on Murrah
	to blow up the Sears tower.		Federal Building in Oklahoma
			City in 1995 killed 187 people,
July 2006	One man arrested for allegedly plotting to	100	1993 bombing of WTC killed 6. cf. 2005 London underground
July 2000	bomb New York City train tunnels and	100	bombings killed 39 commuters.
	flood the financial district.		Flooding unlikely to cause mass
			casualties.
May 2007	Six men were charged with plotting the	100	high level of armed security at
	shooting of U.S. soldiers in an armed assault on Fort Dix.		U.S. military bases.
June 2007	Four men planned to destroy JFK	500	mass casualties very unlikely as
	international airport by blowing up jet fuel		jet fuel is flammable, not
	lines.		explosive in nature
TOTAL		1500	

List of plots: "Plots Since 9/11," wcbstv.com, 3 June 2007.

Table 3. Comparison of Annual Fatality Risks

			Total	Annual fatality risk
			fatalities	
			for the	
Hazard	Territory	Period	period	
World War II	Worldwide	1939-1945	61,000,000	1 in 221
Cancers	US	2009	560,000	1 in 540
War (civilians)	Iraq	2003-2008	113,616	1 in 1,150
All accidents	US	2007	119,000	1 in 2,500
Traffic accidents	US	2008	34,017	1 in 8,000
Traffic accidents	Canada	2008	2,431	1 in 13,500
Traffic accidents	Australia	2008	1,466	1 in 15,000
Traffic accidents	UK	2008	2,538	1 in 23,000
Terrorism	No. Ireland	1970-2007	1,758	1 in 43,000
Industrial accidents	US	2007	5,657	1 in 53,000
Intifada	Israel	2000-2006	553	1 in 72,000
Terrorism	US	2001	2982	1 in 101,000
Natural disasters	US	1999-2008	6,294	1 in 480,000
Drowning in bathtub	US	-	320	1 in 950,000
Terrorism	UK	1970-2007	2,196	1 in 1,100,000
Home appliances	US	-	200	1 in 1,500,000
Deer accidents	US	2006	150	1 in 2,000,000
Commercial aviation	US	-	130	1 in 2,300,000
Terrorism	US	1970-2007	3,292	1 in 3,500,000
Terrorism	Canada	1970-2007	336	1 in 3,800,000
Terrorism	Britain	1970-2007		1 in 5,200,000
Peanut allergies	US	-	50-100	1 in 6,000,000
Lightning	US	1999-2008	424	1 in 7,000,000
	Australia incl			
Terrorism	Bali	1970-2007	117	1 in 7,100,000
<b>Transnational</b>	World outside			
Terrorism	war zones	1975-2003	13,971	1 in 12,500,000
Terrorism	US	1970-2000	309	1 in 30,000,000
	Australia w/o			
Terrorism	Bali	1970-2007	25	1 in 33,300,000
Drowning in toilet	US	-	4	1 in 75,000,000
Terrorism	US	2002-2007	1	1 in 1,800,000,000

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