

# THE IMPACT OF 9/11 ON PSYCHOLOGY AND EDUCATION

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THE DAY THAT CHANGED  
EVERYTHING?



EDITED BY MATTHEW J. MORGAN

WITH FOREWORDS BY ROBERT J. STERNBERG  
AND PHILIP G. ZIMBARDO



## The Impact of 9/11 on Psychology and Education

Also by Matthew J. Morgan

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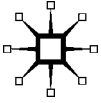
*The Impact of 9/11 on Religion and Philosophy*

**The Impact of 9/11 on  
Psychology and Education  
The Day That Changed Everything?**

**Edited by  
Matthew J. Morgan**

***With Forewords by  
Robert J. Sternberg and Philip G. Zimbardo***

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THE IMPACT OF 9/11 ON PSYCHOLOGY AND EDUCATION

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*For true mentors—Jim N., Henry O., Anita G., Woody W., Mike W., Ted B., Brock H., Ozan G., Roland J., Yasir M., Bryan H., Brian M., John P., and many, many others.*

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# Foreword

*Robert J. Sternberg*

Why did 9/11 happen? This book considers many points of view on this question. I would like to frame the discussion by highlighting three of the many causes, all of which involve the teaching/learning process: teaching that propagates hate, failure to teach for wisdom, and the challenge of teaching young people to behave ethically.

## Teaching That Propagates Hate

One might imagine that a purpose of religion in the world would be to lead the fight against hatred. Historically, however, religious leaders have vacillated between combating and actually propagating hatred, the latter usually toward people of other religions. In some cases, historically, the greatest hatred has been felt not toward those of other religions but those of different sects within the same general religious group (e.g., Catholics and Protestants, Sunnis and Shiites).

Hatred has three components: negation of intimacy, passion, and commitment.<sup>1</sup> All contribute to terrorism. Consider each in turn.

The first component of hate is the negation of intimacy. Whereas intimacy involves the seeking of closeness, the negation of intimacy involves the seeking of distance. Often distance is sought from a target individual because that individual arouses repulsion and disgust in the person who experiences hate. This repulsion and disgust may arise from the person's characteristics or actions or from propaganda depicting certain kinds of characteristics and acts. The propaganda typically depicts the individual as subhuman or inhuman, or otherwise incapable of receiving, giving, or sustaining feelings of closeness, warmth, caring, communication, compassion, and respect. A group may be depicted as comprising cockroaches, bacteria, rats, or other animals people are likely to view as repulsive. As with the positive intimacy component, feelings of distancing tend to be somewhat slow to develop and somewhat slow to fade. It is easier to plot a terrorist attack against individuals if you believe they are not quite or even close to being human.

A second component of hate is passion, which expresses itself as intense anger or fear in response to a threat. Anger often leads one to approach, fear to avoid, the object of hate. Propaganda may depict the targeted individuals as an imminent threat to approved society, and one that should be feared because of this threat. Targeted groups may be depicted as rapacious warriors bent on defiling women or attacking children or as monsters that threaten the very fabric of society (as well as the individual rights of its members). This component of hate is typically rapid in its growth and often rapid in its demise. Terrorists may feel it is justifiable to attack individuals or groups that represent an imminent and serious threat.

The third component of hate is decision/commitment, which is characterized by cognitions of devaluation and diminution through contempt for the targeted group. The hater is likely to feel contempt toward the target individual or group, viewing the target as barely human or even as subhuman. The goal of those who foment hate, including religious and governmental leaders, is to change the thought processes of the preferred population so that its members will conceive of the targeted group(s) in a devalued way. Often these changes are accomplished through some kind of instructional or otherwise “educational” program, whether in school or without. For example, young children may be taught hatred of another group as part of their basic education, as is happening today in the Middle East. This perverse twisting of religious doctrine is a major cause of terrorism, because terrorism comes to be seen as a good, which will bring rewards to one’s group and to oneself after death. Some of those who do the twisting probably do it cynically—to enhance their own power—and others probably convince themselves that what they believe actually has merit.

### **Failure to Teach for Wisdom**

A second major cause of terrorism is failure to teach for wisdom. The best way to combat hate may be through developing wisdom.<sup>2</sup> Intelligent people may hate; wise people do not. People like Mohandas Gandhi, Martin Luther King, Mother Theresa, and Nelson Mandela had the same human passions as any of us, but in their wisdom, they moved beyond hate to embrace love and peace.

A balance theory of wisdom defines wisdom as the application of intelligence, creativity, and knowledge toward a common good by balancing one’s own interests with others’ interests and institutional interests, over the long and short terms, though the mediation of positive ethical values.<sup>3</sup> Because wisdom is in the interaction of person and situation, information processing in and of itself is not wise or unwise. Its degree of wisdom depends on the fit of a potentially wise solution to its context. In this view, the same balance of

cognitive, motivational, and affective processes that, in one situational context, might result in a wise solution, in another context, might not.

Terrorists may be smart in a traditional sense; they may be well-educated; they even may be successful in some sense, if blowing up people and things can be viewed as a success. But they are not wise. What they are doing cannot be for a common good because it is clearly not for the good of the people who are destroyed. The terrorists may view what they do as for the common good of the people who matter—those in their own group—but that’s precisely what wisdom is not—the belief that only one’s own group matters.

By definition, wise people do not hate others because they care about the individuals’ (or group’s) well-being as well as caring about their own, or that of their group. They seek solutions that embrace the legitimate interests of others as well as of themselves. To be wise, therefore, one must understand not only people’s cognitions, but also their motivations and their affects. Someone who cares about another’s interests and well-being cannot hate that person, in part because he or she cannot dehumanize that other.

Schools typically teach children knowledge and to think intelligently. But they rarely teach for wisdom. Indeed, some schools around the globe teach hate toward one group or another. Ultimately, if we wish to combat hate, we need to teach students to think wisely. Wisdom is probably best developed through role modeling and through the incorporation of dialectical thinking into one’s processing of problems. To teach for wisdom requires wisdom, and so far, the possession of that wisdom is a challenge many of us fail to meet, not because we cannot, but rather, because we *choose* not to. Teaching for wisdom to combat hate involves several elements.

1. *Dialogical thinking.* Dialogical thinking involves seeing things from the perspective of other people. In the case of remedies for hate, it involves truly trying to understand how the members of the target group feel and how they perceive you as well as themselves. People who hate rarely understand the perspectives of their targets, and typically make no effort to understand these perspectives. If they do, it is often to adopt a stereotyped view of how the targets feel, rather than to understand their true feelings. Having meetings with members of the target group to understand their feelings and perceptions, as well as how they arose, can help. If people understood each other’s perspectives, they would be less likely to hate. For example, Israelis and Palestinians often resort to stereotypical representations of each other’s thinking, rather than trying to understand how each other is actually thinking. Dialogue groups have sometimes been successful in reducing these stereotypes. In the history of the United States, settlers saw the American Indians as impeding their westward movement. Had they thought dialogically, they would have realized that the American Indians saw them not as

settlers, but rather, as invaders. Understanding another's point of view helps to reduce conflict, although it may not eliminate it.

2. *Dialectical thinking.* Dialectical thinking involves an understanding that what constitutes a valid or useful solution to a problem or answer to a question changes over time. Solutions that may work at one time in history may not work at another. For example, people today are unlikely to solve problems between nations by attacking their enemies with catapults. When people carry grudges, they are often thinking in terms that are simply not relevant.
3. *Thinking for the long term and not just the short term.* Wisdom involves thinking for the long term, not just the short term. For example, the vengeance sought by both Israelis and Palestinians in the Middle East may result in short-term satisfaction, but inevitably is followed by a continuing cycle of revenge and counter-revenge, which yields no long-term positive consequence. In the long term, repeat cycles of vengeance can result in no solution to problems of hate and violence.
4. *The infusion of positive ethical values.* The world's great religions and ethical systems all share a largely common set of values—sincerity, honesty, compassion, care, integrity, goodwill. These values are sometimes corrupted by cynical religious and political leaders. But the values themselves transcend attempts by particular leaders to corrupt them. If people return to the veridical values of the ethical system they claim to underlie their behavior, they are unlikely to hate.

In sum, if we taught children in school not only to be knowledgeable and smart, but also to be wise, terrorism would dissipate. But 9/11 is likely to repeat itself in some other form because many teachers themselves are not wise, but rather, foolish, and role model foolishness for their students in the cloak of wisdom.

### **The Challenge of Teaching for Ethical Behavior**

Why don't people behave ethically? Terrorists don't, but often the positive response to terrorism in some parts of the world further suggests that the spectators are not much better—they allow terrorism to flourish. I have proposed that developing ethical behavior is much more challenging than it appears to be.<sup>4</sup> The model I have proposed is based on the Latané and Darley model of bystander intervention.<sup>5</sup> According to the proposed model, enacting ethical behavior is much harder than it would appear to be because it involves multiple, largely sequential, steps. To behave ethically, the individual has to:

1. recognize that there is an event to which to react;
2. define the event as having an ethical dimension;

3. decide that the ethical dimension is of sufficient significance to merit an ethics-guided response;
4. take responsibility for generating an ethical solution to the problem;
5. figure out what abstract ethical rule(s) might apply to the problem;
6. decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution;
7. enact the ethical solution, meanwhile possibly counteracting contextual forces that might lead one not to act in an ethical manner;
8. deal with possible repercussions of having acted in what one considers an ethical manner.

Consider these steps in more detail.

1. *Recognize that there is an event to which to react* When people hear their political, educational, or religious leaders talk, they may not believe there is any reason to question what they hear. After all, they are listening to authority figures. In this way, leaders, including cynical and corrupt leaders, may lead their flocks to accept and even commit unethical acts.

2. *Define the event as having an ethical dimension* Cynical leaders may flaunt their unethical behavior—one is reminded today of Robert Mugabe, but there are other world leaders who might equally be relevant here. When Mugabe and his henchmen ceased the farms of white farmers, the seizure was presented as one of compensating alleged war heroes for their accomplishments. Why should it be unethical to compensate war heroes? Unfortunately, many people around the world do not view terrorism as having negative ethical ramifications; on the contrary, and strangely, they may view it as supremely ethical.

3. *Decide that the ethical dimension is significant* Politicians seem to specialize in trying to downplay the ethical dimension of their behavior. The shenanigans and subsequent misrepresentations of Bill Clinton regarding his behavior are well known. George Bush and Dick Cheney, in their respective roles as president and vice president, seem to have been practically immune to seeing problems of treatment of prisoners in ethical terms.

4. *Take responsibility for generating an ethical solution to the problem* People may allow leaders to commit wretched acts because they figure it is the leaders' responsibility to determine the ethical dimensions of their actions. Isn't that why they are leaders in the first place? Or people may assume that the leaders, especially if they are religious leaders, are in a uniquely good position to determine what is ethical. If a religious leader encourages someone to become a suicide bomber, that "someone" may feel that being such a bomber must be ethical. Why else would a religious leader suggest it?

5. *Figure out what abstract ethical rule(s) might apply to the problem* Most of us have learned, in one way or another, ethical rules that we are supposed

to apply to our lives. For example, we are supposed to be honest. But who among us can say he or she has not lied at some time, perhaps with the excuse that we were protecting someone else's feelings? By doing so, we insulate ourselves from the effects of our behavior. Perhaps, we can argue, that the principle that we should not hurt someone else's feelings takes precedence over not lying. Of course, as the lies grow larger, we can continue to use the same excuse. Or politicians may argue that they should provide generous tax cuts to the ultra-wealthy, on the theory that the benefits will "trickle down" to the rest of the population. So perhaps one is treating all people well, as we learn to do—just some people are treated better than others with the rationalization that eventually the effects will reach all the others.

6. *Decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution* People may have skills that shine brightly in a classroom, but that they are unable to translate into real-world consequential behavior. For example, someone may be able to pass a written drivers' test with flying colors, but not be able to drive. Or someone may be able to get an A in a French class, but not speak French to passersby in Paris. Or a teacher may get an A in a classroom management course, but be unable to manage a classroom. Translation of abstracted skills into concrete ones is difficult, and may leave people knowing a lot of ethical rules that they are nevertheless unable to translate into their everyday lives.

If one follows reports in the media, there are any number of instances in which pastors who are highly trained in religion and ethics act in unethical and unscrupulous ways. They may be able to teach classes on ethics, but they fail to translate what they teach into their own behavior. One may tend to be quick to blame them, but as a psychologist, I know that there are many competent psychologists who are unable to apply what they do in therapy to their own lives. Being a psychologist is no protection against personal strife, any more than being an ethicist is protection against unethical behavior.

7. *Enact the ethical solution, meanwhile possibly counteracting contextual forces that might lead one not to act in an ethical manner* Sometimes, the problem is not that other people seem oblivious to the ethical implications of the situation, but that they actively encourage you to behave in ways you define as unethical. In the Rwandan genocides, Hutus were encouraged to hate Tutsis and to kill them, even if they were within their own family.<sup>6</sup> Those who were not willing to participate in the massacres risked becoming victims themselves. The same applied in Hitler's Germany. Those who tried to save Jews from concentration camps themselves risked going to such camps. In a country that supports terrorism, it may be dangerous to speak out against terrorism.

8. *Deal with possible repercussions of having acted in what one considers an ethical manner* One may hesitate to act because of possible repercussions. Perhaps students in my class saw me as grossly unethical, but did not

want to risk challenging me openly and thereby potentially lowering their grade. In genocides, opposing the perpetrators may make one a victim. Or one may look foolish acting in an ethical way when others are taking advantage of a situation in a way to foster their personal good. Even before one acts, one may be hesitant because of the aftermath one anticipates, whether real or merely imagined.

In this foreword, I have tried to set the stage for some of the reasons that terrorism has taken such a toll, on 9/11 and subsequently. Unless we combat hate, teach for wisdom, and teach the young the importance of acting ethically, there is no reason to believe terrorism will be less of a threat in the future than it has been in the past.

### Notes

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6. See discussion in Sternberg and Sternberg, *The Nature of Hate*.



# Foreword

*Philip G. Zimbardo*

It is a privilege to be included among the fine set of essays that constitute this psychology and education section of the Palgrave-Macmillan series on “the day that changed everything,” namely the 9/11 surprise attacks on the World Trade Center and the Pentagon. The authors represented here are distinguished scholars, diligent researchers, and wise theorists who bring a remarkable range of talents and perspectives to this most complex tragic experience. My colleague Robert Sternberg has focused his foreword on highlighting some lessons for teaching and education that he has gleaned from this eventful phenomenon.

I will look at the dark side of the tragedy by reviewing from a personal perspective how this tragedy was immediately politicized by the Bush administration to consolidate and expand its power base, to refashion the image and domain of the president, and to create a war of aggression that was unnecessary and ultimately immoral in its tragic consequences. In doing so, I will draw from personal experiences visiting New York City and Washington, DC, a few weeks after 9/11,<sup>1</sup> serving as President of the American Psychological Association (2002), teaching a course in the Psychology of Terrorism at the Naval Postgraduate School (2002 until now), and serving as Director of the Stanford Center on Interdisciplinary Policy, Education, and Research on Terrorism, CIPERT (2004 until now).

On September 11, 2001, two commercial airliners were flown into the World Trade Center buildings, destroying both of the trade center’s towers, along with 54 other surrounding structures that were damaged or lost entirely. In the second phase of the attack, the Pentagon’s west side was seriously damaged by a third air craft, American Airlines flight 77, which penetrated three of the five rings of Pentagon offices when it struck. A final airplane, United Airlines flight 93 was commandeered to destroy an unknown fourth target, presumed to be the U.S. Capitol or White House, but was brought down short of its objective in a field in southwestern Pennsylvania by heroic passengers struggling to retake control of the craft.<sup>2</sup>

The combined destruction on that day resulted in the loss of almost 3,000 individuals, with nearly 20,000 body parts recovered from the Ground Zero site. As many as 200 people, individually, in pairs, and in groups jumped from windows of the WTC buildings from a thousand feet down to the street below.<sup>3</sup> The financial costs associated with the 9/11 attacks were also enormous. About 150,000 people lost jobs in New York following the attacks, and the total cost of the disaster to the New York economy was estimated to range between \$50-100 billion. Of course, the costs to the nation and the world were much greater, in the trillions of dollars lost from the stock market crashing, air travel crippled, and many businesses suspended, as Volume 2 of this series has elucidated. These events unveiled numerous flaws in national planning, preparedness, and training efforts for catastrophic events. For example, communication problems within and between the Federal Aviation Administration (FAA), the North American Aerospace Defense Command (NORAD), and the National Command Authority (senior civilian command, including the president and the secretary of defense) resulted in substantial delays identifying and locating hijacked aircraft and confusion about shoot-down orders.<sup>4</sup> Further, lack of situational awareness, deviations from prior emergency planning, and radio interoperability problems stymied evacuation orders for first responders inside the World Trade Center. In all, 403 first responders, including New York fire department, Port Authority police department, and New York police department personnel were killed—most of them after orders to evacuate the towers had been issued.<sup>5</sup>

The Department of Homeland Security (DHS) was created in November, 2002 as part of the Homeland Security Act (2002) that reorganized more than 180,000 federal employees from across many agencies and services. Among the agencies brought in under this umbrella was FEMA, the Federal Emergency Management Agency. Despite much fanfare and multi billion-dollar budgets, this DHS and FEMA were shown to be totally unable to cope with the first national disaster that America faced when Hurricane Katrina struck New Orleans, Louisiana in 2005. There were obvious failures of communication between federal, state and local authorities, political rivalries surfacing, lack of any clear leadership from the White House or FEMA leadership that together made the natural disaster even worse—and that all happened with days of pre-warnings.

DHS had created a terrorist warning system to alert both the public and service agencies at national and local levels to prepare for a potential terrorist attack. Initially, when intelligence agencies had seemingly valid information about a new terrorist attack, spokespersons for the government would announce them on national media, but in vague terms. Unlike emergency warnings that typically give citizens channels of actions to follow, these terror alerts merely prescribed, “Keep Your Eyes Open,” or ended with BOLO advice, “Be On the Lookout” for terrorists.<sup>6</sup> But then nothing happened. Responding to calls for greater precision, DHS rolled out its new Color Coded Terror Warning System

in January, 2003, with 5 levels of warnings associated with a unique hue: \* Severe (red): severe risk; \* High (orange): high risk \* Elevated (yellow): significant risk \* Guarded (blue): general risk \* Low (green): low risk.

In all, there have been at least a dozen uncolored and color-coded warnings disseminated to the public. In every case they came accompanied by the reassurance that they were from reliable sources and so should be taken seriously. It is estimated that raising the code level one hue from Yellow, which is the lowest level ever used to Orange, which is the highest level ever used, costs a billion dollars a month for activating all the relevant national, state and local service agencies. There is also evidence that these warnings did raise fear among the public and created stress for many vulnerable populations of elderly and children.<sup>7</sup> And again, nothing happened, and again there was never a reason given to the public of why an alert level was being lowered, there has never been a public debriefing. It appears that the DHS has now simplified matters by sticking to a one-color code system of only Orange, which has been in effect for over the past year from 2008 to 2009. Interestingly, there is evidence that President George W. Bush's approval rating jumped several points correlated with each public warning alert.

I have long argued that this system was flawed for many strategic reasons, and was really politically motivated to make U.S. citizens feel both vulnerable to another 9/11 terrorist attack, and more secure knowing that their Commander-in-Chief was at the helm protecting them.<sup>8</sup>

In the days after 9/11, seemingly endless declarations of concern and sympathy streamed in from around the world, even from former adversaries. As the unrivaled super power, the United States was then in the position to assert "A Global Challenge of Terrorism " because that wanton attack against innocent civilians included scores of people from nations around the globe who worked at the WTC. It was then that our government was in the position to lead that challenge, create super trans-national intelligence agencies, work out cooperative treaties for curtailing financial support of terrorist organizations, uncover front groups that supplied resources to them, and in general make the prevention and reduction of terrorist threat a matter of world-wide priority and cooperation. Instead, the U.S. administration decided to go out on its own, disregard reactions of its allied nations, by essentially declaring, "You are with us, or against us," and with an arrogance of entitlement. Since effective terrorism is faceless and placeless, thus difficult to fight in any traditional war, the Bush administration gave it a new face, Saddam Hussein, and a new place, Iraq, and fabricated the rationale for war as protecting America's Homeland from the certain terrorist attacks that would follow when Hussein gave or sold his cache of Weapons of Mass Destruction to his ally, Osama bin Laden. Their connection was non-existent or even hostile, and the WMD's proved equally non-existent.

Nevertheless, the U.S. military would avenge the insult on America's homeland and the loss of American lives at the WTC with a "shock and awe" March

20, 2003, war campaign that would permanently eliminate this source of terrorism from Iraq. As is now evident, it did not work exactly as envisioned, cost the nation at least a trillion dollars, thousands of soldiers lives lost or mangled, hundreds of thousands of Iraq citizens killed and maimed, and the entire country severely crippled with millions having fled to nearby nations.

Back in April 2003, two weeks after America's invasion of Iraq, the California Psychological Association had honored me with a lifetime achievement award. Part of my acceptance speech was not only arguing against that war, as I had done against the U.S. invasion of Viet Nam, but also exposing what I felt were the emerging evils of this government's deception, deceit, and dishonesty. In part I said to this gathering of my colleagues:

If there are no WMD found, then the second greatest casualty of this unnecessary war, after the deaths and dismemberments of so many people, is Truth and Honesty. Embarrassment is the least negative emotion our leaders should experience—shame and guilt are more appropriate.

It will become more obvious that those in whom we put our trust at a time when we felt so vulnerable after September 11 deceived the nation for political objectives. Consider the hypothesis that our leaders manufactured a scenario that made us feel perpetually at risk of homeland insecurity and then proposed to make us all feel safer by creating a target for our collective fear-reduction—winning the war in Iraq, eliminating all their WMD and ridding the world of the menace of Saddam Hussein. How can they justify this aggressive war if there are no WMD, and there are no terrorists found operating in the homeland of the United States?

I believe that all American citizens need to become more fully aware of the fundamental changes being pervasively insinuated into the fabric of America's foreign and domestic policies by the current [Bush] administration. Those myriad changes in government policy, that primarily promote the agendas of big business, the religious far right, and the Pentagon will have disastrous consequences for world peace, the continued viability of the UN, a sustainable environment, and the financial support of our national health, education, welfare, and research programs.

We are at the same time witnessing the erosion of our basic individual freedoms—all under the scurrilous banner of “national security,” and blind obedience to patriotism that suppresses all dissent of the administration's policies—even by Democratic Party leaders fearful of challenging the war time Commander-in-Chief.

Doctor Samuel Johnson reminds us “patriotism is the last refuge of scoundrels.” He meant the leaders of nations who hide behind that rallying cry. But it also applies to the public who accept at face value the propaganda pushed on them by the administration's marketing experts and spin-doctors. Mindless patriotism is as much a danger to American democracy as extreme religious fundamentalism is to tolerance and appreciation of diverse religious and humanitarian values.

My personal solution for relieving our national stress is through adopting an energetic commitment to rid the nation of these Orwellian forces of arrogance, entitlement, greed and disdain for individual rights that characterize the current [Bush] administration. They are the true cause of our stress, anxiety, depression, and justifiable worry now and in the future wars in which they will continue to enmesh America as the Defense Department dominates the State Department and the Pentagon's voracious war machine is continually fed billions of taxpayer dollars to build bigger and more deadly weapons, including a new tactical nuclear arsenal.<sup>9</sup>

I am saddened to say that I was more on target than off target with that assessment, wishing that I had been wrong and the country went right. Sadly, it went too Right in ignoring its Center and Left—and the rest of the world.

Even righteously fearful New Yorkers were showing fine tuned community resilience when I visited my home ground shortly after the WTC attack. I worked with psychologists there to set up free treatment programs for fire-fighters and their families, especially those from the Brooklyn Heights fire station, one of the first to reach the WTC disaster, and thus one that suffered major losses of lives. Most everyone came to realize the fragility of existence, the beauty of living, and the vitality of the human connection. It was a time of uncommon civility; New Yorkers were Canadians. They were able to deal with the aftermath of those horrific explosions. However, the damage done to the United States by the executive branch of its own government 2001 to 2008 is much greater and more enduring than anything any terrorist organization could have done in a worst-case scenario.<sup>10</sup>

We have seen the Enemy and it was US. Or, at least it was our U.S. government leaders whose myriad actions and reactions to the 9/11 explosive attacks have imploded much of what is special about America. Only time will tell if, and how, Americans can develop the communal resilience to recover from these internal attacks on our core values.

## Notes

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# Acknowledgments

The terrorist attacks of September 11, 2001, were an event that for most Americans will be remembered for a lifetime as a pivotal moment in history. Like the Kennedy assassination a generation before on November 22, 1963, Americans share a collective memory and trauma of the event, often asking each other and reminiscing about what one was doing during that fateful moment. Now, with several years passed since 9/11, this series reflects on that event by bringing together, from a broad spectrum of disciplines, the leading thinkers of our time.

In order to undertake such an ambitious project as this, appreciation must go to a wide-range of people. First and foremost are the distinguished and skillful writers who have contributed to the series. Their willingness to share their talents and follow through with their commitment to this effort made all the difference. I cannot thank them enough for the sacrifices they have made to contribute their work to this series.

As I thank the many authors from such diverse backgrounds, perspectives, and even countries, I should caution readers that opinions expressed in this series reflect the views of each contributing author of each chapter and should not be contrived to represent views of the contributing authors generally or even my own views. The series has self-consciously attempted to include a “big tent” of different perspectives, some highly critical of policy decisions, others supportive of government actions in difficult times, some dubious of the significance of 9/11, others finding it a disruptive event that “changed everything.” I have tried to reserve my own views in order to allow this series to collect these perspectives.

I would like to thank several people who have made special contributions to this process. First, two friends have proven themselves adept at finding my errors and improving my work, which is an invaluable skill for an author to find in a trusted colleague. These two distinguished professionals—Jennifer Walton of JPI Capital and Linda Nguyen of Deloitte Consulting—have taken time out of their busy schedules to review these manuscripts, and I am eternally grateful. Second, many of our authors are extremely busy top leaders at the pinnacles of their careers. In these cases, their professional assistants and staff have been incredibly helpful in managing correspondence and facilitating the timely completion of these contributions. Among these helpful professionals

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Finally, I owe a debt of gratitude to several members of the publishing community to bring this massive effort to fruition. First, Hilary Claggett of Potomac Books, my editor at Greenwood/Praeger for my first book (*A Democracy Is Born*, 2007), envisioned an interdisciplinary series reflecting on the national tragedy that was 9/11. This concept was initially to be four volumes, but due to the enthusiastic response from the scholarly and writing communities, the series expanded to six, allowing for a full treatment of each major area we have undertaken. Next, Toby Wahl of Westview Press, and former Political Science Editor at Palgrave-Macmillan, supported me with my publication of *The American Military after 9/11: Society, State, and Empire* at Palgrave (2008) and provided energy and commitment in the initial stages of the development of *The Day That Changed Everything?*. After his departure, Farideh Koohi-Kamali, Editorial Director at Palgrave, assumed Toby's responsibilities and provided excellent advice and support, taking the series through its last stages in the summer of 2008. Lastly, Editorial Assistants Asa Johnson and Robyn Curtis deserve heartfelt appreciation for their efforts to bring the book to publication in its final form, exceeding all expectations.

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# Introduction

*Matthew J. Morgan*

This book is the fifth volume of the six-volume series *The Day that Changed Everything?* With some time having passed now since the attacks of September 11, 2001, it is possible to reflect upon the attacks and assess their impact. The series brings together from a broad spectrum of disciplines the leading thinkers of our time to reflect on one of the most significant events of our time. This volume is devoted to psychological changes after 9/11 as well as to the closely related field of education.

Over its two-century national history, the United States has enjoyed a sense of invulnerability. This invulnerability has been reinforced by a vast area rich with natural resources, insulation from competing great powers provided by two oceans, and a principle-centered government based on universal, moral absolutes. The concept of “American exceptionalism,” a sense of a special place or uniqueness, has led to alternating periods of isolationism and imperialism throughout American history. Psychologically, it has resulted in insulation from the sense of vulnerability that has affected peoples around the world due to the anarchic condition of state-based international relations. Arguably, the impact of the 9/11 attacks was to shatter—or at least call into question temporarily—the sense of invulnerability that had existed among Americans.

After 9/11, the color-coded security conditions and the heightened measures at airports and other transportation and government facilities serve as reminders of the vulnerability to attack. In the immediate aftermath, Americans became conscious that every aspect of ordinary life could be filled with dangers. This new mindset was visible in the effects of terror on Americans during the emotionally intense beltway sniper shootings which occurred after the World Trade Center attacks. These sniper shootings, like the anthrax-laden letters in late 2001, led to widespread panic. The *New York Times* effectively captured the panic and fear among the public in the area:

We don't want to buy gas. We don't want our children going to school. We don't want to shop. We don't want to drive to work. We may deliberate for hours whether we go to the grocery store or pharmacy. These days, we

cringe beneath the shadow and roar of every low-flying passenger plane. We worry about opening our mail. At the office, we demand X-ray scanners and other high-tech devices that might detect explosives or anthrax. We decide not to buy that new house or car. Really, we rationalize, we don't need anything right now. New clothes can wait. A dinner out at our favorite restaurant isn't a necessity. In fact, let's not go anywhere. Forget vacation plans or conventions. Forget any activity that might involve travel or expense.<sup>1</sup>

The panic incited by this incident was significant, and it likely had its roots in the consternation over the events of 9/11. The questions remain, however, of how long this sense of trauma and fear will stay, and of whether all Americans or only some populations will retain a lingering sense of changed mental attitudes. The nature of the psychological repercussions—whether they are transitory or lasting—is a matter of strong disagreement among observers. Similarly, whether those living in large cities, or specifically New York, or those working in specific fields, have been more affected are also ongoing discussions.

This volume considers the psychological effects of 9/11 in three major sections. The first deals with trauma, fear, morality, and other issues of personal impact. The second involves changes to children and the family. The last section does not focus on psychology but on the related field of education.

The first section begins with two chapters whose author teams are each led by founders of the Terror Management Theory, or TMT. These psychologists were coauthors of *In the Wake of 9/11*, an ambitious project sponsored by the American Psychological Association in 2002 to look at the consequences of the attacks. The leading authors of the first two chapters, Jeff Greenberg and Tom Pyszczynski, respectively, explore the consequences and the causes of global terrorism. They revisit the themes of their earlier research with some time to reflect. The volume somewhat counter-intuitively begins with the consequences rather than the causes because the former topic is more closely linked with the objectives of this series. However, after Greenberg provides a review of the consequences of today's terrorism, it is logical to consider the causes, and Pyszczynski's chapter provides this assessment.

The following two chapters consider responses in more detail, beginning with Roxane Cohen Silver, whose work as principal investigator of a three-year national longitudinal study of responses to the 9/11 attacks has given her context to discuss the role individual differences (such as coping strategies, personality traits, etc.) can play in both the acute and longer-term response to 9/11. Yuval Neria and his team look at posttraumatic stress by reviewing a series of studies of populations at the local and national levels.

The remaining chapters of the section consider specific areas, with Linda J. Skitka looking at social interaction, Ronnie Janoff-Bulman considering changing morality, and Alice LoCicero focusing on fear. The next chapter is

a multidisciplinary effort with Amy Ai, whose background is in the field of social work, and religious scholars Terrence Tice and Catherine Kelsey, exploring religious coping mechanisms. Finally, Walter A. Davis, a renowned author, provides a more philosophical, and less empirical, reflection to conclude this section.

The second section on generational effects begins with Tufts University child psychologist David Elkind's assessment of the deleterious effects of today's wars and violence on the American child. Deborah O'Donnell follows this theme by considering how the family has changed as a result of terrorism. Neil E. Grunberg and Sarah Shafer Berger of the Uniformed Services University of the Health Sciences look at adolescents' subsequent health risk behaviors in the wake of 9/11. Finally, Daniel C. Feiler and Kimberly A. Wade-Benzoni consider intergenerational differences in the wake of 9/11.

The final section focuses on education. The study of education is closely related to the discipline of psychology, so this volume includes several chapters on the topic. The section begins with Henry Giroux of McMaster University, who considers the increasing integration of the military and the academy in the post-9/11 world. Stephen Sloan and Ted Reynolds examine the university connection with a more specific perspective, documenting the evolution of terrorism studies and homeland security programs, government awarded scholarships, and other such developments. James Forest, director of West Point's Counter-Terrorism Center, considers another important aspect of the discipline—professional military education. The next chapter, "College Student Attitudes about 9/11," by sociologists Morten Ender, David Rohall, and Michael Matthews, considers a different dimension of education—the changing perspective of the students who receive education rather than the professionals who design and deliver it. Finally, Patricia Peknik, a young assistant professor of liberal studies, relates her students' experience with American exceptionalism in a post-9/11 age.

The contributing authors of this volume—and the entire series—have been deliberately assembled to reflect divergent perspectives on 9/11 and its aftermath. Some have interpreted developments after the 9/11 attacks as long-lasting alterations of the American psyche; others view the psychological response as a near-term adjustment whose effects will not last. This series attempts to bring together leading minds from a variety of perspectives. Without any particular "ax to grind," I believe this approach to reflect on the impact of the attacks is best to explore the question of whether September 11, 2001, was the day that changed everything.

### Note

1. Patricia Cornwell, "The Sniper Next Door," *New York Times* October 18, 2002.



Section I

# **Psychology and Trauma**

# Eight Years in the Wake of 9/11: A Terror Management Analysis of the Psychological Repercussions of the 9/11 Attacks

*Spee Kosloff, Mark Landau, Dave Weise,  
Daniel Sullivan, and Jeff Greenberg\**

As we write this chapter, eight years have passed since the tragedy of September 11, 2001, when 19 members of al Qaeda hijacked and crashed multiple jet airliners into the Twin Towers and Pentagon, killing 2,974 people and striking terror in the hearts and minds of most Americans. While the initial worry, anger, patriotism and bloodlust caused by the 9/11 attacks seems largely to have subsided, psychological fallout from the attacks continues to influence contemporary American culture, its international standing, and concerns over the very real threat of international terrorism.

In this chapter we utilize terror management theory (TMT) and research to help understand this psychological impact. The theory addresses the psychological defenses people marshal to cope with the potential for terror engendered by the awareness of their own mortality. TMT is particularly well-suited

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for providing insights into the effects of terrorism because, at its core, terrorism is a strategy to advance an ideological agenda through terror generated by death threats.

TMT is based on the writings of Ernest Becker, a cultural anthropologist who, beginning in 1962, took it upon himself to figure out what is responsible for the uniquely human penchant for terror and violence. In the books *The Birth and Death of Meaning* (1962/1971), *The Denial of Death* (1973), and *Escape from Evil* (1975), Becker developed an analysis of the core motives that drive human behavior.<sup>1</sup> His analysis was subsequently synthesized and systematized into TMT by social psychologists Jeff Greenberg, Tom Pyszczynski, and Sheldon Solomon.<sup>2</sup> Along with many students and colleagues, this trio has spent the last 20 years researching and refining the theory. In their book, *In the Wake of 9/11: The Psychology of Terror*, Pyszczynski, Solomon, and Greenberg explained how TMT provides an empirically supported account of the psychological causes and consequences of the 9/11 attacks.<sup>3</sup> In the following sections we summarize TMT and its analysis of 9/11's immediate and sustained psycho-cultural impact.

## TMT

TMT begins with the observation that humans, like other animals, have many biological systems directed toward keeping us alive. Additionally, though, humans possess unique mental capacities, including self-consciousness and the ability to contemplate the past and future, which enable us to be aware that these systems will ultimately fail: that sooner or later, each of us will die. The awareness of personal mortality in an animal predisposed in so many ways to stay alive creates the potential for humans to experience intense and even paralyzing anxiety. To avoid a fearful confrontation with death anxiety, humans use their unique intelligence to construct and maintain *cultural worldviews*—shared views of reality that imbue the world with order, meaning, and permanence. Worldviews also provide opportunities to acquire *self-esteem*—the belief that one is a significant, enduring being in a world of meaning, rather than a mere animal fated only to obliteration upon death. This belief is buttressed by literal and symbolic forms of death transcendence provided by cultures. Literal immortality is the sense that one will literally continue on in some form after death, and is provided by the spiritual concepts evident in virtually all known ancient and traditional cultures, such as an everlasting soul or spirit, heaven, and reincarnation. Symbolic immortality is the sense that one leaves a lasting mark or symbol of one's existence even after physically dying, and is obtainable by identification with larger groups and causes, offspring, and culturally valued achievements in the arts and sciences.

In summary, TMT posits that humans manage fear stemming from their awareness of death's inevitability by (a) sustaining faith in a cultural worldview

that imbues reality with order, meaning, and permanence and provides paths to literal and/or symbolic immortality for those who meet prescribed standards of value; and (b) maintaining self-esteem by perceiving oneself as meeting the culture's standards of value.

### Basic Findings of TMT Research

Over the past 20 years, laboratory research has gathered a large body of evidence in support of TMT. Much of this research is guided by the idea that, if cultural worldviews and self-esteem help protect people from death-related concerns, then reminding people of their inevitable death should motivate them to affirm faith in their culture and strive to feel like a valuable contributor to it. Researchers have used diverse ways of heightening awareness of mortality—or inducing *mortality salience* (MS)—such as asking people to write about their death, having them view gory accident footage or stand near a funeral home, and even presenting the word *death* subliminally, outside of conscious awareness.

Consistent with TMT, hundreds of published studies have shown that MS heightens people's motivation to support and defend their cherished cultural beliefs (i.e., *worldview defense*), and intensifies individuals' efforts to convince themselves and others that they possess self-esteem-bolstering attributes and skills (i.e., *self-esteem striving*).<sup>4</sup> For instance, after MS, Americans derogate American and foreign critics of the United States, Canadians derogate those who criticize Canada, and conservative and liberal Americans allocate high levels of painfully spicy hot sauce to another student who criticized conservatives and liberals, respectively. Research has further shown that MS instigates efforts to deny one's corporeal or animal nature, to affirm the value of close relationships, and to increase liking for people and everyday events that confer meaning, order, and stability.<sup>5</sup>

Research inspired by TMT has also demonstrated the unique role of death concerns in worldview defense and self-esteem striving. This work has shown, for example, that defensive responses to MS are not elicited by reminders of other topics that are anxiety-provoking (e.g., pain, paralysis), future-orientated (e.g., upcoming events), self-relevant (e.g., embarrassment, exclusion) or existential in nature (e.g., uncertainty, meaninglessness). Furthermore, sufficiently intense threats to individuals' worldview and self-esteem have been shown to increase unconscious concerns with death but not other negative thoughts, while defending those structures reduces unconscious death concerns.<sup>6</sup>

Studies have also revealed a specific sequence of defenses activated by conscious reminders of mortality.<sup>7</sup> When thoughts of death are in conscious attention, they trigger a set of *proximal defenses* aimed at removing such thoughts from consciousness. People try to convince themselves that they are healthy, that death is a distant problem, and they actively avoid further thoughts about

death. However, thoughts of death no longer in conscious attention can continue to resonate at an unconscious level, and it is under these conditions—after proximal defenses have subsided—that death concerns elicit *distal defenses* aimed at shoring up faith in one’s worldview and self-esteem. Although these distal defenses are superficially unrelated to death, they prevent anxiety-provoking thoughts of death from flooding back into consciousness. Research supporting this analysis shows, for example, that subliminal primes of the word *death* immediately lead to worldview defense, whereas conscious reminders of death do so only after people are distracted from such thoughts.

To summarize this somewhat technical section, TMT proposes that individuals seek to maintain faith in a cultural worldview and bolster their self-worth in order to protect themselves from anxiety-provoking confrontations with personal mortality. Laboratory research supports this analysis by showing that reminding people of death heightens their motivation to maintain a meaningful conception of the world and self-esteem.

### **Terror Management in Responses to 9/11**

How does TMT, and its associated research, inform our understanding of the psychological consequences of 9/11? As we’ve discussed, TMT claims that people typically keep concerns with their mortality buried beneath the surface of consciousness by maintaining faith that their culture and its symbols are permanent, reliable and invulnerable sources of meaning and value. The 9/11 attacks, however, rudely disrupted these assumptions, on the one hand by demolishing symbols of American socioeconomic supremacy (e.g., the WTC and the Pentagon) and on the other by forcing Americans to confront the fact that death can occur for reasons that cannot be fully anticipated or controlled.

This two-pronged threat set in motion a series of psychological processes observed in many prior laboratory studies of TMT. In the immediate aftermath of 9/11, when fears of terror and death were particularly palpable, Americans proximally defended against death-related fears by distracting themselves from self-awareness. People consumed more alcohol, particularly in New York City; Las Vegas reported increased slot machine use; Blockbuster movie rentals soared; and primetime television viewing was up 4 percent relative to similar periods from the preceding two years.<sup>8</sup> Meanwhile, President George W. Bush publicly encouraged the American people to “go out shopping.”<sup>9</sup>

In addition to seeking distraction, Americans sought to escape feelings of vulnerability to death by avoiding airports and other public places (e.g., the Superbowl) that might be targets for terrorist attacks, stockpiling food and weapons, and buying gas masks and thyroid-protecting pills. The United States government also took efforts to reduce Americans’ elevated concerns with vulnerability to terror and death, such as ramping up airport security and civilian

surveillance protocols, and implementing a terror alert system much to the (initial) approval of most citizens.<sup>10</sup>

But as the smoke over lower Manhattan cleared, distraction and direct attempts to avoid lethal threats gave way to *distal defenses*—efforts to reaffirm faith in the American way of life, including its symbols, values, and ideology, and to quash the perceived evils that threatened it. Distal terror management responses were apparent in nearly every aspect of American life, and were especially prominent in religious and political arenas. A September 21, 2001 Gallup Poll found the highest levels of church attendance since the 1950s, even among self-proclaimed atheists.<sup>11</sup> Bible sales skyrocketed, as did the number of visits to religion-related websites.<sup>12</sup> Patriotism also peaked: sales of American flags flourished, and songs like “God Bless America” and “America the Beautiful” were omnipresent. Concurrent with this affirmation of American identity were unsavory efforts to suppress “dissenting” attitudes (e.g., Bill Maher’s forced resignation from the television show *Politically Incorrect* after making remarks seen as anti-American), and overtly discriminatory acts against minorities (e.g., the destruction of mosques in Texas, Indiana, and Ohio; the slaying of Balbir Singh Sodhi, an Indian Sikh, at a gas station in Mesa, AZ). These many “real world” efforts to affirm faith in one’s religious and national ideologies resemble the intensified religiosity and nationalism observed among mortality-primed participants in laboratory studies of TMT, suggesting that Americans were collectively struggling to cope with the threatening reality of mortality.<sup>13</sup>

Such surges in cultural identification following national tragedy are typically accompanied and fomented by the presence of a “charismatic” leader—one who confidently and optimistically affirms the righteousness of one’s cultural values and promises hope and bold action to overcome terror and evil. Landau and colleagues reasoned that, following 9/11, President George W. Bush took on such a role.<sup>14</sup> Specifically, these researchers proposed that, in the aftermath of the attacks, Bush helped assuage Americans’ distal terror management concerns by championing resolve for American ideals and promising to rid the world of terror through proclamations such as: “Our war that we now fight is against terror and evil. . . . our struggle is going to be long and difficult. But we will prevail. We will win. Good will overcome evil.”<sup>15</sup> Consistent with this idea, national polls found that Bush’s approval rating went from 50 percent just prior to 9/11 to 88 percent a few days later.<sup>16</sup>

Landau and colleagues put this analysis to the test prior to the 2004 presidential election by examining whether MS and reminders of the 9/11 attacks would increase Americans’ support for President Bush and his war on terror. Reminders of death and 9/11 indeed heightened support for Bush. One study showed, for example, that participants who did not get MS showed a strong preference for Bush’s political opponent, the purported flip-flopper Senator John Kerry, whereas mortality-primed participants strongly favored Bush, the crusader against evil. Moreover, these effects of MS and 9/11 reminders were found among both liberal and conservative Americans, suggesting that Bush’s

charismatic leadership served a terror management function for Americans regardless of their political orientation.

### **Terror Management since 9/11: The Changing Face of Proximal and Distal Defenses**

At the time of writing, the sociopolitical events set in motion by the 9/11 attacks continue to determine the trajectory of American international relations, as well as the cultural climate within America itself. But many aspects of the cultural climate have shifted in interesting ways, begging the question of whether terror management defenses stemming from the 9/11 attacks may have changed over time, and if so, how?

Looking first at proximal defenses, there are signs that Americans are regaining confidence in their physical safety. For example, the small post-9/11 increase in handgun applications had subsided by November of that year, and there was no overall increase in firearm purchases in response to the attacks.<sup>17</sup> But vigilance is still high. Overall some \$23 billion in domestic security financing has been funneled to the states from the American federal government since the attacks.<sup>18</sup> And the American government continues to expand search and surveillance powers over citizens. The Total Information Awareness program of 2003 was proposed as a way of gathering purchase histories, medical records, and other personal information on every American, and the New York Police Department's Operation Sentinel, planned for completion in 2010, entails photographing and storing information on every vehicle that enters Manhattan.

Accordingly, the perceived necessity of measures taken in response to 9/11 to directly protect citizens from death seems deeply ingrained in the national consciousness. At the same time, awareness of 9/11 has for many Americans receded from the forefront of consciousness, becoming like a white noise resonating in the background of everyday life. As discussed earlier, these are precisely the conditions under which TMT would predict distal defenses to be high. How have those manifested in the years since 9/11?

There are some signs that they've abated in intensity. The FBI reported that bias-related assaults, threats, and vandalism targeting Muslims and individuals of Arab (and Arab-appearing South Asian and Sikh) ethnicity increased by 1,600 percent from 2000 to 2001, with more than 1,700 incidences of violence against Muslims within five months following the attacks.<sup>19</sup> Consequently, scores of families emigrated, and the flow of immigration from Egypt, Pakistan, and Morocco thinned dramatically. But although hate crimes certainly haven't disappeared, five years after 9/11, Muslims were immigrating to the United States in record numbers.

What about the initial upsurge in support for charismatic leaders? The initial and unprecedented spike in support for President Bush, including his

policies that were largely irrelevant to terrorism, remained high well into 2004, and was periodically boosted in response to government-issued terror warnings.<sup>20</sup> In 2002 more than 85 percent of Americans supported Bush's military actions against the Middle East, which was essentially the same level of support seen in 2001.<sup>21</sup> But in the waning years of Bush's administration, his support reached a record low, and even conservatives questioned the utility of a protracted and expensive war in Iraq.

More generally, Americans are ambivalent about politicians invoking 9/11 and its portents to bolster their campaigns. Many mainstream media outlets satirized Bush's decision to rekindle the memory of 9/11 in his 2006 televised address challenging criticism of the Iraq war. Also, in 2007 Rudolph Giuliani initially focused his presidential campaign on issues such as his career in the Justice Department, but when his polls dropped he took up the theme of 9/11 that had transformed him from a lame-duck mayor to a popular national figure six years earlier. But the public failed to take his message seriously, and the media mocked him for what they saw as a gratuitous exploitation of fears for political gain.

That said, invocations of the memory of 9/11 continued to appear prominently in political discourse, even well into the 2008 presidential campaign. In fashioning his political persona as a tough, embattled war hero, Senator John McCain emphasized his strength on the issue of national security and his readiness to prevent "another 9/11." By doing so, McCain may have catered to proximal terror management concerns, those linked to the literal threat of death, rather than trumpeting a trail-blazing message that America might renew its symbolic greatness in the post-Bush, post-9/11 era. By contrast, Barack Obama, who inspired record voter registration and turnout at primaries by packaging himself as an agent of change and hope, appeared more concerned with reshaping America's strategic and ideological prospects than with reigniting the raw anxieties of 9/11. From the perspective of TMT, then, Obama's forward-looking strategy of promising charismatic leadership and participation in a novel, grand and enduring vision may partly explain his victory in the 2008 presidential race.

A similar dynamic has arisen in debates over the appropriate way of commemorating 9/11. On the one hand, every anniversary of the attacks has been marked by national tributes. In 2006, for example, cathedral bells rang in Chicago, Carnegie Hall hosted a memorial concert, and students at MIT erected a 25-foot model fire engine atop a campus building bearing the Latin word *meminimus* ("we remember"). This suggests that memory of the attacks, and the surge of solidarity that followed, have remained unvarnished by time. On the other hand enthusiasm is waning, as evidenced by the decreased willingness to fund and complete large-scale commemorative projects. To mention two of many examples, the Port Authority of New York and New Jersey has postponed construction on a 9/11 memorial plaza until 2010, and the building of enormous metal wings forming the roof of the main hall at the World Trade



Center transportation hub has been stymied by budget limitations. In short, there are clear signs of Americans wishing to “move on” from the events in a way that would have seemed sacrilegious a few years ago.

A third and equally interesting response joins the urge to remember and the urge to forget, namely, the urge to secure a clear, coherent understanding of how and why the attacks happened. This search for understanding has led to a number of self-searching analyses, many of which paint the United States in unflattering terms. The best-selling 9/11 Commission Report outlined numerous weaknesses in America’s government and safety response institutions. Popular movies such as *Fahrenheit 9/11* and *Charlie Wilson’s War* suggested that America may have sown seeds of aggression in its prior dealings with the Middle East. Such works were accompanied by a proliferation of conspiracy theories accusing the United States government of covering up details of the attacks and even aiding in their execution.

How can we make sense of this response? From a TMT perspective, a common distal defense against mortality concerns is the belief in a just world—the belief that people generally get what they deserve and do not suffer unjustifiably. And in TMT laboratories MS has been shown to increase people’s preference for clear explanations of a tragic event.<sup>22</sup> Analogously, when Americans witnessed the senseless murder of innocent civilians on 9/11, many sought a clear causal explanation by eagerly pointing to evidence of an international network of terrorism connecting Iraq, Iran, and Syria, and cooperation between Saddam Hussein and al Qaeda. But another, more insidious way of restoring the belief in a just world is to derogate victims as a way to view them as somehow deserving of their misfortune (“They must have been doing *something* wrong!”). Indeed, studies show that MS leads people to assign more blame to the victim of a senseless, but not a more comprehensible, tragedy.<sup>23</sup> These findings suggest that, at least for many Americans, viewing their country as incompetent, myopic, and even morally destitute is an acceptable cost for a clear understanding that assuages fears over the capriciousness of death.

What about the aforementioned spike in religiosity? American college students interviewed in November 2001 reported being significantly more invested in goals related to “intrinsic” religiosity, such as giving and receiving love, than they were pre-9/11, although they were no more concerned with extrinsic goals such as being physically attractive.<sup>24</sup> Indeed, this personal quest for religious meaning was an effective way for many Americans to cope with the emotional strain associated with the threat of terrorist attacks.<sup>25</sup> But in the years since, religious identification has become more defensive and partisan. So-called “moral” issues were certainly fomenting on the cultural stage prior to 9/11, but they came to a head in the years since the attacks, in part due to America’s support for a president who openly endorsed Christian evangelical values. We witnessed a renewed collaboration between the Christian Right and United States domestic policy, as seen, for example, in the Ten Commandments Defense Act permitting religious displays on state property,

the Marriage Protection Act, and protracted debates about stem cell research and the teaching of evolution that continue at the time of writing. At the other ideological extreme, mistrust of Islamic fundamentalism, amplified by the Madrid train bombings of 2004, stoked contempt for Christian fundamentalism in America and Europe, as evidenced by a wave of controversial atheistic manifestos in 2006 and 2007 (e.g., Dawkins's *The God Delusion*; Hitchens's *God is Not Great*). So, whereas post-9/11 religious identification was initially a source of personal security and meaning, it has in the wake of the attacks become the battleground for bitter debates and partisan divides.

A similar dynamic occurred with regard to political ideology. At first Americans across ideological spectra put aside their differences and united as Americans, yet now the country appears once again fiercely divided over political issues. Liberals and conservatives, who had commonly clung to Bush's charismatic leadership toward the end of his first term, now appear to have returned to partisan identifications as sources of psychological security. Ironically, this revitalized divisiveness may reflect a common concern with "threat" since 9/11, with members of both sides employing apocalyptic rhetoric to advance their respective agendas: conservatives voicing staunch support for border security (immigrants "invading" the country's borders), and advocating building a wall to keep illegal immigrants out; and liberals zealously embracing issues like global warming (carbon emissions "destroying" the environment). Indeed, Kosloff, Greenberg, Weise & Solomon recently found that for liberal and conservative Americans, MS increased the appeal of a fictional charismatic gubernatorial candidate if that candidate advocated values central to the study participant's liberal or conservative political orientation.<sup>26</sup> And Weise and colleagues recently found that MS augmented the perceived importance of non-terrorism-related issues relevant to individuals' political orientation, causing liberals to place greater weight upon issues like getting minorities into college and helping the disadvantaged and conservatives to show greater concern with legislating against abortion and homosexual marriage.<sup>27</sup>

TMT helps us understand why 9/11 initially inspired personal meaning-seeking and national unity but, with time, helped to fuel ideological gridlock and intergroup enmity. Laboratory research shows that a sustained, blatant reminder of personal mortality initially leads to tendencies toward personal growth and relaxed defensiveness, but that these effects diminish as the awareness of death recedes into the background of consciousness.<sup>28</sup> For example, Kosloff and Greenberg found that immediately after being reminded of their mortality, people showed decreased preference for extrinsic but not intrinsic goals, but when reminded of their mortality and then distracted from such thoughts, people reported a greater desire for extrinsic goals like fame and wealth.<sup>29</sup> Analogously, after 9/11 people were explicitly coping with mortality concerns and clung to their belief systems for personal security rather than to dominate the person next door, but as those mortality concerns receded over the years into the background of the American consciousness, they motivated

a more rigid, comparative form of worldview defense that seems to have fueled many cultural and political controversies.

### **Terror Mismanagement: Troubles in Coping with a Cultural Trauma**

In addition to these political, religious, and ethnicity-based consequences, 9/11—both the attacks themselves and the haunting memory of them—presents an emotionally distressing, at times overwhelming, reminder of the fragility of life. Much like Pearl Harbor or Hiroshima, 9/11 was an emotional shock to an entire cultural system, one that remains partly unhealed. Salzman and Halloran have used TMT to propose the development of a diagnosable “cultural trauma syndrome,” based on the premise that violent assaults (such as colonizing or terrorist acts) perpetrated against a collective with explicit intent to discredit or eradicate that collective’s worldview are more than mere physical infringements.<sup>30</sup> Considering this, we are inclined to agree with Hartmann and Basile, who—having found an increase in the intensity of dream images of a random sample of Americans after 9/11—proposed that the terrorist attacks “produced some degree of trauma or at least serious stress in everyone living in the United States.”<sup>31</sup>

There is evidence that Americans in general have suffered emotional upheaval after 9/11, and that adverse psychological effects of 9/11 persisted months after the attacks.<sup>32</sup> New York City inhabitants have varied in their long-term responses to the attacks,<sup>33</sup> but, consistent with TMT, Updegraff, Silver and Holman recently found that those less successful in procuring a meaningful account of the attacks experienced elevated fears of future terrorism, leading to poorer psychological adjustment years after the attacks.<sup>34</sup>

Further findings from Kosloff and colleagues have directly linked death-related concerns to 9/11-related distressed outcomes among otherwise healthy individuals.<sup>35</sup> In two studies, MS increased retrospective reports of psychological dissociation during the 9/11 attacks; individuals attempted to defuse threatening, 9/11-related cognitions and emotions by viewing them as surreal and distant from the self. While initially a protective response, dissociation during a trauma is associated with the delayed onset of anxiety-related pathology, presumably because the initial traumatic concerns remain undealt with.<sup>36</sup> Consistent with this process, Kosloff and colleagues found that MS-induced dissociation heightened individuals’ reported concerns with experiencing anxiety, suggesting that persistent memories of 9/11, coupled with the thought of one’s own death, may contribute to long-term distress.<sup>37</sup>

However, TMT also suggests that the impact of cultural trauma should be most pronounced among individuals who generally struggle to maintain faith in their cultural bases of meaning and value. Studies show that the effects of MS are particularly pronounced among individuals incapable of maintaining

a positive self-image or sense of security within the dominant cultural paradigm, such as those prone to chronic depression, low self-esteem, or neuroticism.<sup>38</sup> And MS increases phobic and compulsive tendencies in those with a proclivity for such behavior.<sup>39</sup>

Analogously, evidence suggests the terror induced by the 9/11 attacks had pronounced negative impacts upon those predisposed to psychopathology. In a national longitudinal study of almost 2,000 people, Silver and colleagues found that individuals with a prior mental disorder were highly likely to develop post-traumatic stress disorder (PTSD) symptoms and global distress during the 18 months following the attacks.<sup>40</sup> Furthermore, in a more specific sample of low-income, Hispanic primary care patients at New York Presbyterian Hospital, Neria and colleagues found that 79.6 percent of those patients who screened positive for 9/11-related PTSD displayed comorbidity with one or more other mental disorders (the most frequent being major depression, generalized anxiety disorder, and panic disorder).<sup>41</sup>

In sum, the 9/11 attacks exposed most Americans to intense death-related fear and anxiety while bringing them into distressingly close contact with the fragility of their cultural meaning system. Through direct and indirect exposure to the attacks, the cultural trauma of 9/11 became widespread. Accordingly, memories of those events, coupled with humans' symbolic awareness of their mortality, may contribute to negative mental health outcomes, especially among those for whom protective sources of meaning and value are tenuous and unreliable.

## Conclusion

The 9/11 attacks forced Americans to take a long hard look at the existential reality of death, while simultaneously cleaving them from secure faith in the permanence and inviolability of their culture. Like participants in a TMT experiment on a grand scale, American citizens sought to put a convincing cap on the death anxiety spurred by those tragic events, initially by allaying literal concerns with mortal vulnerability, and later by rallying in support of their religious and political values and beliefs.

Still, eight years later, concerns with national security remain quite high. Americans are willing to endure long lines at airline security checkpoints with no more than a bit of grumbling, perhaps also aware that such measures serve the broader aim of protecting themselves and close others from further devastation at the hands of terrorists. While the societal imprint of proximal responses to the 9/11 attacks can still be observed in such lingering concerns, distal terror management responses to 9/11 have altered radically over time as American social and political climates have changed. In the wake of 9/11, Americans initially rallied together in support of God and country, and former president George W. Bush. Yet later, Americans became disillusioned with

Bush and his policies, rallying instead in support of Barack Obama's voice of change and revitalized Americanism. At the same time, however, long-standing adherences to party-line beliefs seem as prevalent as ever, perhaps even strengthened by apocalyptic rhetoric reminiscent of the dire messages following the 9/11 attacks but now applied in the context of polarizing debates over border security and global warming.

Hopefully, additional research will identify factors that reduce the tendency of death-related concerns to promote divisiveness in post-9/11 American culture. Indeed, some experimental investigations have shed promising light on this prospect, showing that defensive responses to mortality are attenuated when individuals personally prioritize values of tolerance or encounter the idea that all humans share a common identity (*homo sapiens*) that cuts across differences within and between cultures.<sup>42</sup> Additionally, deeper contemplation of personal mortality (e.g., thinking in particularly explicit, prolonged and concrete ways about one's death) has sometimes been found to promote less defensive and more growth oriented responses, perhaps because particularly realistic confrontations with death heighten appreciation of the individuals and experiences one may encounter in this short life.<sup>43</sup> Continued investigations along these lines may thus reveal that emerging conflicts, motivated in part by memories of 9/11 and existential concerns associated with them, can be eclipsed by acknowledging the common human identity we all share, regardless of our cultural background, and the conscious knowledge that we are all equally mortal.

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# Waging Terror: Psychological Motivation in Cultural Violence and Peacemaking

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In the aftermath of the terrorist attacks of September 11, 2001, the United States led the charge in a global war on terrorism using hardline violent military actions to pursue terrorist groups in many nations. Thus far, this war has led to two armed conflicts in Afghanistan, where al Qaeda was known to reside and train potential future terrorists, and in nearby Iraq, where some leaders feared weapons of mass destruction would be given to terrorist groups. Some scholars have suggested that using strictly hardline aggressive military action only serves to exacerbate the problem of terrorism because it fails to address the underlying motivations of terrorism.<sup>1</sup> Indeed, this aggressive military action targeting terrorists seems to have had the unintended effect of increasing the number of terrorist acts around the world. Terrorism scholars Bergen and Cruickshank report a sevenfold increase in instances of fatal terrorist attacks worldwide since the U.S. President George W. Bush declared war on terrorism.<sup>2</sup> More specifically, the incidence of attacks has jumped from 28.3 attacks per annum to 199.8 per annum. We have also witnessed a drastic increase in the number

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of terrorism related deaths per year, from 501 in the years prior to 9/11 to 1,689 per year by 2007.

Alarming, this increase in the prevalence of terrorism is not confined simply to Iraq and Afghanistan. Other areas have also experienced this increase, albeit to a lesser degree. Consider the 2004 bombings in Madrid, 2005 bombings in London, and other conflicts that seemingly should have little to do with the wars in Afghanistan and Iraq, such as those in Kashmir and between the Chechen separatists and Russia.<sup>3</sup> This chapter will examine the psychological factors that serve as catalysts to the cycle of terrorist and extreme counter-terrorist violence from the perspective of terror management theory (TMT).<sup>4</sup> After reviewing research relevant to these ideas, we then discuss potential ways to defuse the conflict and promote more peaceful intergroup relations.

### **Terror Management Theory**

TMT is not specifically a theory of terrorism, but rather a theory of human motivation derived from the writings of the Pulitzer Prize-winning existential cultural anthropologist Ernest Becker.<sup>5</sup> This theory begins with the proposition that human beings and most other living organisms have evolved mechanisms gearing living beings toward continued life and self-preservation. This orientation is problematic for humankind because humans are uniquely aware of the inevitability of death. In order to combat the existential anxiety that arises from this conflict, people devise and adhere to cultural worldviews which imbue life with meaning and create the possibility that its believers may transcend their worldly deaths either literally, through an afterlife of some type (e.g., Heaven, Nirvana), or symbolically, by being part of something greater and longer-lasting than oneself and being remembered by others for one's life accomplishments (e.g., authoring a bestselling book or winning a Nobel Prize). The prospect of continued life motivates members of a society to adhere to the prescriptions of behavior set forth by a particular worldview, which garners them a sense of value and self-esteem and thereby buffers the anxiety that results from human awareness of the inevitability of death.

For many, this anxiety buffering system works well, but becomes problematic when believers in one worldview encounter adherents of another. The socially constructed nature of cultural worldviews renders them inherently fragile, requiring continuous validation to maintain their death-anxiety buffering efficacy. When others share one's beliefs and values, it implies that these beliefs and values are correct and reflect external reality rather than personal whim, bias, or delusion. Consistent with the idea that consensually validated worldviews provide protection against existential anxiety, much research has demonstrated that when people are led to think about death they display increased preference for people who support their cultural beliefs and

decreased liking for and aggression against people who threaten their cultural beliefs.<sup>6</sup> Rosenblatt et al. also showed that death reminders make people more punitive toward people who engage in moral transgressions.<sup>7</sup> Similarly, threatening someone's worldview increased the accessibility of death thoughts; that is, it brings such thoughts closer to consciousness.<sup>8</sup> These increases in thoughts of death resulting from threats to cultural belief systems and self-esteem are problematic because they often foster more aggressive intergroup interactions.

According to TMT, people have several common recourses when encountering challenges to their worldviews. They may attempt to convert others, thus bolstering support for their own way of life by increasing social support for their worldview. Successfully converting others to one's own ideology increases the number of followers of one's own ideology and with it, the ideology is consensually validated. In a similar vein, believers of one worldview will sometimes try to accommodate threatening aspects of another worldview into their own. If conversion and accommodation fail to defuse the worldview threat, believers of one worldview often simply derogate believers of alternative worldviews. This approach is not uncommon in the contemporary Western discussion of terrorism. Westerners often assume terrorists to be mentally ill or weak and brainwashed by wicked leaders.<sup>9</sup> Religious terrorists appear to use this same approach in response to targets that threaten their worldview, declaring that nonbelievers are heretical infidel slaves to an evil empire.<sup>10</sup> There is, however, another, more macabre response to particularly threatening outgroups. This response entails annihilating the adherents of the threatening belief system and can be seen throughout history in genocides such as the Holocaust in Germany and the Rwandan conflict.

These central tenets of TMT have been empirically examined in over 400 experiments conducted in 21 countries using a diverse array of methodological approaches.<sup>11</sup> Reminders of death have been shown to affect a host of other attitudes and behaviors ranging from close relationships, nationalism, religiosity and self-esteem striving, political preferences, prejudice, risk-taking, sports-team preferences, time spent sunbathing, and sexual attitudes.<sup>12</sup> Together, these findings suggest that cultural belief systems and self-esteem do serve to protect us from our existential fear of death.

### **The Cycle of Terrorist and Counterterrorist Violence**

In recent years, TMT researchers have more directly examined factors related to the cycle of terrorist and counterterrorist violence. Pyszczynski et al. conducted parallel studies on American and Iranian college students looking at their support for the usage of extreme military tactics and terrorist tactics, respectively.<sup>13</sup> American participants led to think about death displayed increased support for using extreme military tactics including the

use of nuclear and chemical weapons even at the expense of killing tens of thousands of innocent Middle Eastern civilians. Iranian participants were led to think about death or a negative control topic and then, instead of being asked about support for using military tactics in the Middle East, they were asked to evaluate two students, one who espoused a pro-martyrdom attitude and one who espoused an anti-martyrdom attitude. In the control condition, Iranian participants significantly preferred the anti-martyrdom student over the pro-martyrdom student. But when led to contemplate death, Iranian participants shifted their preference to the pro-martyrdom student who was willing to sacrifice his life to defend the Iranian way of life. Hirschberger and Ein-Dor replicated this same basic pattern among conservative Israeli settlers in the Gaza Strip.<sup>14</sup> Death reminders led these settlers to view the use of violence as justified. These findings suggest that death reminders appear to enhance people's support for violence in an effort to defend one's cultural beliefs and buffer existential anxiety.

Other research supports the old adage that violence begets more violence.<sup>15</sup> Landau et al. found that this may even occur outside conscious awareness.<sup>16</sup> Landau et al. subliminally primed the 9/11 attacks and found that this subliminal prime, consciously undetectable by participants, led to increased accessibility of death-related thoughts. Extending this finding, Gillespie and Jessop found this same basic effect among Europeans by exposing them to media coverage of the 9/11 United States attacks or 7/7 London bombings.<sup>17</sup> Vail, Motyl, and Pyszczynski took this one step further by demonstrating heightened death thought accessibility among people who viewed a series of pictures of buildings being blown up or struck with airplanes.<sup>18</sup> Importantly, these researchers also found heightened death thought among participants who viewed pictures of buildings that had been previously partially reduced to rubble by bombing attacks or missiles, suggesting that the aftermath of violent terrorist attacks or bombing campaigns produce lasting effects that may serve as day-to-day death reminders. However, this study also found that viewing images of similarly distraught buildings that are under (re)construction do not elicit these heightened thoughts of death. These findings may be particularly relevant to the urban landscapes of the war-torn countries of Afghanistan, Iraq, Lebanon, Israel, Palestine, Tamil Eelam, and others around the world, where we see perpetually high levels of intergroup violence and hostility. Thus, such findings would suggest that regions plagued with violence and killing would be especially conducive to the development of intensified intergroup animosity and violence.

This is evident when considering the fact that in the three years following the 2003 invasion of Iraq, that country bore witness to more suicide bombings than the entire world had in the previous 22 years.<sup>19</sup> Similarly, Mogahed reported that from 2004 to 2006, there was a threefold increase in the number of acts of terrorism in the Middle East compared to the previous two years.<sup>20</sup>

Bergen and Cruickshank noted that there were a record number of terrorist attacks in 2007.<sup>21</sup>

Interestingly, TMT also helps explain the curious phenomenon in which the drive to survive pushes some people to end their own existences through acts of suicide terrorism. The cultures that produce many suicide bombers tend to describe their act not as one of the finality of their life, but rather as a courageous act that grants them both literal and symbolic immortality. For instance, some Middle Eastern countries have annual "Martyrs Days" that closely resemble the American holidays of Memorial Day and Veterans Day.<sup>22</sup> To supplement this symbolic immortality, many Islamic terrorists are promised an idyllic afterlife complete with 72 beautiful virgins. These immortality assurances assuage believers of their death-related fear and encourage them to commit egregious atrocities in defense of their group.

Stern conducted a series of ethnographic interviews with terrorists from around the world with myriad belief systems and found that terrorists all seem to be driven to violence by very similar factors.<sup>23</sup> Specifically, she found that members of terrorist organizations all shared feelings of alienation and humiliation, and all felt that injustices had been committed against them. The experience of any of these emotions need not be direct and personal, although it may sometimes be; the experience must be something that has affected the culture to which the people belong or the fellow members of that culture, with whom they identify. For example, Hamas terrorists often indicate that Palestinians are humiliated on a daily basis due to their relative deprivation compared to the Israelis and the many Israeli checkpoints and security outposts that have been erected on the Palestinian territories. On the other side of the conflict, Israelis may be humiliated by the occurrence of fatal suicide bombings claiming the lives of many innocent Israelis and this humiliation may motivate the Israelis to adopt strict, defensive postures with respect to the neighboring Palestinian areas.

It should also be pointed out that the power of humiliation is not limited to smaller nations or subnational groups. Lifton suggests that people living in superpower countries can experience this same sense of humiliation just by recognizing that their country is not invulnerable to attacks.<sup>24</sup> Consider that very few Americans were actually directly affected by the attacks of 9/11. Rather, Americans identified with the symbolic nature of the attacks as being against the American people, the American government and economic policies, and ultimately, the American culture. This identification led many Americans to support using extreme military action in Afghanistan and Iraq. Lifton refers to this type of humiliation as the *superpower syndrome*. Landau et al. and Gillespie and Jessop both demonstrated that thinking of terrorist acts committed against their homelands leads people to experience heightened thoughts of death and presumably an increased willingness to use violence against threatening outgroups.<sup>25</sup> Other social psychological research

supports this notion more generally and has shown that when people observe transgressions being committed against their group, they become willing to engage in extreme actions to defend their group, even at extreme expense to themselves.<sup>26</sup>

An ABC News Poll, supporting these findings, shows that more than one in every three Iraqis feel humiliated rather than liberated.<sup>27</sup> Wessels examined the feelings and reactions of Afghans and Iraqis in response to the presence of the United States and some of its Western allies.<sup>28</sup> In interviews with people who opposed and supported the Taliban in Afghanistan, he found that people in both groups viewed the U.S.-led war in Iraq as unjustified and as a major contributor to the rise in recruitment of terrorists in the region. Similar beliefs prevailed in Iraq. Among Iraqis who both supported and opposed Saddam Hussein, Iraqis viewed the overthrowing of his regime in a negative light because it permitted greater Western domination of the region. Furthermore, many of those interviewed blamed the increased lawlessness, violence, and rape in the region on the U.S.-led invasion. Many of the people interviewed also indicated that the invasion motivated them or people they knew to join violent jihadist groups. Similarly, Fontan indicated that more than 80 percent of Iraqis in both Sunni and Shi'ite parts of Baghdad view Western forces as "occupiers" rather than "liberators."<sup>29</sup>

On first blush, this evidence might lead one to think that violent challenges can only result in violent retaliation and that violence necessarily begets more violence. Luckily, it appears that increased hostility is not an inevitable response to bleak reminders of our existential predicament.

### Promoting Peace

An emerging literature has recently begun to explore a variety of approaches derived from TMT to counteract the common negative responses to death reminders. From this perspective, people are driven to live in accordance with the behaviors prescribed to them by their worldviews in order to obtain a sense of meaning in the world. As we have seen thus far, encountering people with competing belief systems often evokes anger and hostility. These responses seem contrary to the values of beneficence, tolerance, and compassion that are inherent to most cultural belief systems. In justifying violence, people may selectively attend to specific aspects of a worldview. Consider the Bible's instructions to seek vengeance by taking "an eye for an eye," while loving your enemy and turning the other cheek. The Koran has similarly conflicting passages instructing followers to take "an eye for an eye," while doing "goodness to others." Social psychological theory and past research has demonstrated that most belief systems have some conflicting aspects and that behavior can be steered by activating particular aspects of a belief system.<sup>30</sup>

### *Compassionate Values*

Recognizing that most religious traditions have conflicting passages that could be interpreted as hostile or peaceful, Rothschild, Pyszczynski, and Abdollahi conducted a series of studies to test whether priming compassionate religious values might decrease support for violent policies and tactics following death reminders.<sup>31</sup> In the first two studies, Rothschild et al. asked participants to think about death, exposed them to compassionate biblical values, compassionate non-biblical values, neutral biblical statements, or neutral non-biblical statements, and then measured participants' support for the war on terror. Participants scoring high on a measure of religious fundamentalism responded to the death reminders by becoming more supportive of the war on terror unless they were primed with compassionate biblical values.<sup>32</sup> This study was replicated among fundamentalist Shi'ite Muslims in Iran. Iranians were asked to think about death, read a set of compassionate values that were either labeled as Koranic or secular, and then were assessed on their attitudes toward the Western countries. Again, a death reminder led to increased anti-Western attitudes unless participants were first primed with compassionate Koranic values—under these conditions, the death reminder actually *decreased* anti-Western attitudes. These studies suggest that although religious fundamentalists are often among the most aggressive and most supportive of war, this aggression can be eliminated by emphasizing the compassionate aspects of their specific worldviews.<sup>33</sup>

### *Common Humanity*

Dr. Martin Luther King Jr. often compassionately reminded people that we are “our brothers’ keeper.” In this way, Dr. King and many other activists throughout history have suggested that if people could only recognize that all people share a common humanity with each other then conflict would be substantially reduced. Classic social psychological theories have also suggested that simply expanding the inclusiveness of our ingroups to include all of humanity can reduce intergroup conflict.<sup>34</sup> Motyl et al. conducted a series of studies exploring this possibility.<sup>35</sup> In the first study, American participants first wrote short essays about death or a negative control topic (e.g., physical pain), then evaluated one of three sets of pictures depicting American families, American individuals, or families from various countries engaging in typical human behaviors (e.g., eating dinner, playing games), and finally completed a measure of implicit anti-Arab prejudice. As expected, participants primed to think of death exhibited increased implicit anti-Arab prejudice when viewing pictures of Americans (the control conditions), but decreased implicit anti-Arab prejudice when viewing the pictures of international families. A second study observed similar effects on an



explicit measure of attitudes toward immigrants.<sup>36</sup> These researchers found that death reminders led participants to express increased anti-immigrant attitudes after reading a set of common childhood memories purportedly penned by Americans, but not after reading the same childhood memories purportedly penned by various foreigners.

### *Common Catastrophe*

Recognizing that all people share a common humanity also suggests that, in many cases, a catastrophe that directly affects some people may actually indirectly affect all people. This notion is expressed through the philosophy of *ubuntu* that was preached extensively in South Africa in the wake of apartheid. This philosophy suggests that what happens to one person or group of people necessarily affects all people everywhere. Motyl, Rothschild, Pyszczynski, Vail, Greenberg, and Goldenberg tested this possibility by asking participants to think about death or a negative control topic, then to consider either how the global climate crisis would affect people around the world or how an earthquake would affect people in a small region, and then complete a measure of support for peacemaking.<sup>37</sup> As hypothesized, participants led to think about death and a localized catastrophe displayed a decreased willingness to engage in peaceful diplomatic actions with other countries. However, when participants were led to think about death and the common catastrophe of global climate change, participants exhibited an increased willingness to peacefully engage in diplomatic talks with other countries. Taken together, these studies suggest that recognizing the humanity of other people may undermine our ability to engage in violent acts against them and even promote peaceful interaction.

### *Infra-humanizing Violence*

Related to the notion of encouraging people to recognize each other's shared humanity is the need to feel like uniquely human, symbolic beings.<sup>38</sup> Accordingly, one of the key psychological mechanisms that enables people to commit atrocities and engage in violent behaviors against other people who belong to other groups is *infrahumanization*.<sup>39</sup> In intergroup conflicts we can more easily engage in violent acts against others if they are perceived as less than human because then they are seen as beyond the realm of moral consideration. Consider, for example, how the Bosnians in the Balkan wars, Jews in the Holocaust, and Tutsis in the Rwandan conflict were equated to vermin by their perpetrators.<sup>40</sup> Motyl, Pyszczynski, and Hart questioned whether this mechanism could also be used to prevent people from engaging in violent acts.<sup>41</sup> In this study, participants thought about death or a negative control topic, read a passage depicting violence as a behavior that is either uniquely human or very animalistic (effectively *infrahumanizing* the *behavior* of violence), and then

completed a role-playing assessment of support for extreme military action against Iran. This study indicated that among right-wing authoritarian participants, death reminders and depictions of violence as a uniquely human behavior led to increases in their support for military action. These same participants, however, became significantly *less* supportive of military action when they read about how violence was an animalistic, infrahuman behavior. Together, with the previously discussed research on common humanity reminders, it appears that we have an existential need to feel that we are unique, symbolic beings and when we perceive others as being unique, symbolic beings much like we are, we can no longer endorse violence against others.

### *Promoting Moderation*

Some scholars have suggested that conflict is incited by fundamentalist thinking.<sup>42</sup> If this were true it seems that one could reduce hostilities by empowering moderates. Kruglanski recently reported that officials in Singapore and Saudi Arabia have implemented programs that may discourage terrorist violence and political extremism.<sup>43</sup> In Singapore, moderate religious clerics have been contracted to preach peaceful interpretations of the Koran to fundamentalist Muslims in prisons. In Saudi Arabia, peaceful activists have been recruited to preach a message of peace on Internet discussion boards. It appears that each of these approaches is leading to a decrease in support for terroristic ideologies. It is still early to draw firm conclusions from these naturalistic experiments, but these preliminary findings are encouraging.

### **Conclusion**

In this terror management analysis of the cycle of terrorist and counterterrorist violence, we provide an empirically based psychological explanation for an incredibly complex issue that has cost millions of human lives over the span of thousands of years. Clearly, this is no simple issue and cannot be easily solved. Our hope, however, is to encourage a thorough, empirical, and interdisciplinary approach to the study of terrorism. Simply assuming that those who oppose us are evil, inferior, irrational, or subhuman misses the mark and will likely be ineffective in quelling the conflict. Rather, one should recognize that while others may have differing cultural beliefs, they are still human beings motivated to obtain value in life and defend against the fears resulting from the human condition and the inevitability of death. Essential to any conflict resolution strategy is an acceptance of this idea and the notion that most conflicts concern far more than simply territory and resources. When considering the problem of terrorism, one must take into consideration the psychological factors that ignite intergroup conflict if there is any hope for laying the groundwork for a lasting intergroup harmony.

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# Coping with a Collective Trauma: Psychological Reactions to 9/11 across the United States

*Marnie Brow and Roxane Cohen Silver\**

September 11, 2001, is a date firmly imprinted in the collective memories of residents of the United States. On that day, every person in the country, as well as Americans traveling and living around the world, experienced a tragedy unprecedented in its scope and impact on both individual lives and the national psyche. Simultaneous terrorist attacks destroyed lives, brought down buildings, and shook the foundation of many core values and beliefs that define this country. An estimate of well over 100,000 people witnessed the terrorist attacks directly,<sup>1</sup> while countless others watched or listened to television, the Internet, or other real-time media as these events unfolded. Then, in the weeks that followed, a myriad of both new and recurring haunting and graphic images, predictions of additional attacks, and newly-experienced sights such as armed police and soldiers in communities, reminded residents time and again of that day.

Shortly after 9/11, a team of researchers from the University of California, Irvine (UCI) began a longitudinal study of the various impacts of the attacks in and on the United States. The primary purpose of this research was to document the variability in both acute and longer-term responses to the largest community-based trauma in recent U.S. history and to explore factors

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associated with these responses. This broad-scale study was one of the first to recruit and systematically follow a nationally representative sample of several thousand individuals, beginning shortly after a major traumatic event and concluding three years later, and it was the only comprehensive investigation of emotional, cognitive, and social responses to the attacks. Informed by this unprecedented set of data and supporting information,<sup>2</sup> our team has sought to understand people's responses to this collective trauma and its aftermath, as well as to identify those specific personal, social, and psychological factors that predict differences in outcomes, both immediately and over time.

In this chapter, we present a brief overview of findings from this study: how people across the country fared emotionally in the early weeks, then years, that followed September 11, 2001, how they coped with acute reactions to the event, and several other individual characteristics related to both acute and ongoing reactions. We conclude with recommendations for future research on large-scale disasters and offer a few suggestions for mental health providers.

### Study Overview

Two of the primary goals of this project were to investigate the psychological and social processes that help explain individual differences in response to the terrorist attacks and to identify early predictors of long-term adjustment to the attacks. Working with Knowledge Networks, Inc. (KN), a survey research organization that had previously recruited a nationally representative web-enabled research panel of potential respondents, the UC Irvine team administered anonymous web-based surveys at seven time points ("waves") following 9/11 to a sample of U.S. residents. Specifically, assessments were conducted at two weeks, and two, six, 12, 18, 24, and 36 months post-9/11. Respondents answered questions covering a broad range of topics, including, but not limited to: exposure to the attacks; physical, psychological, and emotional health; behaviors, attitudes, and beliefs related to the attacks; religiosity and world-views; personality; perceived social support; and prior and ongoing negative life events. Given that surveys were administered to a preexisting panel of KN members, physical and psychological health and health care utilization data prior to the attacks also were available on most study participants.<sup>3</sup>

This project expressly targeted a broad, national sample; therefore, only 2 percent of respondents reported direct exposure to the events as they were occurring, such as being at, or within view of, the World Trade Center or Pentagon, or on the telephone with someone who was in one of the buildings or airplanes. Less than 5 percent of the sample lost a family member, loved one, or personal property as a result of the attacks. Study results, however, indicated that psychological effects were not limited to those directly affected and the degree of response was not directly proportional to the amount of loss, level of exposure to the attacks, or proximity to the World Trade Center or Pentagon.<sup>4</sup>

### Acute Stress Responses Following 9/11

Approximately two weeks after the attacks (Wave 1), panel members completed the Stanford Acute Stress Reaction Questionnaire (SASRQ), a questionnaire designed to assess symptoms of acute stress disorder (ASD). The sample of 2,729 adults ranging in age from 18 to 101 ( $M = 48$  years) reported an average of five symptoms of acute stress: nearly 60 percent endorsed feelings of anxiety or psychological arousal (e.g., *I felt irritable and had outbursts of anger*), and over 40 percent reported re-experiencing the events or images of 9/11 in their minds (e.g., *From time to time, I suddenly felt as if the plane crashes and buildings falling were happening again*). Almost 31 percent of respondents reported trying to avoid disturbing thoughts or images of the attacks (e.g., *I actively tried not to think about these events*), and nearly 32 percent felt dissociated from themselves or the trauma (e.g., *I experienced myself as though I were a stranger*).<sup>5</sup> Applying criteria B, C, D, and E for acute stress disorder from the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* (three or more dissociative symptoms, one or more re-experiencing/intrusive symptom, one or more avoidance symptom, and one or more arousal/anxiety symptom),<sup>6</sup> approximately 12 percent of adults were classified as having “high” levels of acute stress symptoms. Not all *DSM-IV* criteria for acute stress disorder (e.g., feelings of fear, horror, or helplessness; duration of symptoms) were measured; therefore, no clinical diagnosis was intended or assumed.<sup>7</sup>

A few other research teams also examined the immediate impact of the 9/11 attacks in nationally representative samples. For example, in their study of acute stress symptomatology three to five days after the attacks, Schuster and colleagues found that 44 percent of adults claimed “substantial stress” levels on at least one of five questions about their reactions, and one to two months following the attacks, Schlenger and colleagues found elevated levels of distress, although not at clinically significant levels.<sup>8</sup> Thus, it is clear from several large-scale studies that the terrorist attacks were acutely felt nationwide and psychological symptoms were not limited to those who lost someone close to them or experienced or witnessed the attacks directly. Media, and television in particular, were undoubtedly responsible for transmitting the psychological impact of the 9/11 attacks across the country.

### Emotional Responses over Time

Over six additional waves of data collection, panel members were asked to report and rate their feelings and reactions specific to the terrorist attacks, prompted by a sentence such as, *Now we'd like to ask you some questions about certain experiences you may or may not have had surrounding the 9/11 attacks and their aftermath*. In this manner, we hoped to capture the longitudinal

perspective of recovery, or lack thereof, relative to 9/11, as acute memories faded and patterns of life beyond that day fell into place. Thus, reported thoughts and behaviors indicated the presence and level of global distress, as well as posttraumatic stress symptomatology. Similar to the methodology used to assess acute stress, rates of high levels of posttraumatic stress symptoms were calculated using *DSM-IV* criteria B, C, and D for posttraumatic stress disorder (PTSD), that is, at least one re-experiencing symptom, three or more avoidance symptoms, and two or more arousal symptoms.<sup>9</sup> In addition, similar to the assessment of acute stress, not all *DSM-IV* criteria (e.g., degree of functional impairment, duration of symptoms) were measured. Therefore, and because most respondents did not meet a basic requirement for PTSD diagnosis—direct exposure—no clinical diagnosis was intended or assumed.

Results revealed that the number and nature of symptoms reported by study respondents who were not directly exposed to the terrorist attacks mirrored that of symptoms reported by direct trauma survivors.<sup>10</sup> In other words, the structure of the various factors that underlie the diagnosis of PTSD (e.g., re-experiencing, hyperarousal, avoidance) looked similar, regardless of whether the individual had been directly, or indirectly, exposed to the attacks. It is both interesting and important to note that examining posttraumatic stress symptom clustering as set forth in the *DSM-IV-TR*<sup>11</sup> found no obvious dose-response relations relative to the degree of exposure, amount of loss, or proximity to the attacks. We did *not* find that as “objective” loss or trauma exposure decreased, so did distress.

By March 2002 (six months post-9/11), the number of respondents reporting stress symptoms had declined. Re-experiencing the events in one’s mind remained the most highly-reported symptom (26 percent, compared with 48 percent of participants at two months post-9/11), and the number of adults reporting high levels of posttraumatic stress symptoms, as defined previously, dropped from 17 to 6 percent. The one-year anniversary saw a spike in those symptoms: over 43 percent of respondents stated that the anniversary reactivated thoughts and feelings they had experienced shortly after 9/11 at least “somewhat.” Nonetheless, in the years following the attacks, these emotional and psychological responses continued to decline in frequency and intensity.

A terrorist attack psychologically targets an entire population, not merely those in physical proximity to the attack. Most research on reactions to traumatic events has focused on the impact on those immediately affected. Less frequently explored are the psychological consequences to the individuals beyond the immediate community in which the event occurs. In the case of the 9/11 attacks, the population of the United States was the terrorists’ intended psychological target. Indeed, national responses echoed the reactions of individuals who experienced the events of 9/11 firsthand (i.e., direct exposure or direct loss).<sup>12</sup>

### Predictors of Responses and Adjustment over Time—A Focus on Individual Differences

Given the variability in reactions from respondents across the United States, a great deal of our continuing research has focused on identifying processes and individual differences that help explain people's adjustment over time. In this section, we discuss some of the findings from these analyses.

First, the use of certain coping strategies shortly after the terrorist attacks strongly predicted both posttraumatic stress symptoms and global distress over time.<sup>13</sup> Responding to statements assessing what they were doing to deal with their stress since the attacks, panel members reported how frequently they had relied on particular coping strategies.<sup>14</sup> Active coping in the immediate aftermath of the attacks was the only strategy that appeared protective against ongoing distress. However, disengaging from coping efforts (e.g., "giving up"), self-blame, and using denial or self-distraction appeared to increase the likelihood of experiencing ongoing distress and posttraumatic stress symptoms over time.

Whereas our early work involved analysis of specific relationships between coping strategies and emotional distress, subsequent research expanded to examine the various mediated and moderated relationships between distress, coping, and individual differences. One of those individual differences was personality. Personality traits are defined as enduring characteristics and dispositions that contribute to an individual's unique way of living and interacting in this world. One of the most popular and empirically-supported personality trait models is commonly referred to as the *Big Five* model,<sup>15</sup> composed of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.<sup>16</sup>

Traits clearly were related to the use of specific coping strategies immediately after the terrorist attacks.<sup>17</sup> Respondents who scored higher in neuroticism were significantly less likely to accept the attacks or try to actively cope with them than those who scored lower on that trait. Instead, they chose denial, behavioral disengagement, and self-blame. Neuroticism was positively associated with both acute and longer-term distress. As opposed to neuroticism, high levels of each of the other traits were positively related to active coping, acceptance, instrumental support, and planning, and negatively related to denial, behavioral disengagement, and self-blame. The other traits also had significant relationships with distress, albeit negative: increases in post-9/11 distress were associated with lower levels of extraversion, openness, agreeableness, and conscientiousness. We then extended our investigation and found distinct differences in outcomes when considering two traits in combination, as opposed to single traits.<sup>18</sup> For example, individuals high in neuroticism who also were high in extraversion reported significantly fewer symptoms of global distress following the attacks than those low in extraversion. On the

other hand, for participants with *low* levels of neuroticism, extraversion was not related to distress following the attacks. One therefore may cautiously conclude that, for respondents with high neuroticism, high extraversion, if also present, predicted lower levels of global distress.<sup>19</sup>

Another individual difference predictor of the use of coping strategies and levels of distress following the attacks involved respondents' conceptualization of time.<sup>20</sup> Briefly, the construct of time consists of several facets, including perspective—the overall cognitive involvement in past, present, and future life domains<sup>21</sup>—and orientation—the primary focus on one particular time frame (e.g., the past or the future). Recent research has expanded the orientation facet to include contexts within the primary time frame.<sup>22</sup> For example, future anxiety involves a tendency toward pessimism when predicting future solutions to global problems.<sup>23</sup> Respondents in our research who expressed a goal-oriented future perspective tended to engage in active coping behaviors, such as planning, and reported lower levels of distress over the years following 9/11. On the other hand, future anxiety (i.e., fear of future terrorism) was related both to people's tendency to worry and to higher levels of emotional distress. Interestingly, some consider worrying as a way of preparing (i.e., planning) for a possible future attack. These apparent contradictions of the strategy of planning may be explained by whether one perceives the act to mean specific, immediate actions for a possible stressful event or a more general orientation toward one's future and goals.

A final individual difference related to coping strategies and emotional distress is the concept of searching for, and perhaps finding, meaning surrounding events such as the 9/11 attacks. Of importance to note is that the act of searching for meaning does not necessarily result in finding that meaning. Two months after the attacks, approximately 69 percent of panel members actively were trying to make sense of the attacks. In addition, acute stress was the strongest of all event-specific predictors of respondents' search for meaning. That search persisted for most of these respondents over the following year, yet most reported never finding any kind of meaning in those events.<sup>24</sup> Indeed, neither the passage of time nor the intensity of a person's search for meaning increased the likelihood of finding meaning over the years.

In fact, Americans who were engaged in a search for meaning in the early aftermath of the attacks were more likely to report posttraumatic stress symptoms over the following two years than those who were not searching for meaning. In contrast, Americans who were able to find some way of explaining the event in the early aftermath were less likely to report subsequent fears of terrorist attacks and reported fewer subsequent posttraumatic stress symptoms over time than those who could not make sense of it. People who tried to look for positive consequences and who sought instrumental support from others (i.e., sought other people's help and advice) were more likely to find meaning. In contrast, engaging in denial and seeking emotional support (i.e., getting

comfort and understanding from another) in the early aftermath of 9/11 was negatively associated with finding meaning.

### **Additional Variables Associated with Post-9/11 Response**

In addition to the individual difference factors described above, our research demonstrated that those who had been diagnosed with mental health difficulties (anxiety disorders, depression) *prior to 9/11/2001* were more likely to respond to the attacks with posttraumatic stress symptoms and higher levels of distress over time. People's prior traumatic life experiences, and the stressful events they experienced in the intervening years after 9/11, were other important factors to help account for the variability in response. Finally, we found that the acute stress response to 9/11, as well as the posttraumatic stress symptom trajectory over the year post-9/11, were strong predictors of acute stress response to a subsequent national stressor: the Iraq War. Thus, our research suggests that responses to one stressful event may be strongly related to responses to a prior traumatic event, and imply that those who responded with acute distress following the 9/11 attacks may be particularly vulnerable psychologically to subsequent terror attacks.<sup>25</sup>

We also found effects beyond distress and posttraumatic stress symptoms that are the typical focus of investigations on 9/11. Many people in our sample reported finding unexpected positive consequences in the wake of the attacks, such as closer relationships with family members and a greater appreciation of the national altruism demonstrated in the attacks' aftermath.<sup>26</sup> Positive emotions were also prevalent. A narrow focus on psychopathology and clinical outcomes, while ignoring social benefits and community resilience, can paint a distorted picture of people's responses to the terrorist attacks and hide the fact that most individuals were quite resilient. A comprehensive understanding of the impact of traumatic events requires considering both negative and positive outcomes.

### **Conclusions and Recommendations**

In this chapter, we have drawn from a national longitudinal study conducted by our research team to demonstrate that the terrorist attacks of 9/11/2001 had a widespread impact and produced a variety of emotional responses across the United States. Direct exposure to the events of that day previously would have been considered a necessary condition for reactions reported. Yet, the data did not support that condition: responses were not clearly explained by the level of exposure to, or loss resulting from, the attacks. Instead, the data led us to explore several processes that helped account for the variability

in people's responses and individual differences that predicted long-term adjustment to the 9/11 attacks, some of which we have discussed herein. These results guide our recommendations for future research on major catastrophes, and inform both public policy makers and mental health providers who respond to victims of traumas, regardless of the time frame of the event's occurrence.

Specifically, for public policy makers and those who help people recover from tragedy, we offer the following observations. First, one should not expect a simple "dose-response" relationship between exposure and reactions to a disaster. At the same time, we also must acknowledge the powerful impact of people's exposure to the news media's vivid and graphic images, both real-time and in countless reruns. The relationship between television-viewing and distress symptomatology was clear in our study. While individuals are responsible for their own choices whether to watch television (or Internet) coverage, media also are encouraged to consider reporting these events in a manner (e.g., decreased use of horrific images or reporters' accounts from the midst of the action) that may be less devastating to viewers.

Second, the variability of individual reactions to negative events is present both immediately after the event and over time; most people do not follow an easily-defined, set path to recovery. Early predictors, such as those discussed previously, and other individual differences must be considered, and in proper context, prior to determining what may or may not be an abnormal response. Behaviors and reactions that initially appear pathological may subsequently prove quite reasonable over time. However, these same predictors may assist health care providers to identify individuals at greater risk for developing clinical levels of distress, warranting more intense or sustained intervention to assist with recovery.

Finally, we recognize that special populations (e.g., police and fire personnel, first responders to the scene, young children) may be impacted in a completely different way from the general population. Their differential responses should not immediately be considered inappropriate or abnormal. In addition, these populations may well benefit from future research, as well as support and interventions that acknowledge and address the unique qualities of their experience.

With this project and the wealth of information obtained, our research team has been afforded a somewhat unique opportunity to both support the findings of past work as well as examine new questions in the trauma field. Hopefully the United States will never again experience an event of the magnitude and consequences of the 9/11 terrorist attacks. Nonetheless, if it does, we hope that information collected in this program of research can assist in clarifying the coping process more generally so as to advance future conceptual and empirical work in this area. We also hope that future educational and intervention efforts that are designed and implemented in response to terrorism are

evidence-informed so as to be truly sensitive to the needs of individuals as well as the broader community.

### Notes

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# Posttraumatic Stress after the 9/11 Attacks: An Examination of National, Local, and Special Population Studies

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The terrorist attacks on the World Trade Center and the Pentagon on the morning of September 11, 2001, have shattered assumptions of safety for many people living in the United States and abroad. Whether one was in New York, Washington DC, other parts of the country, or elsewhere in the world, the images of how the disaster unfolded and the subsequent rescue, recovery, and rebuilding efforts are apt to be easily recollected from memory. The events are still a part of our everyday experience, filtered through the resulting war on terrorism and subsequent threats and attacks in other parts of the world by terrorist groups.

In the past eight years since the attack, several research teams have collectively built a body of work describing the mental health effects of 9/11.<sup>1</sup> It was initially speculated that the terrorist attacks would have an immediate and long lasting impact on many in the New York and District of Columbia

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metropolitan areas.<sup>2</sup> This was based on evidence from previous research evaluating the 1993 bombing of the Alfred P. Murrah Building in Oklahoma City. The findings indicated that several months after the event, residents of Oklahoma City were four times more likely to exhibit negative stress symptoms compared to residents of Indianapolis and over one-third of persons directly exposed to the blast had clinically significant reactions.<sup>3</sup> Because the 9/11 attacks were unprecedented in their scope, blatantly targeting the democratic and economic viability of the entire United States, researchers also postulated that adverse reactions would be observed on both national and local levels.<sup>4</sup>

Overall the body of scientific literature points to 9/11 having a complex emotional impact on Americans varying in its degree and persistence.<sup>5</sup> The mental health consequences have been dependent on degrees of exposure coupled with demographic and socioeconomic characteristics historically shown to increase one's risk for psychopathology.<sup>6</sup> Given the multifaceted nature of mental health research, the goal of this chapter is to introduce readers to seminal epidemiological studies that have documented the psychological effects of 9/11 at the national and local levels. We first provide readers with a brief description of posttraumatic stress disorder and then focus on observational studies conducted within the first few years of the attacks. While the majority of 9/11 studies have been cross-sectional in design and therefore provide a snapshot of mental health status at one particular point in time, we highlight longitudinal studies in this chapter where possible so readers may obtain a sense of the course of stress reactions. Longitudinal data also serve to help elucidate which factors are associated with long-term impact. The strengths and weaknesses of the particular epidemiological study designs chosen by the investigative teams are beyond the scope of this chapter, but the research presented here warrants our attention, and viewed together, illustrate the variability of stress responses following 9/11.

### What Is PTSD?

History has long documented the mental health effects of trauma. During the U.S. Civil War era, the term *soldier's heart* was used to depict mental and emotional changes resulting from war's horrific conditions. This characterization was followed by *shell shock*, *combat fatigue*, and *traumatic neurosis*; all of which gained use during World War II with the latter included as a diagnosable condition in the first edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM).<sup>7</sup> The fourth and current edition of the *DSM* recognizes that individuals who are exposed to a traumatic event are at increased risk for the anxiety disorder known as posttraumatic stress disorder (PTSD).<sup>8</sup> Six criteria must be met for diagnosis: A person must be exposed to an extreme stressor or traumatic event (Criteria A) to which he or she responded with fear, helplessness, or horror (Criteria B). Three distinct types of symptoms must also be present: the re-experiencing

of the event, avoidance of reminders of the event, and hyperarousal (Criteria C, D, and E, respectively). Re-experiencing symptoms, the most distinctive and identifiable, refer to unwanted recollections of the event such as distressing images, nightmares, or flashbacks; avoidance symptoms consist of behavioral and cognitive attempts to avoid reminders including persons, places and thoughts associated with the event; and hyperarousal symptoms, similar to panic and generalized anxiety disorder symptoms, include insomnia, irritability, lack of concentration, hypervigilance, and increased startle reactions. Finally, the three types of symptoms must last for at least one month and cause functional impairment (Criteria F). It is noted here that a clinical assessment based on these criteria is required for the proper diagnosis of PTSD. However, timely epidemiological studies are frequently large in scope and limited in resources, compelling researchers to rely on self-reported screening tools that characterize a portion of symptoms (i.e., posttraumatic stress symptoms or reactions) or approximate the prevalence of PTSD using questions that focus on criteria C, D, and E. When self-reported assessments are employed, the outcome of interest is referred to as probable PTSD.<sup>9</sup>

Before 9/11, it was estimated that as many as 1 out of 12 individuals develop PTSD at some point in their lives.<sup>10</sup> Community studies have found that PTSD is the most common adverse psychological response following trauma.<sup>11</sup> This involves substantial functional impairment and PTSD is often comorbid with other mental health conditions such as depression, generalized anxiety disorder, and substance abuse. It was estimated that while approximately 50 percent of the cases of PTSD remit within six months of trauma exposure, for almost one-third of sufferers the disorder can persist for years, dominating a person's life. In addition, research on stress reactions after trauma have consistently found that key sociodemographic subgroups such as women, nonwhites and people with preexisting emotional or psychological problems, are at increased risk for PTSD following exposure.<sup>12</sup>

In a review of the disaster literature published since 1980, Galea and colleagues found that the prevalence of PTSD in the general population ranges between 1 and 11 percent during the first few years with slightly higher ranges for individuals exposed to man-made disasters compared to natural disasters.<sup>13</sup> Their review highlighted a wide range of correlates of PTSD including female gender, psychological factors such as guilt and anger, external locus of control, weaker coping ability and low social support. A history of prior traumas, stressors, psychiatric conditions before the disaster are also consistently found to place those exposed to disasters at higher risk for PTSD.

### **National Reactions to 9/11**

Immediately following the terrorist attacks, three national studies found widespread posttraumatic stress symptoms in the general population. Within

the first week after 9/11, Schuster et al. conducted a national random-digit dial telephone survey of 560 adults and found that 44 percent of participants reported substantial stress reactions, defined as a subset of symptoms found to be highly reported by survivors of the Oklahoma City bombing.<sup>14</sup> Though the early assessment period made the study an unacceptable measurement of clinically important outcomes, noteworthy variations in stress reactions were observed. First, respondents in the northeast or those living within 100 miles of the World Trade Center were significantly more likely to report substantial stress reactions (55 and 61 percent, respectively). Second, the study provided the first indication that television viewing of the attacks was associated with traumatic stress reactions in 58 percent of respondents who had viewed an excess of 13+ hours.

One to two months after 9/11, Schlenger and colleagues developed a web-based epidemiological survey of a nationally representative sample of 2,273 adults in order to assess psychological symptom levels and their association to indices of exposure to the attacks.<sup>15</sup> Using a self-reported PTSD-checklist, the prevalence of probable PTSD nationally was 4.3 percent during the second month following the attacks. When stratified by geographic location and key sociodemographic characteristics were controlled for, participants in the New York City metropolitan area on 9/11 were 2.9 times more likely to be probable cases of PTSD than those who were elsewhere. Those in the vicinity of the District of Columbia attack were less likely to be cases. This prompted the authors to suggest that there was less perception of personal vulnerability owing to the fact that the Pentagon was a military attack and caused less devastation in comparison to the New York area. As with Schuster et al.'s study, the risk for probable PTSD among participants was significantly associated with the number of hours of television coverage participants reported watching. In addition the researchers found that the number of graphic events respondents saw on the television was related to the incidence of probable PTSD.

These two studies were followed by a national longitudinal web-based survey that examined whether demographic factors, mental and physical health history, lifetime exposure to stressful events, 9/11 exposures, and coping strategies predicted adverse posttraumatic stress symptoms after the attacks.<sup>16</sup> Utilizing a nationally representative web-based panel, 2,729 adults completed Wave 1 of the survey 9 to 23 days after 9/11. A random sample of 933 panelists residing outside New York City completed Wave 2 two months after the attacks and Wave 3 was completed by 787 of those panelists approximately six months after the attacks. The researchers found that 12 percent of individuals reported acute stress symptoms and 8.9 percent reported symptoms with functional impairment within the first month after the attacks. Using the Impact of Events Scale at Waves 2 and 3, the course of posttraumatic stress symptoms notably declined from 17 to 5.8 percent respectively. High levels of posttraumatic stress were associated with female sex and pre-9/11 physician

diagnosed mental or physical illness. After controlling for these correlates, severity of exposure, measured by a characterization of proximity to the attacks (e.g., watching the events unfold live on television, talking on the telephone with someone involved, personally witnessing or escaping the attacks at the World Trade Center or Pentagon), was found to be a significant predictor of posttraumatic stress symptoms during the six months following 9/11. The odds of experiencing high levels of posttraumatic stress were also significantly greater among individuals who exhibited negative coping behaviors, such as denial, disengagement, and substance abuse, while acceptance of the events was related to reduced symptomatology.

Taken together, the studies highlighted here present clear evidence that post-traumatic stress reactions related to 9/11 were experienced on a national level. High levels were observed within the acute stage of the disaster; symptoms tapered off within six months. However, symptoms remained among many individuals who did not necessarily meet the Criterion A exposure requirement for PTSD as it was originally conceived. Indirect exposure, whether proliferated by media images or concerns about safety and well being following the terrorist attacks, appear to have been associated with symptoms of clinical concern in the general U.S. population. While these findings have challenged the core definition of exposure, from a public health perspective they provided guidance to mental health professionals on how to quickly identify people who were at risk for PTSD development within the first year of the attacks.

### **Reactions in the New York Metropolitan Area**

After the collapse of the Twin Towers of the World Trade Center on 9/11/2001, New York City was left to face the loss of 2,800 individuals, another 3,000 injured and the devastation of Lower Manhattan. While approximately 14,000 people evacuated the towers that day, more than 80,000 people in the metropolitan area lost their job as a result of the attacks, and another 80,000 had their work hours reduced.<sup>17</sup> With the towers completely destroyed, employers had to decide when to resume work activities and where to locate their offices. Many businesses relocated to midtown Manhattan or across the Hudson River in New Jersey, but 25 percent of the 550 businesses located in Twin Towers went out of business and about 10 percent returned to their home headquarters, usually overseas. After the attack, the recovery and cleanup period was both complex and lengthy, taking place at Ground Zero, on river barges and at the Fresh Kills Landfill on Staten Island. It is estimated that over 91,000 workers were involved in these activities through June 2003.<sup>18</sup> During the months of clean-up and economic slow down, high levels of fear and uncertainty remained concerning the risk of future terrorist attacks. These fears were exacerbated by the anthrax contaminations that followed which killed 5 people and infected 17 others in 2001. Still to this day,

the development of the World Trade Center site remains a source of controversy between developers, politicians, victims' families, and survivors.

The unique and enduring experience of the World Trade Center attacks raised questions and concerns about the impact of 9/11 on the mental health of New Yorkers and neighboring communities. The New York State Office of Mental Health estimated that over 400,000 individuals could meet the criteria for PTSD and over 100,000 would seek treatment.<sup>19</sup> Key epidemiologic research conducted by the New York Academy of Medicine (NYAM) provided the first look at the overall local impact on mental health.<sup>20</sup> Utilizing a serial, cross-sectional design, researchers conducted surveys one month, four months, and six months post event. Random digit dialing was used to obtain a representative sample of New York City residents. Probable PTSD was measured by the National Women's Study PTSD module. Their results showed that the overall prevalence of PTSD in NYC in the immediate aftermath of the attacks was about 6 percent, dropping to 1 percent six months later. For Manhattan residents, the prevalence of PTSD was 7.5 percent one month after the attack, but this percentage also dropped to 1.7 percent at four months and to less than 1 percent six months after 9/11. Both these findings indicated that PTSD in the local area resolved by early 2002 to levels below the national average. Of the individuals who met criteria at six months, two-thirds had been directly affected by the attacks, defined as having been in the World Trade Center Complex during the attack, injured, losing possessions or property, having a friend or relative killed, losing a job as a result, or involvement in rescue efforts. These findings paralleled the national studies, which indicated that a large number of individuals were symptomatic shortly after the attacks, but those with sustained stress reactions were most likely to have experienced higher rates of exposure.

In addition to exposure, Galea and colleagues found significant correlations between marital status, the number of lifetime stressors before 9/11, the number of stressors in the 12 months leading up to 9/11, and the number of life stressors post event.<sup>21</sup> To explore this further, 2,282 individuals of the original sample contacted by NYAM were recruited into a longitudinal study and contacted approximately six months after baseline in 2002 and then at yearly intervals until 2005 in order to document each participant's course of PTSD.<sup>22</sup> Researchers were particularly interested in the relationship between ongoing stressors and the development of symptomatology. Their work again demonstrated that, independent of known sociodemographic risk factors; financial stressors, interpersonal stressors, and traumatic events were all independently associated with an elevated risk for PTSD related to the attacks.<sup>23</sup>

Related to life stressors and economic vulnerability, Nandi and colleagues evaluated the relationship between job loss, income, and the sustained presence of PTSD in a subgroup of 149 individuals from the original NYAM study who screened positive for probable PTSD six months after 9/11. When this group was interviewed again six months later, 42.7 percent of the sample was



diagnosed with probable PTSD. Statistically significant predictors of sustained PTSD included midrange income, unemployment at any time since the baseline interview, and perceived high levels of work stress.<sup>24</sup> Another longitudinal study conducted by NYAM's Adams and Boscarino surveyed 2,368 adults living in New York City one year (Y1) after the attacks.<sup>25</sup> The second year (Y2) they re-interviewed 1,681 of these individuals. Their analysis revealed that while a person's age, experience of negative life events, and traumatic events were significant at Y1, these factors played an even larger role as risk factors for PTSD at Y2. Other significant predictors at Y1 including gender and social support were no longer statistically significant at Y2. Across the entire sample, experiencing two or more negative life events lead to an increase in symptomatology. Collectively, the cross-sectional and longitudinal studies demonstrated that early contributors of PTSD included predisposing factors and exposure. However, over time, for the general population in the New York metropolitan area, the influence of life stressors and economics played a larger role on the persistence of PTSD.

### **High-risk Populations**

The mental health studies from NYAM have been among the most instructive to date because their findings demonstrated a range of responses to the events. Even though an epidemic of PTSD in the general population was not observed in the NYAM studies, we cannot dismiss the fact that, taking into consideration the size of the NYC adult population, these percentages resulted in a large number of people in need. NYAM researchers approximated that 91,000 persons met criteria for probable PTSD within months following the attacks.<sup>26</sup> Importantly, their surveys indicated that segments of the local population, namely those in lower socioeconomic positions and those with direct exposure to the attacks, were significantly more likely to be among the thousands of individuals who could have enduring posttraumatic stress symptoms.

These findings corroborated earlier studies conducted by the Centers for Disease Control in three highly affected Manhattan neighborhoods surrounding the World Trade Center, approximately six weeks after the attacks.<sup>27</sup> This sample of 414 residents lived within approximately one mile of the WTC epicenter, 55 percent had witnessed the collapse of the towers and 48 percent knew someone who died. Using a screening tool, researchers determined 39 percent had symptoms above the cutoff for PTSD. Additional studies in the neighboring downtown community of Chinatown also documented high exposure and posttraumatic stress symptoms above expected levels among the largely immigrant community.<sup>28</sup>

These early local 9/11 studies showed that PTSD did not result in everyone who was closely affected by the disaster. Accordingly, studies of the most directly affected groups were warranted to understand what kinds of specific

exposures to 9/11 *within* these groups might explain why PTSD developed or persisted. In a response to this need, the Agency for Toxic Substances and Disease Registry and the New York City Department of Health and Mental Hygiene entered into a collaborative agreement in June 2002 to create the World Trade Center Health Registry (WTCHR).<sup>29</sup> The purpose of the Registry was to monitor the health status of individuals highly exposed to the attacks and to serve as the city's key public health resource on the disaster, providing guidance on medical care and other support services and inform response planning in the event of future disasters. Four broad eligibility groups were constructed for Registry enrollment taking into account proximity by time and place to the WTC attacks, acute exposure to the collapse of the towers and subsequent debris clouds, and chronic exposure to long-term environmental disturbances in the vicinity of the WTC site. These groups included (a) people who were present south of Chambers Street in lower Manhattan on the morning of 9/11, including building occupants, passersby, and people in transit; (b) workers and volunteers involved in rescue, recovery, cleanup, and other activities at the WTC site, the Staten Island Recovery Operations Center, or on a transport barge from the WTC site for at least one shift any-time from 9/11/2001 through June 30, 2002; (c) people with a primary residence south of Canal Street in lower Manhattan on 9/11; and (d) students enrolled in and staff employed at schools (grades pre-K to 12) south of Canal Street on 9/11.<sup>30</sup>

WTCHR researchers recruited over 71,000 registrants through active and passive enrollment methods that included the compilation of lists obtained through address directories, employers and governmental agencies, and registration of potentially eligible individuals via a toll-free number and website. Baseline data of registrants were collected using web-based, computer-assisted telephone interviewing (CATI) or computer-assisted in-person personal interviewing (CAPI) between July 2003 and November 2004, two to three years after the attacks. Of the tens of thousands of persons who completed the initial interviews, 43,487 were persons who were south of Chambers Street on 9/11, 30,665 were workers and volunteers involved in rescue, recovery, and clean-up, and 14,665 were lower Manhattan residents living south of Canal Street on 9/11. The adult interview included detailed questions on exposures related to these key eligibility groups, therefore allowing researchers to capitalize on the large sample sizes in order to delineate which exposures seemed to be the largest contributors to probable PTSD several years after the event.<sup>31</sup>

Among WTCHR eligibility groups, the prevalence of probable PTSD according to the PTSD-Checklist was highest among building occupants, passersby, and people in transit in lower Manhattan on the morning of 9/11 (19 percent), followed by residents (16 percent).<sup>32</sup> Among these groups, distinct patterns of risk for PTSD clearly emerged. For instance, new findings on the relationship between the evacuation of lower Manhattan and PTSD were documented: Evacuees who had not returned to live or work in lower

Manhattan had the highest prevalence of probable PTSD, significantly higher than enrollees who had not evacuated their home or workplace and those who had returned to their home or workplace within the two to three years before the interview took place.<sup>33</sup> Consistent with theories about the causes of PTSD, the prevalence of probable PTSD among individuals who lived or worked downtown was also elevated if a high degree of life threat was experienced. Examples of the factors characterizing life threat were sustaining an injury, being so close to the epicenter as to have been caught in the dust cloud or personally witnessing the atrocities of the day including people falling from the towers and the towers collapsing.

With respect to the Lower Manhattan residents, sociodemographic risk factors for PTSD, including female gender, minority racial/ethnic status, low income, and middle age were also observed. The relationship between income and PTSD was particularly strong among Lower Manhattan residents, with persons reporting a household income less than \$25,000 having PTSD levels nearly four times as high as those reporting a household income of \$100,000 or greater. As many as one in five of the poorest residents of Lower Manhattan were observed to have probable PTSD several years after 9/11.<sup>34</sup>

WTCHR researchers also published an in-depth study on rescue and recovery workers, which examined together with studies by Mount Sinai School of Medicine, highlight how the unique experiences of these individuals affected mental health. In the WTCHR study, Perrin and colleagues found that 15 percent of rescue and recovery workers screened positive for PTSD two to three years after 9/11. Since the Registry collected information on the worker affiliation, the researchers were able to observe great variability in this prevalence. Specifically, workers least likely to have had prior disaster training or experience, including unaffiliated rescue/recovery volunteers (25 percent) and construction or engineering employees (21 percent) were significantly more likely to be at risk compared to groups that regularly respond to emergency situations such as firefighters (14 percent) and police (7 percent). Other risk factors for PTSD included duration of work, earlier arrival, and performing activities uncommon for one's occupation.<sup>35</sup> In the Mount Sinai studies, 10,132 individuals who worked at the World Trade Center site responded to a rolling self-report survey designed as part of a medical monitoring program. The point prevalence of probable PTSD ranged from 13 percent at 10 months to 9 percent 60 months following the event.<sup>36</sup> A subset of 1,138 individuals was selected from the original sample for closer analysis.<sup>37</sup> Two hundred and twenty four or 19.7 percent of these individuals screened positive for probable PTSD and 12.8 percent met PTSD criteria along with functional impairment.

The prevalence estimates of current, probable PTSD documented in the highly exposed groups studied by the WTCHR and Mt. Sinai were higher than those found by New York Academy of Medicine in New York City, as well as the national estimates in general population. This is likely due, in part, to

the fact that Lower Manhattan residents, building occupants, passersby, and people in transit, as well as rescue and recovery workers experienced more direct exposures of acute and chronic duration than the general population. Recently published data from a WTCHR follow-up survey conducted four to six years after 9/11 has shown that symptoms among these highly exposed groups continued and may have increased for some groups.<sup>38</sup> Importantly, the Registry found 9.5 percent of its cohort screened for PTSD at follow-up only. The data suggested that experiences in the post-disaster environment, including job loss, quality of life, and health care access, were related to chronic and late-onset symptoms but further studies are needed. By collecting systematic health information on a wide and diverse group of people who were exposed to health risks, these studies offer the best estimates of how many people were heavily exposed and the magnitude of subsequent adverse health effects. The resultant picture that emerges is one of significant disruption for large numbers of people particularly in New York City, including rescue and recovery workers, residents and building occupants. Though the general population recovered emotionally and demonstrated resilience, the subgroups experiencing a higher rate of adverse effects warrant some particular attention from the mental health field. Data from these studies have already been used to inform the development of physician guidelines and the expansion of 9/11-related services for residents through city-funded programs, including a mental health benefits program and an Environmental Health Center of Excellence.<sup>39</sup>

### Conclusion

Taken together, the findings of the studies presented here suggest that the mental health effects of the attacks of 9/11, experienced on both the national and the local levels, have provided a number of new insights into the effects of large scale mass violence events. Although high levels of acute symptoms were observed in the acute phase after the 9/11 attacks, most of them declined within the first six months. Yet, PTSD symptoms were reported by individuals who did not necessarily meet accepted Criterion A exposure requirement for PTSD. Those indirectly exposed to 9/11 through the images projected by the media appear to manifest substantial vulnerability to PTSD. Further examination of patients who reported PTSD following exposure to live media suggests that the risk for PTSD among television viewers is especially great among individuals who had previous trauma exposure and mental health problems.<sup>40</sup> These findings elucidate the role of factors involved in persistent PTSD. They may provide significant guidance to policy makers and clinicians on how to identify people who were at risk for PTSD and evaluate needs for treatment and follow-up.

The events of 9/11 and the resulting war on terror have profoundly disrupted the world's physical, political, and social environments. The extreme magnitude and intensity of the World Trade Center attacks of 9/11 have made it

a particularly important disaster to study. While the event was unprecedented, it is not outside the realm of possibility that a disaster of this magnitude will occur again. Furthermore, understanding the impact of 9/11 is still warranted today, given the nation's continuing war on terrorism and the repeated threats made by terrorists groups. While 9/11 was devastating, society can benefit from the study of its consequences. In particular, the disaster has provided a unique opportunity to study PTSD in various communities, and such investigation can facilitate recovery and set preparedness priorities.

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# Dark Clouds and Silver Linings: Social Responses to 9/11

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There is clear evidence that the September 11, 2001, attacks on the World Trade Center and Pentagon had both immediate and long-term effects on the American psyche.<sup>1</sup> Some of the psychological consequences of the attacks were transparently hostile, negative, and defensive. An unfortunate consequence of terrorist attacks against Western liberal democracies is that people often react to these attacks by becoming more willing to sacrifice necessary cornerstones of freedom, that is, by becoming willing to restrict both their own and others' civil liberties, and often worse.

However, 9/11 not only motivated political intolerance and hate, it also motivated many Americans to react with group and value affirming responses. For example, Americans donated blood, gave money and time to charity, and started organizations such as My Good Deed, a group committed to "changing the world, one good deed at a time" as a memorial to the victims of 9/11.

This chapter reviews how the 9/11 attacks on the World Trade Center and the Pentagon brought out some of the best and worst in Americans, and provides a psychological account for both reactions. We first review evidence of increased levels of political intolerance, prejudice and discrimination, hate crimes, and desires for vengeance. We then review evidence that Americans also responded with unprecedented levels of giving, as well as other attempts

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to reaffirm their commitments to fundamental standards of cultural value. Finally, we discuss some of the implications of this research for how people might best channel their responses when confronted with threats like terrorist attacks in the future.

### **The Dark Clouds of Intolerance, Discrimination, Hate, and Vengeance**

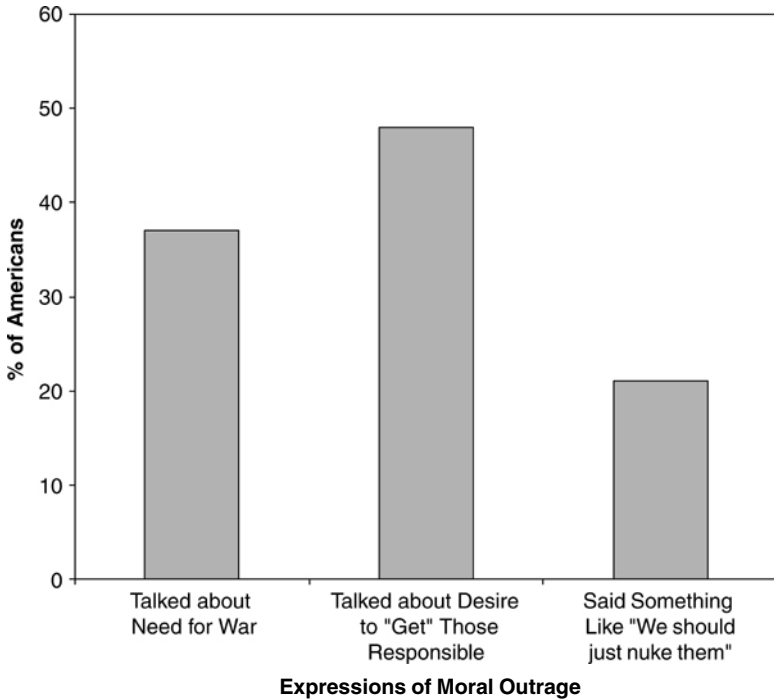
Psychological theorizing suggests that people experience events like terrorist attacks as threats to their cultural worldviews.<sup>2</sup> Value protection theorists argue that people are intuitive prosecutors, who respond to moral transgressions with a strong sense of motivated arousal and distress, and with a desire to secure the moral perimeter from future threat.<sup>3</sup> This motivated arousal leads people to respond to threats like terrorist attacks with moral outrage, a reaction that includes cognitive, affective, and behavioral components such as negative attributions and vilification of the transgressor, rage, and punitive behavior.<sup>4</sup>

Consistent with value protection theory predictions, there was considerable evidence that Americans expressed various forms of moral outrage in response to the 9/11 attacks. For example, as can be seen in figure 5.1, significant percentages of Americans responded by admitting to having said something like “we should just nuke them” and talking about the need to go to war.<sup>5</sup> In addition to these examples of moral outrage, there was considerable evidence that Americans expressed moral outrage in the form of (a) higher levels of political intolerance, prejudice, and discrimination against groups symbolically associated with the attackers (e.g., Arab Americans and Muslims), (b) higher incidences of hate crimes against these same groups, and (c) with strong needs and desires for vengeance.

#### *Political Tolerance and Intolerance*

Political tolerance refers to attitudes, norms, and laws that prohibit discrimination against practices or groups that may be disapproved of by those in the majority. More specifically, political tolerance describes people’s degree of support for one of the foundations of liberal democracy, that is, the degree that a given society or cultural context supports its citizens’ civil liberties and ensures that all groups have the same political freedoms as others (e.g., freedom of speech, freedom of association, rights to due process<sup>6</sup>).

One of Americans’ many reactions to 9/11 was a decrease in political tolerance. More than two-thirds of Americans reported that they were willing to sacrifice some civil liberties to fight terrorism, and one in four thought that the

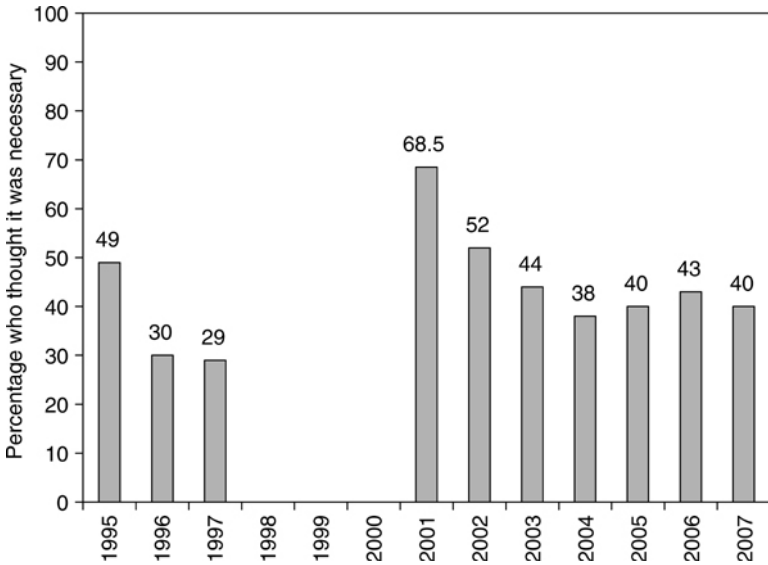


**Figure 5.1** Percentage of Americans who expressed various forms of moral outrage after the September 11, 2001, attacks on the World Trade Center and Pentagon.

*Note:* These percentages are based on a national random sample of adults surveyed within the first four months of the attacks, (Skitka, Bauman, & Mullen, 2004).

Bush administration had not gone far enough to restrict civil liberties in the months immediately following the attacks.<sup>7</sup>

Although the tendency of people to become more politically intolerant under conditions of threat is well documented, researchers only recently have noted the specific link between terrorist attacks and political intolerance.<sup>8</sup> For example, cross sections of national opinion polls revealed that more people were willing to sacrifice civil liberties to fight terrorism in the aftermath of the Oklahoma City bombing in 1995 (49 percent) and following the 2001 terrorist attacks (68 percent), than in 1997 (29 percent), when perceived threat of a terrorist attack was comparatively low (see also fig. 5.2).<sup>9</sup> Although political tolerance does appear to recover over time, terrorist attacks erode support for broad civil liberties for significant periods,<sup>10</sup> and therefore are particularly effective weapons against democratic functioning.



**Figure 5.2** Percent of Americans who believed that the average person would need to sacrifice civil liberties to curb terrorism in the United States, 1995–2007.

*Note:* The 1995 data were collected in an April Los Angeles Times poll. The 1996 and 1997 data were collected in a March, 1996 and April, 1997 PEW Research Center polls. The 2001 data are the average of several polls, including: a CBS/New York Times poll collected on September 13 and 14; a Los Angeles Times poll collected on September 13 and 14; a PEW Research Center poll collected between September 13 and 17; a Newsweek poll collected on September 20 and 21; a CBS/New York Times poll collected between September 20 and 23, and a CBS poll collected on October 8. 2002 data are the average of two PEW Research polls, collected in January and June of 2001. The 2003–2007 data were collected in PEW Research Center polls conducted during August of each of those years.

### *Prejudice and Discrimination*

Americans also expressed considerable prejudice and discrimination against groups symbolically associated with the 9/11 attacks. Specifically, more than half of Americans reported unfavorable attitudes toward Muslim and Arab Americans in the immediate aftermath of the terrorist attacks, whereas majorities of Americans reported positive attitudes toward every other U.S. racial/ethnic group during the same time.<sup>11</sup>

Moreover, despite efforts by the Bush administration to curtail backlash (e.g., specific calls for tolerance in the immediate aftermath of the attacks), Muslim and Arab Americans experienced widespread discrimination after the attacks. For example, the American Arab Anti-Discrimination Committee (ADC) reported more than 80 cases of passenger removal from airplanes due to concerns about the names or perceived ethnicities of Muslim and Arab

American passengers in the first 13 months after the attacks.<sup>12</sup> Illegal passenger removal occurred on every major U.S. airline and primarily resulted from passengers or crewmembers' uneasiness with the passenger-in-question's perceived ethnicity.<sup>13</sup>

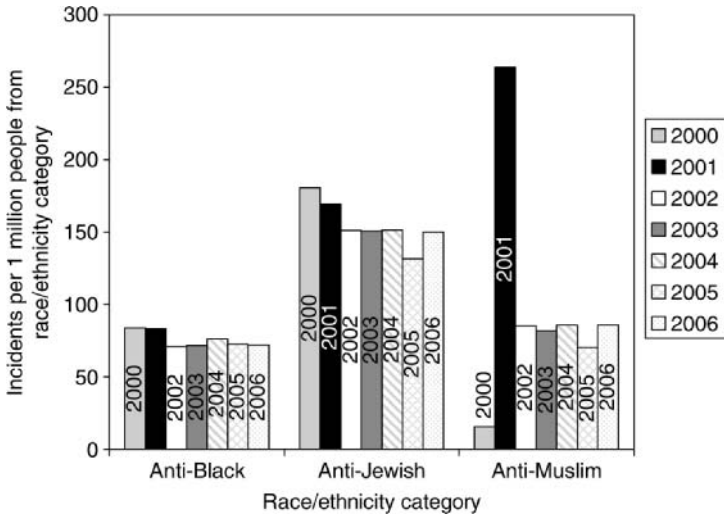
Finally, the ADC also reported more than 800 cases of employment discrimination against Muslim and Arab Americans in 2001—a fourfold increase from the previous year.<sup>14</sup> The ADC also documented numerous instances of denial of service, housing discrimination, police and FBI misconduct (including racial profiling), and the harassment of Muslim and Arab American students in educational settings the year following the attacks.<sup>15</sup> In summary, there is considerable evidence that portions of the American public expressed their moral outrage at the attacks by targeting groups symbolically associated with the attackers in the form of increased prejudice and discrimination. Even more severe expressions of moral outrage occurred in the form of a dramatic increase in the levels of hate crimes toward Arab American and Muslim targets, a topic we turn to next.

### Hate Crimes

When a perpetrator targets a victim because of his or her membership in a certain social group (e.g., the victim's race, religion, disability, sexual orientation, or ethnicity/national origin) the perpetrators' actions can be legally designated as a hate crime.<sup>16</sup> Hate crimes can range from words or actions meant to encourage or instigate violence to physical or sexual assaults, homicide, and other acts of actual violence.<sup>17</sup> Psychologically, hate crimes can be distinguished from other crimes against persons or property in the symbolic and instrumental functions they serve.<sup>18</sup> Hate crimes serve a symbolic function by conveying a message of fear and intimidation to anyone even symbolically associated with the target group. Moreover, hate crimes can serve an instrumental function because they are intended to (and often do) alter the behavior of the targeted group, such as keeping them from patronizing a given business or from living in a certain neighborhood.

One consequence of the 9/11 attacks was an increase in hate crimes against Arab Americans, Muslims, and similar targets. For example, anti-Muslim hate crimes reported to the ADC included more than 700 incidents over the first nine weeks after the attacks,<sup>19</sup> relative to only a handful of incidents reported by the ADC in the years 1998–2000 (the 1998–2000 reports were mostly narrative accounts, and seem to cover less than 10 total incidents<sup>20</sup>). FBI aggregated crime statistics revealed a similar massive spike in reported hate crimes against Muslims in 2001. The FBI reported 28 incidents of hate crimes against Muslims in 2000 compared to 481 incidents in 2001—a seventeenfold increase.<sup>21</sup>

Figure 5.3 attempts to put these numbers into context. Specifically, figure 5.3 summarizes hate crime statistics against Black, Jewish, and Muslim targets



**Figure 5.3** Hate crimes by race/ethnicity: 2000–2006.

*Note:* Data were transformed by dividing the number of hate crimes reported by each racial/ethnic group within the listed reporting year by each racial/group’s estimated population within the listed year and multiplying that number by 1 million. Hate crime data were taken from the Federal Bureau of Investigation compilations of hate crime statistics (2001–2007). Population estimates for Anti-Black hate crimes were taken from U.S. Census population estimates (US Census Bureau, 2008). Population estimates for Anti-Jewish hate crimes were taken from the *American Jewish Committee Archives’ Annual Yearbook* (Pergola, 2005; Schwartz & Scheckner, 2001, 2002; Sheskin & Dashefsky, 2006, 2007; Singer & Grossman, 2003, 2004). Population estimates for Anti-Muslim hate crimes were taken from the CIA’s *World Factbook* (Central Intelligence Agency, 2008).

in the United States, weighted by the proportion of each of these groups in the population. Among other things, these results reveal much higher levels of hate crimes against Jewish than either Black or Muslim targets, with one important exception: the unprecedented increase in reported hate crimes committed against Muslims in 2001. Moreover, trends in these data indicate that hate crimes against Black and Jewish targets have been consistently lower in 2002–2006 than they were in 2000–2001.

Although hate crimes against Muslims fell dramatically after 2001, the rate of hate crimes against these groups has nonetheless stayed at a rate several times higher than it had been prior to the 9/11 attacks. The current level of Muslim hate crime exceeds Black hate crime levels (whereas before 2001, it was many times lower in incidence than Black hate crime), whereas levels of hate crimes against Jews rather dramatically exceeds the level of hate crimes against Blacks or Muslims every year, with the exception of 2001. To some degree, these statistics suggest that with some exceptions (e.g., the immediate reaction to the 9/11 attacks), there may be a relatively stable level of violent

hate, but whom perpetrators target for hate crime changes as a function of factors such as media attention, or which group perpetrators currently see as most threatening.

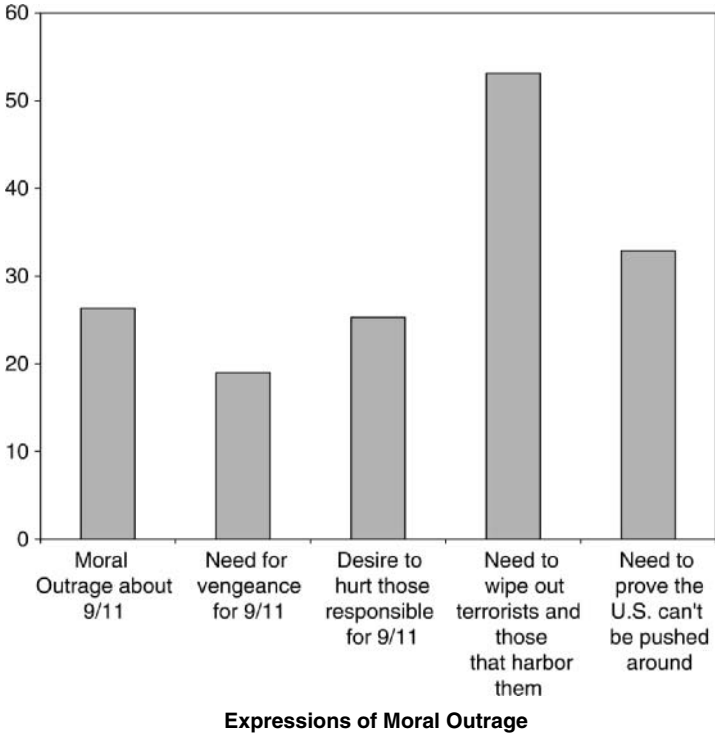
### Other Expressions of Post-9/11 Desires for Vengeance

Another way that Americans expressed moral outrage following the 9/11 attacks was in the form of strong desires for vengeance against whoever was responsible for the attacks.<sup>22</sup> Vengeance is defined as individuals' desire to punish moral transgressions by giving the offender his or her *just deserts*.<sup>23</sup> Vengeance is decidedly more about a punitive desire to hurt or harm transgressors than it is anything about more rational concerns, such as deterrence.<sup>24</sup>

The need to serve up just desserts seems to have led some Americans to psychologically grab at Iraq as a target, regardless of how rational it was to do so. Specifically, in the months leading up to the Iraq War, polls found that 20 percent of Americans believed that Iraq was responsible for 9/11 and 13 percent even said they believed that they had seen conclusive evidence of Iraqi involvement, despite widespread news coverage to the contrary.<sup>25</sup> In addition, belief that Iraq was responsible for the war was strongly related to support for going to war. Among those who believed that Iraq was directly involved in 9/11, 58 percent said they would agree with the President's decision to go to war without United Nations approval.<sup>26</sup> Moreover, as can be seen in figure 5.4, 19 percent of Americans reported that attacking Iraq would satisfy their needs for vengeance for 9/11 and slightly more than 25 percent reported that attacking Iraq would help satisfy their need to hurt those responsible for the attacks (see fig. 5.4).<sup>27</sup>

These results—together with the evidence of post-9/11 intolerance, prejudice, discrimination, and hate crimes—have a number of disturbing implications. Among other things, these findings suggest that Americans have had (and may still have) very broad definitions of “those responsible” when thinking about the 9/11 attacks. The moral outrage people experienced in association with 9/11 clearly spilled over to affect not only those specifically responsible for the attacks (i.e., al Qaeda), but also other groups that were at best only symbolically associated with the source of threat. This expansion of perceived responsibility in turn psychologically expands the number of potential targets for people's wrath.

Taking revenge by targeting those symbolically classified as responsible for the attacks, however, appears to have done very little to help people successfully cope with the distress created by 9/11. For example, people who expressed higher levels of moral outrage following 9/11 were more intolerant of a number of groups post-9/11, including Arab Americans, new immigrants, and Muslims.<sup>28</sup> If expressing moral outrage against groups symbolically associated



**Figure 5.4** Percent of participants who reported that going to war with Iraq would satisfy each of the following either “much” or “very much.”

*Note:* These percentages are based on a national random sample of adults surveyed within the first four months of the attacks, (Skitka, Bauman, & Mullen, 2004).

with those responsible for the attacks helped people alleviate 9/11 distress, we would predict that higher levels of expressing intolerance against these groups would be associated with greater psychological closure (i.e., willingness to put the events of 9/11 behind them). No such relationship between intolerance and closure was found.<sup>29</sup> In short, seeking vengeance against those symbolically associated with the attacks did not effectively help people deal with their distress and anger.

### **The Silver Linings of Moral Cleansing and Value Affirmation**

In addition to motivating people to defend the moral perimeter from further intrusions (e.g., expressions of moral outrage), value protection theories



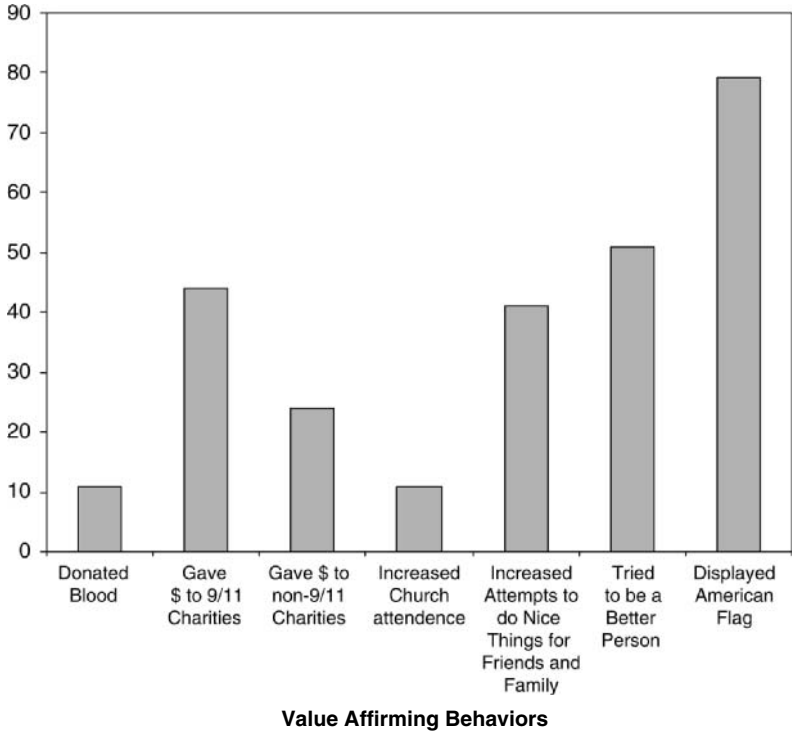
predict that people also respond to threats to their worldviews or sense of moral order with attempts to morally cleanse, that is, by reaffirming their commitment to important cultural or moral values, or by doing good deeds to remind themselves and others of their own comparative moral commitment and worthiness.<sup>30</sup> Moral cleansing psychologically removes the contamination people feel when exposed to perceived immorality or evil,<sup>31</sup> and provides a sense of psychological safety by reassuring people that those in their own group (unlike the moral transgressors) are fundamentally trustworthy and good.<sup>32</sup> Moral outrage is a more interpersonal or intergroup response geared toward shoring up the moral perimeter and guarding against future threat. In contrast, moral cleansing is a more intrapsychic response designed to reassure oneself and other ingroup members of one's commitment to ingroup ideals. There were numerous examples of moral cleansing as a response to 9/11. For example, large percentages of the American public engaged in behaviors such as donating blood, giving money to charity, displaying the American flag, as well as increasing their attempts to do nice things for friends and family and be a better person in response to the attacks (see fig. 5.5).<sup>33</sup> We go into further detail about some of these examples below.

### **Blood Donation**

One way people attempted to reaffirm their core values and conceptions of themselves as decent and good was to donate blood. Blood donation levels were 2.5 times greater in the first week after the attacks and 1.3–1.4 times greater in the second through fourth weeks after the attacks compared to the same weeks in 2000.<sup>34</sup> Most striking was the rise in first-time donations of blood, which increased 5.2 times in the week after the attacks compared to the four weeks preceding them.<sup>35</sup> Although there is generally a strong community response to disasters, blood donation rates following 9/11 well-exceeded donation rate spikes observed in response to the Persian Gulf War or after the 1995 Oklahoma City bombing of the Murrah Federal Building.<sup>36</sup> In short, people appeared to respond more strongly to the 9/11 attacks than other seemingly similar events.

### *Charitable Giving*

Charitable giving, like blood donation, rose to unprecedented levels following 9/11 attacks. Individuals, corporations, and foundations contributed \$1.9 billion to 9/11 related charities and efforts—more than was given to any other relief effort up until that time.<sup>37</sup> Surveys indicated that 70 percent of Americans donated blood, money, or time in response to the 9/11/2001, attacks. Moreover, 73 percent of those who donated money indicated that they planned to contribute as much money as they normally did to other



**Figure 5.5** Percentage of Americans who engaged in various forms of value affirming behavior after the September 11, 2001, attacks on the World Trade Center and Pentagon.

*Note:* These percentages are based on a national random sample of adults surveyed within the first four months of the attacks, (Skitka, Bauman, & Mullen, 2004).

charities (in other words, people did not just transfer their usual amount of giving to a new cause).<sup>38</sup>

### Displaying the American Flag

Another reaction many Americans had to the 9/11 attacks was an impulse to display the American flag. National surveys indicated that between 74 percent and 82 percent of those surveyed displayed the American flag on their homes, cars, or person as a reaction to 9/11.<sup>39</sup> A study of a nationally representative sample of adults in the months immediately following the 9/11 attacks found that displaying the American flag was a phenomenon more

closely related to the same impulses that led people to donate blood and almost \$2 billion to 9/11 charities, rather than feelings of nationalism, xenophobia, or negative feelings about various outgroups.<sup>40</sup> In short, people flew the flag out of a sense of increased patriotism,<sup>41</sup> a desire to affirm American values, and out of a desire to bolster their own and others' feelings of solidarity with and connectedness to their fellow citizens. These results do not mean that displays of the American flag always express people's feelings of ingroup solidarity. The flag and other symbols of group identity can clearly shift in meaning as a function of the context in which they are used. National polls, for example, indicated that the number of people who still displayed the American flag after the Iraq War began was significantly lower (56 percent) than those who displayed the flag in the immediate months after the 9/11 attacks (74 to 82 percent).<sup>42</sup> One can speculate that what it means to display the American flag since the Iraq War began may have shifted more toward the nationalistic than patriotic end of the spectrum, a sentiment fewer Americans may have wanted to endorse.

Taken together, there was clear evidence that the events of 9/11 motivated many Americans to do something to reaffirm cultural standards of value. They donated blood, gave billions to charities, and engaged in a host of other behaviors designed to reassure themselves and others of Americans' capacity for goodness. To what extent was engaging in moral cleansing effective in helping people to cope with the attacks? Our evidence indicated that it was quite effective.<sup>43</sup> People who engaged in more moral cleansing behaviors post-9/11, were higher in psychological closure within four months after the attacks.

Taken together, there is considerable evidence that people responded with moral outrage and moral cleansing to 9/11. This evidence begs the question of whether the people who engaged in these different behaviors were one and the same, or if instead, people tended to cope using one or another strategy. We turn to this question next.

### **Psychological Redundancy in Coping with 9/11**

When threats to people's sense of moral order are especially severe, people are likely to respond with redundancy and overkill reactions in their attempts to restore a sense of psychic balance, rather than rely on one or another reaction alone.<sup>44</sup> Our data suggests that a plurality of Americans had a redundant response to the 9/11 attacks, that is, they reported high levels of both moral outrage and moral cleansing. More specifically, (a) 37 percent of Americans responded with high levels of both response; (b) 18 percent expressed high moral outrage, but did not express much moral cleansing; (c) 16 percent engaged in high levels of moral cleansing, but low levels of moral outrage; and (d) 29 percent were low on measures of both moral outrage and moral cleansing.<sup>45</sup>

We conducted a number of analyses designed to explore how groups who used these four coping strategies differed. The major difference between these groups was the extent to which they responded to the 9/11 with anger versus fear. People who were more angry than afraid tended to respond with higher levels of moral outrage. In contrast, people who were more afraid than angry tended to respond with higher levels of moral cleansing. People high in both anger and fear were the most likely, and people lowest in both anger and fear were the least likely to engage in both reactions.<sup>46</sup> In other words, these results support the notion that most people respond to terrorist attacks with aversive arousal, and the nature of this aversive arousal directs their subsequent reactions to the attacks.

### Conclusion

People responded to the 9/11 attacks with what at first glance seemed to be an odd mix of reactions: Hostility on the one hand, charitable responses on the other. However, when viewed through the lens of value protection theory, these reactions begin to make sense. People respond to threats to their core worldviews or conceptions of moral order with a sense of motivated distress and arousal. People attempt to resolve this sense of motivated arousal by expressing moral outrage or engaging in moral cleansing. If people's distress is sufficiently high or if one or another strategy appears to be ineffective by itself, people sometimes respond with both reactions.

Consistent with value protection theory predictions, there was considerable evidence that Americans responded to 9/11 with moral outrage (e.g., intolerance, prejudice, discrimination, hate crimes, and support for war) in an attempt to shore up the moral perimeter against future threat. A troubling finding, however, was that few of the targets of moral outrage bore any actual responsibility for the terrorist attacks. The real perpetrators were either killed in the attacks or had gone into hiding (e.g., bin Laden), making it difficult to exact vengeance on those actually responsible for the attacks. Once aroused, however, moral outrage seems to require an outlet, and many people therefore targeted individuals within the U.S. borders (Arab Americans, Muslims) as well as outside of them (e.g., Saddam Hussein and Iraq). Although much more research is needed to fully understand the psychology of moral outrage, we now know that it is a likely response to terrorist attacks and that there is considerable risk of collateral damage when people cannot target their rage at those responsible for the attacks. Moreover, expressing moral outrage—at least when it is directed at non-responsible targets—seemed to do little to help those who engaged in it. In other words, expressing greater moral outrage was not related to eventual psychological closure following the attacks.<sup>47</sup>

A potentially more effective strategy than moral outrage for coping with the dark clouds of terrorism may be to seek silver linings, that is, to cope by

reaffirming one's commitment to cultural standards of value and to engage in behavior designed to reassure oneself and others that people can be decent, good, and kind. In addition to considerable evidence of moral outrage following 9/11, there was also widespread evidence of moral cleansing. Americans gave blood, donated billions to charity, flew the American flag to express their solidarity with other citizens, and engaged in numerous other efforts designed to reaffirm their commitment to their fellow citizens. Most important, engaging in moral cleansing proved to better serve people's psychic needs to arrive at a sense of post-9/11 closure.

Our findings have a number of potentially important implications. Given that there appears to be little discrimination in the targets of moral outrage, the risks of harming innocents is high. Moreover, there is some evidence that misdirected moral outrage and vengeance serves little psychological purpose, and no evidence to suggest that targeted moral outrage will serve much better purpose. Instead, there is a considerable body of evidence that suggests that vengeance breeds vengeance, and creates cycles of violence that are very difficult to resolve.<sup>48</sup> Although it may be important and necessary to respond punitively to attacks for reasons of national security, moral outrage is a relatively dysfunctional and disruptive response at the level of individual citizens. Responding by engaging in moral cleansing, however, seems to have little risk or downside, has clear benefits for both the individual and the group, and importantly, it is more effective in helping citizens resolve the distress associated with terrorist attacks.

### Notes

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45. These estimates are based on calculating how many Americans scored above and below the average values on measures of moral outrage and cleansing (see Skitka et al., 2004 for more details about these measures). There are other ways to conceive of whether people responded with high levels of moral cleansing and outrage, for example, but using relative endorsements of specific levels of each of these variables rather than the mean to determine what levels count as high or low. For example, if we use cut-offs of those who score 4 or 5 on a 5-point scale of each of these measures as "high" and those who score below 4 as the measure of "low," 75 percent of Americans would be classified as responding with high levels of both moral outrage and cleansing.



Almost regardless of how one determines what counts as the appropriate cut-off for high or low levels of moral outrage, however, it is clear a plurality of Americans had both responses to the September 11 attacks.

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# Shifting Moralities: Post-9/11 Responses to Shattered National Assumptions

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In the wake of 9/11 Americans experienced a collective trauma. The attacks on the World Trade Center and the Pentagon were deeply disorienting for a nation that had taken for granted its own inviolability. As a group we experienced the extreme anxiety and disequilibrium that accompanied a sense that the world was now threatening and dangerous. The 9/11 attacks were assaults on our buildings, our people, our way of life, our society; they put deep cracks in our myth of American exceptionalism.

Traumatic life events shatter the fundamental assumptions that ordinarily provide us with a sense of safety and relative invulnerability.<sup>1</sup> Individual traumas such as rapes, other criminal assaults, serious accidents, and life-threatening illnesses force survivors to confront their own mortality and fragility, and they experience the terror of their own vulnerability.<sup>2</sup> Those at the World Trade Center and the Pentagon on 9/11, and those who lost loved ones that day, experienced the depths of individual trauma. Yet 9/11 was also experienced by the nation as a whole; our collective trauma involved a breakdown of core assumptions, but now our deep anxiety and dread were focused on our lost sense of security as Americans.<sup>3</sup>

Following instances of individual trauma, survivors struggle to reestablish a sense of safety through *self-regulation* of emotions, cognitions, and behaviors.

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Following collective trauma, efforts to reestablish a sense of security are often accomplished through attempts at *social regulation*. Self-regulation is the domain of psychology, whereas social regulation is the province of politics.

Crises based on national security and foreign threats typically shift politics to the right, and 9/11 was no exception. Whether or not we agree with the conservative shift, we might nevertheless expect national trends in this direction in areas directly related to a newfound sense of national insecurity. Yet following 9/11 this conservative shift expanded far beyond matters of national security and was evident in a new, intense focus on issues seemingly unrelated to American's safety—issues such as legal abortion, same-sex marriage, and stem cell research. This chapter is about the national shift in moral orientation in the immediate aftermath of 9/11, its manifestations and psychological underpinnings.

### Conservative Shift

There is considerable evidence that threat and insecurity often produce a conservative shift, whereby both conservative leaders and opinions become more attractive.<sup>4</sup> Regarding presidential elections, for example, Power notes, “Since 1968, with the single exception of the election of George W. Bush in 2000, Americans have chosen Republican presidents in times of perceived danger and Democrats in times of relative calm... Americans have long trusted the views of Democrats on the environment, the economy, education, and health care, but national security is the one matter about which Republicans have maintained what political scientists call ‘issue ownership.’”<sup>5</sup> Politicians are well aware of this conservative advantage. Thus in a June 2008 *Fortune* interview, a McCain campaign advisor noted that an attack on U.S. soil would “be a big advantage” for McCain. Implicit acknowledgment of this advantage was clear in Bush ads during the 2004 election campaign that encouraged fear-based voting; in “Ashley’s story,” a teenager is shown being comforted by Bush. She had lost her mother in the 9/11 attacks and says, “He’s the most powerful man in the world and all he wants to do is make sure I’m safe....”<sup>6</sup>

Research has explicitly demonstrated this link between threat and political conservatism. A series of studies have shown that reminders of 9/11 led students to be more supportive of conservative (versus liberal) leaders and policies.<sup>7</sup> Studies in Germany and Spain have also found that the salience of terrorism led to greater endorsement of conservative attitudes.<sup>8</sup> Further, fully 38 percent of people who were in or near the World Trade Center on 9/11 reported becoming more conservative in the year and a half after the attack, a number three times greater than the percent who reported becoming more liberal.<sup>9</sup> And increased conservatism in times of strong threat has been supported in archival research.<sup>10</sup> There is considerable evidence, then, that threat

produces a greater preference for politicians on the right; these conservative leaders are typically associated with increased national security.

When national fear and perceived vulnerability are heightened, greater conservatism is also manifested through greater societal acceptance of decreased freedoms and civil liberties, for these restrictions are understood in terms of directly promoting our safety and protection. Thus in the aftermath of 9/11, Americans experienced compromised civil liberties as well the suppression of dissent of government policies in the name of safeguards against terrorism.<sup>11</sup> As Lewis writes with regard to the fear of terrorism after the attacks of 9/11, “President George W. Bush used that fear to adopt a series of programs that broke sharply with American law . . . He authorized the use of torture and other hard methods of interrogation on suspected terrorists . . . He ordered wiretapping of Americans’ international telephone calls, in violation of criminal law. He detained American citizens suspected of terrorist ties indefinitely, without trial of access to counsel.”<sup>12</sup>

Historically, fear has been used to justify repression, as Americans have come to believe that civil liberties need to be sacrificed to protect us from foreign threats. Richard Hofstadter has referred to this as the “paranoid style in American politics.”<sup>13</sup> Just as in the twentieth century the fear of communism was used to justify repression of the rights of many Americans, in 1798 the Federalists used the threat of French terror to justify the Sedition Act.<sup>14</sup> James Madison summed up this threat-based response when, in a letter to Vice President Thomas Jefferson two months before the passage of the Sedition Act, he wrote, “Perhaps it is a universal truth that the loss of liberty at home is to be charged to provisions against danger, real or pretended, from abroad.”<sup>15</sup>

Perhaps not surprisingly, in the name of protection post-9/11, as a nation America became more conservative and more accepting of losses of personal freedom in the political spheres of national security and civil liberties. Interestingly, however, there was a parallel movement in the immediate aftermath of 9/11 towards greater conservatism and loss of personal freedoms in the domain of social issues as well, and yet these do not seem to be directly associated with matters of national safety and foreign threats. Our threat-based loss of liberties extended beyond civil liberties to social choices and private behaviors, the agenda of social conservatives.

### **Moving to the Right: Beyond National Security and Civil Liberties**

Following 9/11 there was a great deal of moralizing from the right and a marked shift towards the agenda of social conservatives. Political commentators on the right immediately suggested that the attacks were a moral wake-up call. In the words of a political scientist writing about this period, “Almost as soon as the hijackers brought down the World Trade Center and gouged a hole in the Pentagon, journalists and writers seized on the day’s

events as a comment on the cultural miasma and decadent materialism of the United States”<sup>16</sup> “Moral weakness” became a post-9/11 theme in conservative political commentaries. Perhaps the most extreme version was Falwell’s particularly vicious invective: “God continues to lift the curtain and allow the enemies of America to give us probably what we deserved...I really believe that the pagans, and the abortionists, and the feminists, and the gays and the lesbians...I point the finger in their face and say, ‘you helped this happen’.”<sup>17</sup>

Consistent with this moralizing, socially conservative response, the Bible Society reported that in the months after 9/11 bible sales were up 45 percent.<sup>18</sup> There was an increased tendency to perceive the world through a moral lens. Anti-abortion, anti-gay marriage, and anti-stem research pronouncements pervaded the media in the early years following 9/11; the voices of strong social conservatives became increasingly loud, vocal, and influential in pushing its “moral values” agenda.<sup>19</sup> Yes, this group was already making its mark to some extent in the 1990s, but the attacks of 9/11 gave their arguments particular traction, potency, and appeal. Thus, for example, the increased focus and success of anti-gay marriage pronouncements was evident at this time. Between 1998 and 2002 a total of four anti-gay marriage initiatives were approved on state ballots. Yet by 2005, state voters passed 15 additional anti-gay marriage initiatives.<sup>20</sup>

The significance of this moral shift became most apparent in the 2004 election. As Larison notes, the attacks of 9/11 “yielded not a weakening or minimizing of religious and cultural divides, but rather an amplification of them,” and thus gay marriage became a major flashpoint of the 2004 election.<sup>21</sup>

In fact the big news story in the 2004 election was the “moral values vote.” According to National Election Pool exit polls, from a list of options that included economy/jobs, health care, education, and Iraq, the greatest percentage of voters (22 percent) chose “moral values” as the most important issue influencing their vote. Further, this was clearly a preference on the right, because fully 80 percent of those who selected “moral values” as most important also voted for Bush.<sup>22</sup> These voters were focused on abortion, same-sex marriage, and stem cell research in the election—issues surely not directly related to national security. By 2004, Bush had the worst job creation record—2.6 million jobs lost—of any president since Hoover and was embattled in a crisis of confidence and trust around the Iraq War<sup>23</sup>; yet he won re-election. His success was primarily attributable to the culture war he helped wage. “Bush proposed a constitutional amendment against gay marriage. He dismissed two scientists who dissented on his bioethics board, which he used to ban forms of stem cell research, replacing the dissenters with adherents of the religious right... Then Attorney General John Ashcroft subpoenaed the medical records of women who have had abortions at Planned Parenthood clinics. Bush followed by supporting the Unborn Victims of Violence Act, creating a new federal crime of ‘fetal homicide,’ that passed the Republican-dominated House of Representatives...”<sup>24</sup>

The nation was transformed into a battleground, not in a fight against terrorism, but against a socially liberal political agenda.

In an attempt to emphasize the importance of “moral values voters” in 2006, the Christian Right held the “Washington Briefing: 2006 Values Voters Summit” before that year’s election. At that meeting Family Research Council President Tony Perkins suggested that our country “was under attack” and pointed to the “subversives” within our country—homosexuals, feminists, liberals, abortionists—as the enemy within.<sup>25</sup> Emphasis was placed on the imminent threats facing the nation from those on the left; support for abortion rights and same-sex marriage represented a clear and present danger.

From the perspective of America’s moral zeitgeist, the rightward shift began to retreat five years post-9/11, as evidenced by the results of the 2006 election; the shift to the left was very apparent in the election of Barack Obama two years later. Although no doubt in large part a consequence of the unpopularity of the Bush administration and increasing economic problems, this movement away from the extreme right was also facilitated by the increasing temporal distance from 9/11. Yet the five years following the attacks on the World Trade Center and the Pentagon were nevertheless noteworthy not only for the country’s understandably elevated concern with national security and physical safety, but also with a parallel emphasis on a socially conservative agenda, where abortion and gay rights rather than foreign terrorists became the threats to contend with as a nation.

It is possible that this shift in the nation’s moral agenda was simply an artifact or byproduct of the greater conservatism afforded in the realm of national security and foreign policy; that is, more conservative leaders were elected for national security reasons, and they also happened to be more socially conservative. However, the strong focus and concerted efforts in these social-political domains suggest otherwise. Rather than an unwitting extension, the moral shift beyond the national security sphere appeared to be a psychologically-related, but nevertheless independent, intentional, and intense drive to control Americans’ lifestyles and “private” behaviors. Why was this such a powerful reaction in the aftermath of 9/11? How were 9/11 and this “moral values” agenda related? To more fully understand their associations, we turn to psychology and what it can tell us about politics and, in particular, moral orientations.

### **Approach versus Avoidance: Motivation and Politics**

Research on politics and psychology suggests that political liberalism and conservatism are associated with different psychological motivations, and these different motivations are instructive when attempting to understand moral shifts associated with national politics. The study of motivation is concerned with the “why” of behavior, and the most basic distinction drawn in

this work is between approach and avoidance orientations. More specifically, drawing from early work on reward and punishment in learning and animal conditioning as well as recent research in neuroscience and psychopathology, contemporary psychologists distinguish between two self-regulatory systems: a behavioral activation system, based in approach motivation, and a behavioral inhibition system based in avoidance motivation.<sup>26</sup> The activation system involves behaviors that try to approach a desired goal, whereas the inhibition system involves behaviors that try to avoid an undesirable goal (i.e., a threat or anti-goal).<sup>27</sup> There is considerable work supporting these two orientations, and this includes recent neuroscience research that provides evidence for distinct neural substrates of approach and avoidance motivation; thus, the approach system is associated in particular with left prefrontal cortex activity, whereas the avoidance system is associated with right prefrontal cortex activity.<sup>28</sup> Further, the importance of these approach-avoidance distinctions is evident in recent research in areas as diverse as achievement, interpersonal relationships, attention, morality, and power.<sup>29</sup>

Most fundamentally, these differences can be understood in terms of motives to *protect* versus *provide*—to protect the individual or group from threats and negative outcomes or to provide for the well-being and advancement of the individual or group. These differences might be thought of in terms of the primary goals of parental responsibility: to protect the child from danger and threats to safety, and to provide for the child's welfare and well-being (e.g., via food, shelter, and nurturance more generally).

Both self-regulatory systems seek optimal outcomes, but they involve different orientations and strategies. There are two defining characteristics that distinguish between these approach (provide) and avoidance (protect) motivations. The first is regulatory focus; the focus of the approach system is positive, in that it involves the promotion of desired outcomes and gains (e.g., rewards, advancement). In contrast, the focus of the avoidance system is negative (e.g., threats, punishments) in that it involves the prevention of undesirable outcomes and losses. The second characteristic is the action tendency associated with each motivational orientation. The action tendency of the approach system is *activation*, for it entails actively moving *towards* a goal. In contrast, the action tendency of the avoidance system is *inhibition*, for it entails *withdrawal* from threats. Psychologically behavioral activation and positive outcomes are linked through the approach motivational system, and behavioral inhibition and the threat of negative outcomes are linked through the avoidance motivational system.

Each of us relies on both approach and avoidance in regulating our own behavior. In the face of threats the avoidance system is activated, whereas the recognition of positive outcomes and rewards activate the approach system. Nevertheless, it is also the case that we differ in the extent to which we emphasize one or the other, for some people focus more on threats and therefore depend primarily on the avoidance system and behavioral inhibition, whereas

others focus more on positive outcomes and therefore depend primarily on the approach system and behavioral activation. As we move from self-regulation to broader social regulation, the domain of politics, these differential emphases are reflected in political orientation; that is, most generally, political conservatism is based in avoidance motivation and the desire to protect societal members, and political liberalism is based in approach motivation and the desire to provide for societal members.<sup>30</sup>

Conservatives, in other words, focus more on negative outcomes and threats and rely on inhibition as the primary form of social regulation. In contrast, liberals focus more on positive outcomes and gains and rely on activation as the primary form of social regulation. These broad motivational differences are reflected in distinct moral orientations as well, and thus conservatives and liberals differ in their moral motives regarding social regulation.

Conservatives' focus on threat and danger helps us understand why they have "issue ownership" on national security issues. It is not that liberals are unconcerned, but rather that they are more likely to be associated with societal gains to be advanced rather than security losses to be avoided, and they thus have greater issue ownership instead in areas such as health, education, and the economy. Not surprisingly, conservatives are apt to emphasize fear in political campaigns, whereas liberals are more apt to emphasize hope. Conservatism emphasizes strength and toughness, which would be expected when your worldview is based on countering threat and negative outcomes—on protecting. Liberalism emphasizes helping and fairness, which is more in line with an approach orientation and a desire to provide for society's social welfare.

Given that avoidance motivation is a response to perceived danger, and conservatism is based in avoidance motivation, conservative shifts in times of societal threat—as in the case of 9/11—may well be expected. The toughness and strength-based themes of conservative ideology and political platforms are particularly appealing to a populace in times of salient danger. The attacks of 9/11 aroused national fears and an associated preference for conservatives, with their perceived emphasis on national security and protection. But how are we to understand the emphasis on other issues—such as abortion, stem cell research, and same-sex marriage? Why this shift in the importance of particular moral issues?

### **Social Order versus Social Justice**

Morality is essentially a set of rules that facilitate group living. These moral rules are in the service of the group or community and function as counterweights to self-interest.<sup>31</sup> Despite each side's tendency to minimize the morality of the other, the conservative emphasis on protecting and the liberal emphasis on providing are both moral orientations, designed to serve the larger group. Yet they entail very different approaches to social regulation;



conservatives strive for social order, whereas liberals strive for social justice.<sup>32</sup> These two moral motives—*social order* and *social justice*—respectively reflect avoidance and approach orientations. Social order motives are a response to perceived negative outcomes and involve inhibition-based regulation, whereas social justice motives are a response to perceived positive outcomes and involve activation-based regulation.

Those high on social order emphasize shared responsibility for maintaining “community standards”; they believe that societal bonds are threatened when people freely choose how to live their lives. Adherence to the group’s norms and conformity to the group’s rules are regarded as evidence of commitment to the group and deserved belonging. In contrast, those high on social justice emphasize more equal distribution of societal resources and shared responsibility for those worse off in society.<sup>33</sup> These are both “communal visions,” essentially oriented toward community interests rather than self-interests, but they are very different visions of social regulation.

A focus on social order is really a focus on protection, but understood in terms of “dangerous” people and perspectives within one’s own society. It appears that the fear aroused in the attacks of 9/11 led to a general motivation to protect society—from both without and within. The avoidance-based reactions to the threats of 9/11 were reflected in the shift to the right that was driven primarily by social conservatives and the Christian Right. Their perspective gained strong footing and force via the newfound threats to the nation. Their agenda was about protecting society from “deviant” forces primarily by way of suppressing personal freedoms in the social domain. The focus was group protection, fundamentally motivated by fear and perceived threats to society. This threat-based orientation was apparent in the dissenting opinion by Justice Scalia in *Lawrence v. Texas*, the Supreme Court case that overturned the law banning same-sex sodomy. Scalia predicted a similar change in “laws against bigamy, same-sex marriage, adult incest, prostitution, masturbation, adultery, fornication, bestiality, and obscenity” and predicted a “massive disruption of the current social order.”<sup>34</sup>

The avoidance-based nature of social order and approach-based nature of social justice are evident in research on these motives’ relationship with two widely used psychological measures associated with political orientation—specifically right-wing authoritarianism (RWA) and social dominance orientation (SDO). Research has demonstrated that RWA is based on the belief in a dangerous, threatening world and reflects a desire for security. SDO, on the other hand, is not threat-based, but rather reflects a belief in a competitive world and a desire for power and dominance. In recent research we found that social order beliefs were strongly associated with RWA, but not SDO, consistent with the proposed greater security concerns underlying this avoidance-based moral motive. In contrast, social justice beliefs were negatively associated with SDO and unrelated to RWA, consistent with the greater activation, resource-distribution concerns of this moral motive. Those high on social justice are not after

dominance and power, but equality and equity. Those high on social order are high on threat and need for security.<sup>35</sup>

Social order, based in avoidance motivation, entails sensitivity to negative outcomes and an inhibitory orientation regarding one's own behaviors and one's social group (i.e., the minimization of "deviance" at the group level). As such we would expect particular attention to societal issues specifically associated with group norms and lifestyles, such as gay marriage and abortion. Social justice, based in approach motivation, emphasizes activation and advancement of self and others, and thus would be more likely to focus on societal issues related to social distributions and inequities, such as affirmative action and welfare.

Recent research supports these differences. Participants were asked to indicate the extent to which they approve or disapprove of a range of contemporary social issues, including legal abortion, affirmative action in college admissions, gay marriage, stem cell research, environmental taxes, the death penalty, pornography on the Internet, government welfare programs for the poor, teaching creationism in the classroom, and tax cuts for the rich. Statistical tests found that the contemporary issues represented two distinct factors. One factor (termed *lifestyles* factor), which included legal abortion and gay marriage items, reflected lifestyle and normative concerns. A second factor (termed *equity* factor), which included affirmative action and government welfare items, reflected economic and equity concerns.<sup>36</sup>

It is important to note that both factors were strongly associated with political orientation; higher scores (stronger approval) on both were positively associated with liberalism. And yet the factors were associated with very different moral motives. The lifestyles factor was strongly associated with social order beliefs, but not social justice; the equity factor was strongly associated with social justice, but not social order. More specifically, the higher your commitment to social order, the greater your *disapproval* of the lifestyle issues—abortion, stem cell research, same-sex marriage; conservatives are high on social order and liberals are low on social order motives. In contrast, the stronger your commitment to social justice, the greater your approval of the equity issues—government welfare, affirmative action, environmental taxes; liberals are high and conservatives are low on social justice. The two factors were differentially associated with approach versus avoidance motives (social justice versus social order, respectively), presumably reflecting the inhibition versus activation based emphases of the two categories of social issues.<sup>37</sup>

Thus a socially liberal domestic agenda emphasizes economic and social equality and focuses on interventions (i.e., actions) that will advance people's welfare, particularly those worse off in society. Liberals are far more likely than conservatives to support government welfare, social security, and affirmative action.<sup>38</sup> There is a strong emphasis on *activation* via interventions that will produce more *positive outcomes*. In contrast, a socially conservative domestic agenda focuses on matters such as abortion, same-sex marriage, and stem

cell research. These were the primary “moral values” issues of the 2004 presidential election. Here the emphasis is on behaviors often associated with the body, health, and intimate relationships, and the action tendency is based in *inhibition* via prohibitions that are believed to minimize *negative outcomes*.<sup>39</sup> Conservatives seek to *prohibit* legal abortion, same-sex marriage, and stem cell research; social order is primarily maintained through conformity.

Conservatives and liberals both believe that there are domains that should not be regulated by society—typically the economic domain for conservatives, and lifestyle and personal behaviors for liberals. Of particular interest, however, is not only the domain, but the form of social regulation advocated by each group. Liberals are for *active interventions* that are believed to *provide* for members of society. Conservatives want to place *restrictions* on behaviors *to protect* societal members. Conservatives see threats to society in allowing abortion and same-sex marriage and opt for prohibitions; liberals see rewards for society in fostering economic welfare and equality and opt for new initiatives to foster such outcomes.

In the moral domain, divorced from politics, these differences in actions versus prohibitions can be understood in terms of a distinction we recently drew between two types of morality: proscriptive versus prescriptive morality. Essentially, proscriptive morality focuses on what we *should not* do (i.e., avoidance-based), whereas prescriptive morality focuses on what we *should do* (i.e., approach-based). Thus the proscriptive system involves avoiding temptations and immoral behaviors (e.g., not cheating, lying, “over-indulging”), whereas the prescriptive system involves activating motivation to do the right thing (e.g., helping others, working hard). Research has shown that proscriptive morality is mandatory, harsh, and condemnatory, in contrast to prescriptive morality, which is more discretionary, less harsh, and commendatory. The proscriptive system focuses on transgressions and immorality, whereas the prescriptive system focuses on “good deeds” and morality.<sup>40</sup>

The relevance of these distinctions to the morality of social conservatives versus social liberals should be apparent. The social order focus of the political right, with its emphasis on prohibitions against behaviors regarded as nonconforming and “immoral” reflects proscriptive morality—an emphasis on what we should not do. It is a harsh, condemnatory system that seeks to punish “deviants.” In contrast, the social justice focus of the political left emphasizes prescriptive morality, with its emphasis on activating positive behaviors—what we should do—and consequent focus on rewards rather than punishments.

### A Few Final Words

The strong association between threat and social order concerns became apparent in the aftermath of the 9/11 attacks. The newfound emphasis on protecting America expanded from protection against outside dangers to

include a focus on protection against perceived inside threats as well. It is as if conformity to a single, strict set of personal behaviors was regarded as demonstration of commitment to the nation. Prohibitions against behaviors such as legal abortion, same-sex marriage, and stem cell research shifted morality to the right. While liberals continued to make a case for broader caring across society, emphasizing our social interdependence, conservatives made a case for greater social conformity and common group identity. In the face of collective trauma and threat in the aftermath of 9/11, it was the conservative agenda that got more traction, was spoken more loudly, and had more converts among those in the political center. Liberal voices were not strong enough or convincing enough immediately after 9/11 to carry the day. This was a time of perceived threat and a heightened sense of danger; this was a time when avoidance motivation was primed, so the country was focused on protection—both in terms of national security and internal social politics. A conservative agenda was emboldened.

The moral shift to social conservatism following 9/11 reflected psychological motivations very similar to those primed by threats to our national security. Yet the external threats to our nation were clear to all and evident in the physical attacks on the World Trade Center and Pentagon. As fear and protection motives were heightened, a consequence was a different emphasis on security, one that involved societal prohibitions and the punishment of “transgressors.” When James Madison wrote of the loss of liberties at home that resulted from dangers from abroad, he could have been describing the moral shift that occurred in the five years post-9/11, with its sharp focus on social order and the sought-after suppression of freedoms in personal domains.

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# Fear across America in a Post-9/11 World

*Alice LoCicero, Allen J. Brown, and Samuel J. Sinclair\**

The terrorist attacks of September 11, 2001, produced a cascade of detrimental effects that continue to have national and international ramifications. The impact of the attacks has insidiously and profoundly compromised multiple facets of life. The psychological effects of the attacks have been the focus of empirical research and scholarly consideration. The results, and their interpretation, shed light on the immediate impact of the terrorist attacks, as well as their continuing repercussions. From our perspective, the major enduring psychological changes affecting a large proportion of citizens of the United States as a result of the 9/11 attacks consist of changes in perception, both of themselves as individuals and of the country as a whole. Many Americans shifted from a perception of personal security to one of insecurity, from a perception of the country as invincible to a perception of the country as vulnerable, from a perception of war and carnage as something that happens somewhere else to a perception that war and carnage can happen here, and from a perception of a mostly predictable future to one of a future that is uncertain.<sup>1</sup>

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This chapter has three somewhat distinct parts, all reflections on changes in perception, and the results of those changes. In the first section, we describe what we see as the end of Americans' false sense of immunity from the type of violence and mass destruction other countries have had to endure. In the second section, we describe research on the development of psychopathological reactions—both to the immediate disaster and to the accompanying loss of the false sense of safety—that affected a sizable group of Americans: depression, posttraumatic stress disorder (PTSD), and substance abuse. In the third section, we focus on longer-term, future-oriented, cognitive shifts following the 9/11 attacks, and the accompanying behavioral changes. The newly developed Terrorism Catastrophizing Scale (TCS) is described as one model for systematically assessing these cognitive shifts and the subsequent impact on daily functioning. The new perceptions of potential danger have led to increases in fear, reconsideration of risks, and consequent decisions to make changes in behavior patterns.

*A Rude Awakening: Americans Recognize  
the Impact of Global Conditions*

Many of the world's citizens live in communities where the threat of violence is constant, and terror is the norm. For a large portion of the human population, fear is a constant, uninvited, companion. Civilians in dozens of the world's states engage in constant, grinding, vigilance, looking out for threats that accompany war: rape, homelessness, poverty, restrictions on travel, hunger, disruptions in education, and death. As in every war, noncombatants are the majority of victims. Children in much of the world are not safe in their homes, schools, or villages. Thirty-three countries are considered likely sites of mass atrocities, and eight are currently on the Genocide Prevention Project's Red Alert list.<sup>2</sup> Those at risk in the countries named know that their survival hinges on luck. Parents in many parts of today's world, like many parents throughout history, have limited ability to keep their children safe, or even alive, and little or no reliable governmental or legal infrastructure within which to attempt to improve their circumstances. Many have no freedom of speech. They have very little hope of generating outrage, or even awareness, of their circumstances in the larger, global community.

In contrast with that global reality, most mainstream adults in the United States in the latter part of the twentieth century enjoyed the conviction that they, their children, and their children's children would be safe. Most believed they would live to grandparenthood secure from danger, with adequate resources, and in good health. They believed that they had effective processes for solving most problems, and that whatever misery was being afflicted thousands of miles away was not going to affect them materially. This late twentieth-century American belief in personal survival and security was occasionally threatened. The Cold War posed a low level chronic threat, and events like the escalation

of the nuclear threat in the 1980s brought about temporary, acute fear. But for much of the last quarter of the century, especially after the fall of the Soviet Union, many American adults thought that premeditated attack on Americans was extremely unlikely. There was, arguably, an imagined sense of invincibility.

Americans' false sense of being mostly secure from external attacks suffered a crushing blow on September 11, 2001, and it does not look like Americans will return to a perception—accurate or not—of counting on their well-being and that of their children and grandchildren anytime soon. On 9/11, without prior public knowledge or warning, dramatic destruction and the deaths of thousands of civilians were broadcast in gruesome detail into peoples' homes. The attacks were followed, in the ensuing weeks, by biological attacks (5 people died, and 17 were made ill by anthrax attacks<sup>3</sup>), as well as by reminders of potential future attacks: continuous flights of fighter jets up and down the coasts and the presence of armed soldiers throughout major airports.

Americans became aware of the existence of non-state entities that were powerful enough and competent enough to mount a series of well-coordinated, effective, terrifying, attacks. And because most Americans had not been aware of the existence of the non-state entity that planned and executed these attacks, many worried that more shocking attacks could come at any time, and many continue to worry about future horrific attacks. Just as an individual's sense of security is apt to be dashed when that individual becomes a victim of trauma or crime, the comfortable—though false—sense of security held by many Americans is gone.

Various reports question whether Americans' immediate fears of further attacks were increased by U.S. government officials' statements and actions.<sup>4</sup> We note that on the evening of 9/11, President George W. Bush made a brief statement that might very possibly increase Americans' fears. In that statement, the president raised the possibility of future attacks, saying, "*Our first priority is to get help to those who have been injured, and to take every precaution to protect our citizens at home and around the world from further attacks.*" Furthermore, the president defined the day's attacks as the start of a war. Referring to unidentified allies, he said, "*we stand together to win the war against terrorism.*"<sup>5</sup> In these two sections of the statement, then, he suggested that the 9/11 attacks were not, in fact, isolated incidents, but the start of a new war.

For some period of time following the attacks, many Americans' outlook on life was more comparable to that of the people at risk in countries around the world than to their own former outlook. American deaths and other Americans' survival on that day had depended on luck—whether or not they lived or worked in specific areas or flew on a specific flight, whether or not their commute was slow, whether they were in or out of their offices, and whether or not their offices were on an upper floor of the one of the towers. Many survivors imagined that their luck might run out at any moment. In Boston, where two of the planes used for the 9/11 attacks had originated, life became an exercise in scanning the environment. Might there be more terrorists in the

city? Does that stranger walking by look suspicious? Who is taking a photo of a skyscraper?

### *Seeking Understanding of Terror Threat*

Even while in a state of acute fear, in apparently healthy attempts to cope with the new knowledge of the reality of threat, and of a longer term war, ordinary Americans made it their personal business to learn more about the state and non-state entities that might attack the United States in the future. Their searches for understanding, facilitated by the world wide web, has not generally made Americans feel secure. Rather, it has brought to the attention of citizens that our fates are no longer separated (if they ever were) from the fates of distant others in a world with a great deal of trouble. Before September 11, 2001, terrorism was known by most literate Americans to exist, but terrorist incidents affecting U.S. civilians seemed to be isolated. Repeated terrorist attacks, experienced over months and years, were thought of by most Americans as affecting someone else, somewhere else. After 9/11, however, Americans learned that any incident that might have seemed isolated before, or might have seemed to affect only someone else, must be reconsidered.

### *Effects of Fear of Future Attacks*

Psychologists, including several authors of chapters in this volume, have debated whether the psychological reactions of Americans to the September 11, 2001, events included a sustained increase in symptoms of PTSD, depression, and substance abuse, as might be anticipated. In the next section of this chapter, we provide a brief overview of some studies that are representative of this research. It is clear that in the immediate aftermath of the 9/11 attacks, there was an increase in symptoms of diagnosable PTSD, and equally clear that, if diagnosable PTSD is the only yardstick with which one measures effects, the effects for most were not, overall, of long duration.

Our specific contribution here focuses not on diagnosable disorders, however, but on the cognitive and behavioral consequences of reassessment of security and risk. We consider Americans fear of future attacks and the behavioral changes made and maintained over a long period of time by adults all across the U.S., in consideration of the perception of such future danger.

### *Limitations of our Current Knowledge*

Even such a narrowly defined task as assessing long-term fears and their impact on behavior is a massive enterprise, and one that will surely not be completed for decades. Indeed, just as contemporary scholarship continues

to help us better understand the development and changes that took place in civilizations hundreds, and even thousands, of years ago,<sup>6</sup> it will likely be many years—perhaps even centuries—before the full extent of the impact of fear generated by the attacks of 9/11 can be fully understood.

Future scientists and researchers who have the benefit of a longer view, and who will surely benefit from new techniques and new theories about fear and its effects, will likely appreciate the efforts of today's social scientists to systematically assess the effects of changes in the perception of danger and threat—the new level of fear—on Americans.

It is in the spirit of contributing to both present and future understanding of the psychological effects, especially fear, generated by the 9/11 attacks, that we offer our analyses. We begin with an overview of studies of diagnosable psychological reactions, especially PTSD, to the 9/11 attacks. We then offer a specific perspective on ongoing fear, and the effects of that fear on the everyday lives of Americans, several years after September 11, 2001.

### **Immediate Psychological Effects of 9/11**

Researchers have examined the direct and indirect psychological effects of the terrorist attacks, focusing on the predictable psychopathological sequelae of large scale trauma. Studies on the psychological and behavioral impact of the events of 9/11 vary as to the geographic location where subjects were obtained, temporal proximity to the attacks, data gathering method, demographics of the subjects, and the focus, or dependent variable, of the study. According to a review of studies of the psychological impact of the 9/11 attacks,<sup>7</sup> many of the very earliest studies were conducted in New York City with subjects who were nearest to the site of the attacks at the time of the attacks.<sup>8</sup> This research began within days of the attacks.<sup>9</sup> The measured effects included PTSD, or key symptoms of PTSD,<sup>10</sup> psychological distress,<sup>11</sup> and alcohol and drug use.<sup>12</sup> A variety of data gathering techniques were used, including personal interviews,<sup>13</sup> questionnaires,<sup>14</sup> Internet surveys,<sup>15</sup> and review of relevant records.<sup>16</sup>

#### *PTSD and Related Symptoms Immediately Following 9/11*

Studies examining the immediate psychological impact of the 9/11 terrorist attacks focused on the prevalence of posttraumatic stress disorder. PTSD is defined in the current version of the *Diagnostic and Statistical Manual of Mental Disorders*,<sup>17</sup> as a psychological disorder that results from direct or indirect exposure to a deadly, or potentially deadly, incident or one that could result in serious injury. This exposure causes the person to experience extreme fear, helplessness, or terror. Characteristic symptoms include

repeatedly experiencing the traumatic event through, for example, vivid images, thoughts, dreams, or bodily sensations related to the traumatic experience. Individuals with this disorder try to avoid anything associated with the traumatic experience and may become emotionally “numb.” Despite their persistent attempts to avoid recalling the experience, people with this disorder typically feel unwittingly energized such that they may suffer from insomnia, uncharacteristic irritability, poor concentration, hypervigilance, and an exaggerated kind of startle response. These symptoms are sufficiently intense as to impair the person’s ability to function in important areas of their lives, such as in their jobs and interpersonal relationships.

Five to eight weeks after the terrorist attacks of 9/11, Galea et al.<sup>18</sup> assessed the prevalence of PTSD in a representative sample of 1008 adults living south of 110th Street (within approximately six to seven miles from the site of the attacks, known as Ground Zero) in Manhattan. The researchers selected subjects through random-digit dialing. They found that 7.5 percent of the subjects reported current PTSD symptoms. Current symptoms of depression were reported by 9.7 percent of the subjects. Subjects who lived closest to the World Trade Center, that is, below Canal Street (within a mile or so of Ground Zero), reported PTSD symptoms at a significantly higher rate, of 20 percent. Factors that were associated with the greatest risk for the development of PTSD included being Latino, living south of Canal Street, having experienced a panic attack at the time of or shortly after the attacks, having experienced two or more prior stressful events, and having lost possessions due to the attacks. Similarly, risk factors for developing depression included being Latino, experiencing a panic attack at the time of or shortly after the attacks, having had two or more prior stressful events, a low level of social support, the death of a friend of relative during the attacks, and loss of a job due to the attacks.

This same data was used in a report by Galea and Resnick, stating that 8.8 percent of the respondents overall reported current PTSD symptoms.<sup>19</sup> They noted that 57.8 percent of respondents reported having at least one symptoms of PTSD in the month prior to the study, the most common being intrusive memories (27.4 percent) and insomnia (24.5 percent). They report the same risk factors for developing PTSD as in the study cited above, with the important addition of involvement in the rescue efforts.

Those studies focused on people who were closest to the sites of the attacks, as previous research had found that the psychological impact of disasters decreased as proximity to the disaster decreased. However, as discussed below, the effects of the 9/11 attacks were not limited to those in close proximity to the sites of the attacks. The attacks of 9/11 were viewed repeatedly by millions. People sought and were flooded by reports, albeit lacking in detail and often false or misleading, about the attacks. Almost no survivors were recovered following the implosion of the Twin Towers or the crash of Flight 93, resulting in a paucity of new information to present to the public. Consequently, television coverage primarily consisted of speculation about the terrorist attacks and

repeated showing of the dramatic videos of the planes crashing into the Twin Towers, people jumping to their deaths from the upper floors, and the horrific collapse of the Twin Towers. Most people found these images disturbing, yet many reported continuing to watch them as they were replayed. This was reminiscent, for many, of the repeated playing of the films of the assassinations of President John Kennedy in 1963 and presidential candidate Senator Robert Kennedy in 1968. The potential traumatizing effects of repeatedly viewing graphic video of this tragedy was an area of concern and debate.

Since this question was considered amenable to empirical study, it was included in some of the research on the prevalence of PTSD. Using the same data set from their research discussed above, the Galea team addressed the issue of the effect of exposure to graphic television images on the risk of developing PTSD.<sup>20</sup> They found that subjects who saw people jumping or falling from the Twin Towers had a higher incidence of PTSD (17.4 percent) and depression (14.7 percent) when compared to subjects who did not (PTSD—6.2 percent and depression—5.3 percent). However, only subjects affected personally by the attacks had their risk of developing PTSD or depression increased by repeated exposure to graphic images of the attacks on television.

Although frequently forgotten or ignored, the terrorist attack on the Pentagon on September 11, 2001, was traumatic to those involved. A study of Pentagon staff members two years after the terrorist attacks found that 14 percent likely had PTSD, and 7 percent likely were depressed.<sup>21</sup> The sample was limited, but researchers were able to establish, within the sample, that subjects who were present at the Pentagon on the day of the attack were more likely to have symptoms of PTSD and major depression, and that those who were injured or who were exposed to dead bodies were more likely to have PTSD or depression, whereas exposure through television did not increase either PTSD or depression. Police officers who responded to the attacks had even higher likelihood of developing PTSD.<sup>22</sup>

### *Nationwide Studies*

The deleterious psychological impact of the terrorist attacks was not limited to New York City and Washington, DC. In a study conducted two to three months after the attacks, researchers found that 87 percent of their sample of 110 Latino adults in Miami, Florida reported three to six symptoms of PTSD. Gender and amount of television viewing were not significantly related to the development of PTSD symptoms. However, prior experience with war and natural disasters were found to be risk factors.<sup>23</sup>

Researchers using a randomly selected national sample of 2,273 adults found that geographic location was an important factor in the likelihood of developing PTSD following the terrorist attacks. One to two months following the attacks, they found that 11 percent of the subjects from New York City met



the diagnostic criteria for PTSD, whereas 4 percent of the national sample was diagnosable with PTSD.<sup>24</sup>

In a study conducted three to five days after the terrorist attacks, researchers found that 90 percent, of the 560 adult subjects randomly selected from across the nation reported experiencing some stress due to the terrorist attacks, and 44 percent experienced at least one symptom of significant stress. Gender, ethnicity, mental health history, and television viewing were found to be strong predictors for the development of significant stress symptoms.<sup>25</sup>

Symptom severity was not static. In a random national sample of 2,729 adults, 17 percent of the subjects reported symptoms of PTSD two months after the attacks. This decreased substantially by six months following the attacks, when symptoms of PTSD were reported by 6 percent of subjects. Risk factors identified in this study included being female, marital separation, previous experience of anxiety or depression, and television viewing.<sup>26</sup>

### *Longitudinal Study*

Regularly scheduled yearly interviews in a 25-year longitudinal study of 610 randomly selected members of the Children in the Community cohort followed by Cohen and colleagues<sup>27</sup> took place shortly after the 9/11 attacks. The subjects ranged in age from 27 to 38. This ongoing study fortuitously resulted in a quasi-experiment. There was a significant increase in the prevalence and severity of symptoms of anxiety following the terrorist attacks, as compared with previous interviews. Subjects also reported a significant increase in anxiety symptoms when interviewed during the following two years. These yearly interviews now occur around the time of the anniversary of the terrorist attacks of September 11, 2001, and it is possible that these reminders affect the interviewees. Study authors note that other reminders of the attacks include media and politicians revisiting the attacks during each anniversary, the ongoing wars in Iraq and Afghanistan, anthrax scares, and terror alerts issued by the Department of Homeland Security.

### *Risk Factors for Developing PTSD*

While most Americans, including those living in NY, experienced increased stress immediately following the terrorist attacks, most did not develop PTSD. Researchers addressed this issue in their “two-wave” prospective cohort study of adults living in New York City on September 11, 2001. This study required subjects to complete a survey twice, with one year between the surveys. For the first part of the study, 2,368 subjects completed surveys one year after the attacks. A year later, 1,681 subjects from the original group completed a follow-up survey. Risk factors for developing PTSD within one year of the terrorist attacks included being younger, being female, having experienced

more traumatic life events, both related and unrelated to the terrorist attacks, low social support, and low self-esteem. Risk factors for developing delayed onset PTSD two years after the attacks included being middle-aged and Latino, having experienced more traumatic life events unrelated to the terrorist attacks, and low self-esteem.<sup>28</sup>

### *Persistence of PTSD Symptoms*

Studies show that symptoms of traumatic stress continued to be present, albeit dissipated, five years after the terrorist attacks. In a 2007 review of the literature on the continued psychological impact to the September 11, 2001, terrorist attacks, Laugharne and colleagues<sup>29</sup> report that the persistence of PTSD symptoms varies on the basis of, among other factors, whether the subject directly experienced the terrorist attacks. Other risk factors for persistent PTSD include geographical proximity, being female, low income, poor education, poor social supports, previous use of psychotropic medications, and a high level of media exposure about the terrorist attacks.

### **Limitations of Research on PTSD**

Studies of the psychological impact of the terrorist attacks of 9/11, while plentiful, tend to be plagued by methodological weaknesses. For example, the potentially confounding effect that the methods used to gather data may have on what data is gathered was not addressed. Studies using random digit dialing may not obtain a random sample of subjects, as subjects who are at home and respond to the questions may not be representative of the population being studied. The methodologies employed, while imperfect, however, may be the best available for quickly assessing a very large population. Findings that identified gender and ethnicity as risk factors for the development of PTSD may reflect gender based societal roles, societal constraints based on race or ethnicity, and/or cultural differences that can affect how people are apt to respond to traumatic events, and how they are apt to explain and express stress. In addition, the tendency of researchers to focus on PTSD, while understandable, unnecessarily limited the types of psychological effects examined.

### **Consistent Findings**

Despite the methodological weaknesses of the research there are some consistent findings. Studies consistently found an increased incidence of acute, clinically significant stress related symptoms in the immediate aftermath of the terrorist attacks. Although the severity and persistence of stress related symptoms varied as a function of whether the individual was directly or

indirectly affected by the terrorist attacks, stress related symptoms following the terrorist attacks are a national phenomenon. More severe and persistent stress related symptoms were found in those who were directly affected by the terrorist attacks, such as those who lost loved ones, property, or jobs in the attacks and those who assisted in the rescue efforts. People who were geographically distant and not directly affected also displayed significant symptoms of stress. Some of the persistence of the deleterious psychological effects of the terrorist attacks is a function of societal changes related to the attacks rather than purely lingering effects of the attacks proper. The wars in Iraq and Afghanistan, terror alerts, and changes in airport security likely contribute to the ongoing effects.

We believe that researchers who documented the prevalence, intensity, risk factors, and course of PTSD made a highly valuable contribution to psychology. We also believe that measuring the existence of the syndrome or symptoms of the syndrome is only the beginning of documenting the psychological effects of the 9/11 attacks. A more complete assessment of the psychological and behavioral impact of the attacks should include an examination of changes in Americans' perceptions of safety, of the danger posed by others, particularly those appearing to be of Muslim religion or Arab descent, and of the degree to which Americans feel in control of their lives.

### **The Terrorism Catastrophizing Scale**

Randall D. Marshall and his colleagues point out that current mental health paradigms do not work well in terms of understanding the impact of large-scale terrorist attacks such as those occurring on 9/11.<sup>30</sup> Furthermore, they argue that “the presence of persistent fears in the general population of being personally harmed in future terrorist attacks is a poorly understood phenomenon that may represent a vulnerability in the general population.”<sup>31</sup> Bruce Bongar and colleagues echoed this point recently, calling for new “psychological science” to better understand, respond, and predict outcome following terrorist incidents.<sup>32</sup> They identify prospective fears, or fears of future harm by terrorism, as being a phenomenon that is not well understood in terms of its impact on the general population.

Several variables make terrorism-related trauma unique. These include (1) the sheer destruction of the event itself, and the results in terms of human lives lost and financial costs; (2) the volitional and malicious quality of the behavior, where one set of individuals targets another for destruction—as opposed to natural disasters, such as hurricanes, which are perceived as more random in nature; and finally (3) the role of the media following these attacks, and the fact that the trauma is vicariously extended well beyond the immediate impact zone by way of television, radio, and other media. The second and third factors likely contribute to fear of future similar events.

Currently, how much do you agree or disagree with the following statements? <i>Please Mark One Box on Each Line</i>					
	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. I have difficulty keeping the threat of terrorism out of my mind.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2. There is little I can do to protect myself from terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3. I frequently think about the threat of future terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4. There is nothing I can do to defend myself from future terrorist attacks.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5. The threat of terrorism does not enter my mind that often.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6. I worry that terrorism will only get worse as time passes.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7. I think that I am completely helpless in protecting myself from future terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8. I worry that the threat of terrorism will never end.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9. I often dwell on the threat of future terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10. I believe the future is dark with respect to the threat of terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
11. I have a lot of power in keeping myself safe from terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
12. I frequently find myself preoccupied with thinking about terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
13. I lack control in defending myself and my loved ones against terrorism.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Figure 7.1** The Terrorism Catastrophizing Scale (TCS)

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In an effort to create new methods for understanding the impact of terrorism fears, the Terrorism Catastrophizing Scale (TCS) was developed to measure ongoing fears of terrorist attacks, as well as the resulting impact of these fears on behavior and well-being. The TCS (see fig. 7.1) is rooted in both terror management and cognitive-behavioral theories,<sup>33</sup> and consists of 13 brief statements (e.g., “I worry that the threat of terrorism will never end.”) that people are asked to rate along a common Likert scale (Strongly Agree to Strongly Disagree).

The TCS contains items measuring three constructs that are hypothesized to be components of catastrophizing: (1) rumination about threat; (2) magnification of threat; and (3) helplessness as a result of threat. The TCS was subject to a rigorous psychometric analysis, which began with an original pool of 21 items and was paired down to the final 13 using factor analysis and

other methods for assessing psychometric/scaling assumptions. The resulting 13-item version resulted in the best statistical “fit,” and was retained for further use. Data was then collected from a representative sample ( $N = 503$ ) of those living within the United States for purposes of evaluating the tool further, and developing norms to be used in scoring the three scales and overall summary measure—all of which use T-scores, and have a mean of 50 and standard deviation of 10. Please see Sinclair and LoCicero for further discussion about the development and validation of the TCS.<sup>34</sup>

### **Impact of Terrorism Fears**

In 2006, Sinclair conducted a large survey study that involved having participants from across the United States complete the TCS in addition to other measures of psychological functioning, well being, health status, behavior change, and demographic variables.<sup>35</sup> The purpose of the study was both to further evaluate the psychometric properties of the TCS, and also to see how well it predicted various outcomes. Several findings were particularly noteworthy.

First, consistent with many of the polls that have been conducted since September 11, 2001, Sinclair found that the majority of those sampled were reporting at least some fears. More specifically, only 10, 6, 2, and 0 percent scored at the floor for the Rumination, Magnification, Helplessness, and overall Catastrophizing scales, respectively.<sup>36</sup> That being said, there was a normal distribution of fear in the general population.

Second, using three large multiple regression models, analyses were conducted to see how well terrorism fears (i.e., TCS scores) predicted symptoms of depression, physiological anxiety (e.g., heart racing, sweating, etc.), and general stress. All models were adjusted for the effects of multiple demographic variables (e.g., age, gender, education, income, whether person lived in a city or not), psychosocial variables (e.g., self-esteem, social connectedness, and anger), and physical health status. Results from these analyses showed that after controlling for these other variables, terrorism fears continued to have a considerable, negative relationship with psychological functioning. That is to say, terrorism fears were related to poorer psychological functioning, and elevated symptoms of depression, anxiety, and stress.

A third area of investigation was focused on assessing the degree to which terrorism fears were associated with behavioral changes. The specific behaviors that were included in the study were generated by focus groups during the pilot testing phase of the project. Specifically, people were asked how they changed their behaviors as a result of terrorism. The resulting answers indicated that people avoided (1) cities as a place to live and work; (2) traveling by airplane or other modes of public transportation; (3) attending public events, such as concerts or sporting events; (4) socializing with others perceived to be similar as those perpetrating the attacks (i.e., those seen to be from Middle

Eastern descent); and finally (5) media relating to terrorism and/or political violence on television, radio, and in newspapers.

Statistical models were again developed to see whether terrorism fears predicted changes in behavior. First, an overall variable was constructed representing an aggregate of the individual behaviors, where people either reported change in any domain or no change at all. Second, each individual variable was constructed such that people reported change or no change. TCS scores were then estimated, after controlling for other known covariates, including demographic characteristics (age, gender, education, income, whether person lived in the city), physical health status, and psychosocial variables (i.e., self esteem, social connectedness, and anger).

Overall, the results of this study are significant for several reasons. First, results indicate that fears are widespread and that most experience some degree of fear. Second, as would be anticipated, fears are normally distributed in the general population, which would indicate that some are at greater risk and others at lesser risk for such negative consequences. Third, this study demonstrated a significant relationship between fears and negative psychological outcomes, such as depression, anxiety, and stress. Consistent with the trauma literature, and with terror management theory, this study also demonstrated that self-esteem and social connectedness were moderating variables. That is to say, they served as “buffers” against these negative outcomes. Finally, this study demonstrated that fears serve as a catalyst for change, and that for most people, fears are associated with altering their lives. This final result is interesting in light of many government officials pleading for people to go about their daily routines but “be vigilant” at the same time.

### Summary

The full extent of the psychological impact of the September 11, 2001, attacks will probably not be understood for some time to come. Contemporary research data is not only enlightening now, but is a resource for future researchers. From our point of view, it appears that many of the major psychological changes that occurred as a result of the 9/11 attacks have been changes in perception. These changes were, for many, disillusioning, and have led to well-documented psychopathological reactions, some of them of fairly long duration. In addition, the 9/11 attacks have led to enduring fear of future attacks, and fear has led to behavioral changes and to reduction in well-being among many Americans. Americans' appraisal of their own future, and of their interdependence with other parts of the world, many of them troubled, appears to have become more realistic, but it has also become more painful and difficult. We imagine that future researchers, with more powerful theories and research resources, will be able to better assess the full extent of the impact of the 9/11 attacks.

## Notes

1. While some Americans, even prior to 9/11, assessed the risk of terrorist attacks on U.S. soil as increasing, the 9/11 attacks constituted a major turning point, where the majority of Americans' perceptions shifted.
2. The eight countries are Afghanistan, Burma/Myanmar, Democratic Republic of Congo, Iraq, Pakistan, Sri Lanka, Somalia, and Sudan. The group's recent report is available on its website. <http://www.preventorprotect.org/> Prominent Americans Madeleine K. Albright and William S. Cohen co-chair the Genocide Prevention Task Force, co-sponsored by the United States Institute of Peace, the United States Holocaust Museum, and the American Academy of Diplomacy.
3. <http://www.fbi.gov anthrax/amerithraxlinks.htm> (accessed December 28, 2008).
4. Paul R. Kimmel and Chris E. Stout, *Collateral Damage: The Psychological Consequences of America's War on Terrorism* (Westport, CT: Praeger, 2006).
5. "Statement by the President in His Address to the Nation," September 11, 2001. <http://www.whitehouse.gov/news/releases/2001/09/20010911-16.html> (accessed November 18, 2008).
6. A well-received report of such findings regarding the Americas before Columbus's voyage is found in Charles C. Mann, *1491: New Revelations of the Americas before Columbus* (New York: Knopf, 2005).
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9. See, for example, the following studies. Michelle Beauchense, Barbara Kelley, Carol Patsdaughter, and Jennifer Pickard, "Attack on America: Children's Reactions and Parents' Responses," *Journal of Pediatric Health Care* 16 (2002): 213–221; Ronald T. Murphy, Keith Wismar, and Kassie Freeman, "Stress Symptoms Among African-American College Students After the September 11, 2001 Terrorist Attacks," *Journal of Nervous and Mental Disease* 191 (2003): 101–114; Mark A. Schuster, Bradley D. Stein, Lisa H. Jaycox, Rebecca L. Collins, Grant N. Marshall, Marc N. Elliott, Annie J. Zhou, David E. Kanouse, Janina L. Morrison, and Sandra H. Berry, "A National Survey of Stress Reactions after the September 11, 2001, Terrorist Attacks," *New England Journal of Medicine* 345, no. 20 (2001): 1507–1512.
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  35. *Ibid.*
  36. In summary, not a single respondent reported a total absence of fear of future terrorism.

# Coping after 9/11: Deep Interconnectedness and Struggle in Posttraumatic Stress and Growth

*Amy L. Ai, Terrence N. Tice, and Catherine L. Kelsey\**

A woman sits, as usual, on the balcony of her 36th floor apartment, gazing contemplatively at the open sky beyond the harbor. Suddenly, the oddly appearing shape of the first plane looms in the near distance and crashes into the first tower of the World Trade Center. She instantly recoils with horror: “People are dying!” After phoning her family, in deep distress she returns to the balcony, only to see the second plane, heading directly toward her (“I’m going to die!”) then swerving to strike the near tower. In the all-too-real, gradually tumbling view four blocks away, her familiar world crashes down. That life-shattering event turned into a long journey of recovery for the witness, the New York poet Lee Briccetti. Here is her poem about that experience, written during the long aftermath of recovery, leading to “the abundant new morning light” that would eventually emerge.<sup>1</sup>

## *Day Mark*

During the evacuation I walked up  
the thirty-six floors in a darkness  
so utter the world no longer existed.

---

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**Catherine L. Kelsey** is Dean of the Chapel and Spiritual Life at Iliff School of Theology.

Voices, slammed firedoors,  
 above and below, fear, the smell of burning fuel.  
 Then, in the dusty air of my savagely bright apartment  
 I hovered over the body I'd lived in.

\*

Fire-glass particles sparkled on the school roof  
 and the dazzle of charred steelwork  
 was a kind of blindness.  
 Triage stations, refrigerator lockers  
 —sound finished.  
 Rescuers and stunned residents under the dusty trees  
 remembered they were dust.

\*

There is a blister on my mind.  
 I agree to that.  
 Moment as the plane, four blocks away,  
 turned, angling in—and I knew  
 they would be dead but I would live.  
 And so it is.  
 Time, a membrane  
 we both slipped through, into the next  
 moment when I could scream.

\*

Personality swallowed itself to a nerve:  
 live.  
 I live above the pit, the river  
 a gorgeous frame  
 for abundant new morning light.

What the poet witnessed that day and went through at a very deep level in the aftermath represents the experience of many Americans. It also crystallizes the subject of this chapter, the seemingly contradictory phenomena of “deep spiritual struggle” and “the deep sense of interconnectedness” that may arise in the aftermath of traumatic events.

Among Americans, 9/11 was followed by an unprecedented level of emotional disturbance, including distress, depression, anxiety, anger, fear, uncertainty, and sadness.<sup>2</sup> Reports indicated a sharp decline in sense of hope just after 9/11, compared with a year ago and far-reaching psychological damage, in terms of posttraumatic stress symptoms (PTSD).<sup>3</sup> A review of 9/11 studies, many of which were large-scale surveys, demonstrated its long-lasting impacts.<sup>4</sup> On the other hand, researchers have also pointed to a seeming paradox in relation to negative events—namely, the experience of remaining positive following violent crises.<sup>5</sup> The 9/11 tragedy can be seen as a testament to this claim, illuminating “the role of crisis as a possible crucible for what is best about people,” as asserted by positive psychologists.<sup>6</sup> It is well-known that in Chinese the

term *crisis* is composed of two paradoxical characters: *danger* and *opportunity for change*. In this light, 9/11 as a national crisis may be viewed as a historically traumatic event that also demonstrates resilience and capacity for positive gains among many Americans. Soon after 9/11, popular discourse intimated that Americans were forever changed as a result.<sup>7</sup> This claim gave rise to several questions: What cultural change has actually occurred? Which subpopulations have perceived benefits? Why have they undergone positive change? Which factors might enable such change to be sustainable over the long run?

In this evidence-based chapter, we review research on 9/11 that has emerged on spiritual aspects of that subject, namely matters of value, ideology, worldview, and faith that attended people's reactions to its horrendous events. We ferret out meanings that emerge from the 9/11 findings and meaningful positive change that has already occurred among ordinary citizens, despite initial emotional turmoil about the tragedy. Therein we come to recognize how two trauma areas, one on *posttraumatic growth* (PTG), still fairly sparse in contrast with the lion's share of attention to another on PTSD, could sharpen our understanding of violent consequences. We also draw out theoretical and practical implications of such change. In this process, first, we summarize reports on positive reactions and resilience among Americans in the aftermath of 9/11. Next, we introduce theories regarding the posttraumatic paradox, inherent in the presence of positive aspects alongside severe distress, supported by research evidence on 9/11-related gains. Further, we explore which groups obtained greater positive changes or benefits and expose underlying value-based mechanisms. Then, we examine the paradox of experiencing positive interconnectedness with or following distress at the 9/11 event, explaining ambiguous conclusions that have arisen from empirical findings. Finally, we present a model to display the dynamic process in the seemingly paradoxical pathways that leads to both negative and positive results from the 9/11 event, as shown in PTSD and PTG.

### **Unprecedented Positive Reactions to the Traumatic Event**

What cultural change has actually occurred in the United States, then, and even beyond? Perhaps as never before, Americans across the nation have openly expressed deep mourning for those victimized by 9/11 by displaying their flag everywhere immediately afterward. This widespread bond with innocent victims was spurred by a shared existential challenge at a critical time in their history. An extraordinary response had arisen, a sense of common humanity shaking people's hearts there. An outpouring of sympathy likewise came to them from around the world, demonstrating international compassion in the face of collective trauma, recognized on a global scale.<sup>8</sup> Given the surging terrorist threat, support, both domestic and foreign, materialized in the form of gifts, blood, and other contributions, including donations to the American Red Cross of \$667 million by the end of 2001.<sup>9</sup> The

9/11 national tragedy appeared to draw together citizens from different communities, across many boundaries, including demographics, socioeconomic strata, political views, and culture or ethnicity. From coast to coast, people coped through interaction with others (98 percent) and making donations (36 percent).<sup>10</sup>

Alongside the clear public devastation, a greater showing of affection for family members and relatives was reported in several polls, an augmented sense of personal relationship being reported by 60 percent of respondents.<sup>11</sup> A national representative sample of Presbyterian ministers (age 51±) indicated greater closeness to family, friends, God, and churches.<sup>12</sup> Moreover, a cross-campus study recorded many forms of peritraumatic positive emotions three months after 9/11, such as reverence and admiration for rescue workers and for NYC firefighters and policemen, pride in their country, gratitude for the proffering of international support, compassion toward people of the world who had undergone similar experiences, as well as sympathy for victims and their families.<sup>13</sup> Still other positive reactions were also revealed, featured by praying with others, building up a sense of community, wanting to work for peace in the world, and understanding better how people in the third world think about “us.”

Despite this unprecedented traumatic impact, Americans have showcased remarkable resilience in the aftermath of 9/11. Six months thereafter, a large-scale survey recorded a 65.1 percent level of resilience within the exposure zone, based on a conservative criterion—having less than one PTSD symptom—among residents in New York City and surrounding areas.<sup>14</sup> A small-scale study on individuals in or near the World Trade Center during 9/11 associated self-enhancement, a tendency toward exaggerated positive or self-serving bias, with a resilient outcome over time (stable low symptoms of depression or PTSD).<sup>15</sup> Similarly, positive emotions (e.g., gratitude, pride, hope, and awe), used as important coping resources, were found to predict post-9/11 adaptation, characterized by the ability to bounce back or by low symptoms among college students at the University of Michigan.<sup>16</sup> A cross-campus study demonstrated that the influence of peritraumatic positive emotions on post-9/11 adjustment (low incidence of symptoms for depression and anxiety) was mediated through optimistic expectations in future mental-health professionals at the universities of Pennsylvania, Nevada, and Washington.<sup>17</sup>

In this multisite study, location was found to bear no effects on demographics and symptoms among the subsamples. Yet, hope and optimism of respondents with diverse beliefs were boosted by using prayer for coping, a faith-related meaningful action in cross-continental response to a value-laden catastrophe. As Ehrenreich pointed out after 9/11, research on trauma-related concepts (e.g., PTSD) tends to be limited by interpretation of outcomes as lying mostly within individual differences (e.g., genetic makeup, personality, or coping mechanism).<sup>18</sup> To better understand extreme traumatization, the role of beliefs, traditions, and social cultural processes within communities and resilience in the population as a whole must also be addressed. Indeed,

some national positive reactions were deeply value-bound, including greater patriotism, self-sacrifice for national security, and support for the president at that time, perhaps viewing him as a national symbol.<sup>19</sup>

Historically, in different populations various faith-orientations offer meanings and enhance prosocial behavior for coping with common threats.<sup>20</sup> Regardless of which faith they were holding, however, in being faced with the 9/11 event many Americans turned to their faith experience and to belief systems to search for meaning, to take meaningful actions, and to find meaningful interconnections with others. In a large-sample, online survey, positive psychologists compared the change of character strengths before and after 9/11.<sup>21</sup> The results documented the increase of seven character strengths (i.e., gratitude, hope, kindness, leadership, love, faith/spirituality, and teamwork), which involve the so-called “theological virtues” espoused by St. Paul, compared with unchanged, more secular character strengths (e.g., courage).<sup>22</sup> A report noted that one of the most widespread immediate coping responses to 9/11 in the United States lay in higher church/synagogue attendance.<sup>23</sup> A poll showed stronger faith among nearly 50 percent of Americans.<sup>24</sup> A telephone survey right after 9/11 indicated 90 percent of respondents turning to religion, prayer, or spiritual feelings at that time.<sup>25</sup>

In the above-mentioned cross-campus study, the contents of prayer used were almost exclusively 9/11-specific, devoted to the victims’ families, to the security of one’s own social circle, and to global peace, each checked by about two-thirds of the sample.<sup>26</sup> Also, 40 percent to nearly half of the sample prayed for various other reasons—the nation, a safe trip, the war against terrorism, the souls of victims, the prevailing of justice, that the best thing happen, and support of their own coping strengths. At least for that short period, 9/11 reduced the physical (geographic) and nonphysical (e.g., separation by belief) distance among Americans, leading many of them to meaning-seeking therein and thereafter, which could be seen to underlie subsequent cultural change. At least for the time being, in the wake of the 9/11 catastrophe, a sense of *deep interconnectedness* seems to have arisen, in which the wisdom of altruism, coordination, and interdependence outweighed values of competition, individualism, and independence. Out of the ruin of the Twin Towers, a new boundary-spanning identity appeared to emerge on U.S. soil, as shown in a picture of many different faces shouting with one voice, “We are Americans!”

### **Worldview-based PTG of Persons under Threat from 9/11**

Despite the evident peritraumatic positive reactions, certain questions remain. Do these momentary reactions merely indicate a transient emotional response? Is any indication available of more substantive cultural changes, carried in some deeper sense? What categories within or among persons might have undergone greater or less change? A firm answer to these

questions could well depend on further evidence, pro or con, to be gathered over decades to come. However, some studies have indeed offered initial evidence suggesting 9/11-based phenomena of change. Despite vast negative impact, the above-cited literature suggests that lasting 9/11-based PTSD would be shown only in a small proportion of the American people, while for others life would move on. This evidence implies that any plausible substantive cultural changes should be assessed at the more profound level, that of worldviews shared among individuals.

In the late nineteenth century, philosopher and historian Wilhelm Dilthey (1833–1911) coined the term *worldview*, which encompasses stable ontological and epistemological perspectives about the universe and everything therein, including life, values, and human relations.<sup>27</sup> Literally, the meaning of this term can be comprehended by pronouncing it in reversed order: people's view of the world. Stated differently, the dramatic change of perceived reality in the world could be reflected in a changing mirror image, as the worldview of significantly impacted individuals and communities. For many decades now, worldview-related change has generally been presented in psychology in terms of "strong positive directional tendencies," the "urge to grow," and the "pressure to self-actualize."<sup>28</sup>

The most-cited concept prior to the current PTG concept may be that of meaning-making through choice in facing tragedy, notably stated by Austrian neurologist and psychiatrist Victor Frankl (1905–1997).<sup>29</sup> Frankl invented logotherapy, a pattern of existential analysis as a form of psychotherapy, to help overcome the anxieties of aloneness and meaninglessness. He believed that a primary motive of human beings is to find meaning and value in their lives, also that a strong *sense of meaning* and *meaningful actions* is central to survival.<sup>30</sup> Frankl's deep awareness of meaning was derived from and encountered in vast social changes in his time, particularly in relation to one severe life crisis, the Holocaust. For many Americans, especially young people, 9/11 may well be the first time they could have experienced directly anything approximating such a horrendous crisis, one roughly analogous to those that Frankl was facing, one that would lead to a deeper, collective inquiry into meaning in one's life.

Only within the recent decade, however, has empirical research begun to unfold altered worldviews with solid data, in terms such as the concept of posttraumatic growth (PTG) or "adverse growth," that is, personal growth in the face of adversity.<sup>31</sup> PTG is defined as the experience of positive change or gains resulting from struggle with highly challenging life crises.<sup>32</sup> One of the major PTG theoretical perspectives emphasizes the process of schema reconstruction and social-cognitive processes in meaning-making after victimization.<sup>33</sup> Traumatic events may generate contradiction and present challenges to an individual's existing worldview, which events could include the loss of a benevolent, controllable, or predictable environment. The threat of unexpected, undesirable, and uncontrollable catastrophe tends to shake the very foundations of an "assumptive worldview," one that people would otherwise



assume to be adequate in ordinary life circumstances, or to disturb a comfortable sense of “second-order realities,” as distinct from “first-order realities.”<sup>34</sup> Shock and confusion from catastrophe and adversity upset the supposed validity of these taken-for-granted worldviews, and thereafter change and adaptation to new realities may follow.<sup>35</sup>

In other words, crises experienced in the external world, such as those in the 9/11 catastrophe, may turn one’s internal world upside down, and in the aftermath pressures to form a new worldview, or aspects of one, could well arise. *Struggles* to cope with crisis can open up alternative interpretations of adversity, perceived benefits from crises, or new meanings and purposes of life.<sup>36</sup> To date, positive changes have been observed in the aftermath of various crises, including medical conditions, disability, personal tragedy, bereavement, or natural disaster.<sup>37</sup> Consistently, common forms of posttraumatic benefits have been grouped into four categories of perceived gains, namely changes in the self, in relationships with others, in philosophy of life, basic values, or goals, and in behaviors of coping or health practices.<sup>38</sup> Perhaps as a ground for changes in the fourth category, the first three all manifest fundamental dimensions of worldview, a basic sense and perspective by which aspirations, attitudes, and behaviors are driven. Little research, however, has addressed PTG phenomena at a cultural or a group level.

Derived from 9/11, what particular categories of change could be seen within the American population? This tragedy might have offered a window of opportunity for understanding both individual and collective positive gains. Compared with the extensive large-scale surveys on post-9/11 PTSD, however, only a few studies have examined post-9/11 PTG. At two months following 9/11, Butler et al. collected a large-scale Internet sample of 1,505, predominantly white (92 percent), female (77 percent), middle-aged (age, 45±), educated (media, graduate school), and affluent (median household income, \$60–\$79k).<sup>39</sup> The highest growth was found for *Appreciation of Life* (44 percent), followed by *Relating to Other* (36 percent), *Personal Strength* (29 percent), *Spiritual Change* (27 percent), and *New Possibilities* (13 percent) of the *PTG Inventory*.<sup>40</sup> At the six-month follow-up, however, levels of growth decreased considerably across all subscales, except *Spiritual Change*. Further, *Positive Worldview Change* (the *Changes in Outlook* scale) was highly associated with five subconcepts, whereas religious involvement predicated only *Spiritual Change*.<sup>41</sup> The authors wisely concluded that post-9/11 PTG involved an “existential domain.”

Although this study included 162 respondents who were directly exposed to the 9/11 attacks or had a 9/11 victim close to them, most other studies have examined individuals who only experienced 9/11 indirectly. A prospective study found perceived gains (the Perceived Benefit Scale) across many categories among 514 students (white 77 percent; female, 34 percent; mean age 21±) from two Southeast colleges (military, liberal arts).<sup>42</sup> These gains, however, reduced considerably between 1–2 weeks after 9/11 and the 10-month follow-up. A qualitative analysis of 457 college students with diverse beliefs

from the states of Pennsylvania, Nevada, and Washington (white 64 percent; female, 83 percent; age, 29±) showed changes in the three worldview-related PTG patterns.<sup>43</sup> The unique context of international terrorist attacks also led to adoption of an additional category of growth, namely changed *political outlooks*. Many of these aspects of PTG were profoundly spiritual in nature; yet, aspects of spiritual change went in both positive and negative directions. These findings may lend support for Butler et al.'s conclusion that an existential domain was present in post-9/11 PTG, despite considerable generational differences between study samples.<sup>44</sup>

### Similarities across Populations and Value-Laden Post-9/11 PTG

The above three studies reflect certain gender and age differences across samples. Concerning 9/11-based changes, of particular interest may turn out to be the growth phenomena among younger generations, given their worldview-formulating developmental stage at the time of the tragedy. During the past several decades, large-sample longitudinal studies and life-course research have unfolded cohort effects and intergenerational differences in the United States.<sup>45</sup> Life experiences that occur in a specific historical period, such as those of the civil rights movement or wars, have a significant impact on shaping cohort adult development—for example, that of the Boomer generation.<sup>46</sup> Conversely, the lack of such defining historical events may also contribute to unclear cohort characteristics within certain other generations—for example, Generations X and Y, which had been used to years of peace and prosperity. The historically traumatic event of 9/11, then, might have imposed its stamp on those who were teenagers or young adults at the time.

A California study targeted 513 adolescents with diverse race/ethnic backgrounds (white 16 percent; female, 44 percent; age, 13.5±), including 4 percent of Persian descent, from four middle schools.<sup>47</sup> The partial form of PTGI measures indicated an average mild amount of cross-category positive change at eight to nine months after 9/11. Religious Identification, Optimism, and Discussion of 9/11 were significantly associated with higher PTG scores. Of the sample, 33 percent reported moderate to high levels of Positive Change, but 11 percent reported Negative Change. Further, the study in part addressed this question: Which subgroup may have changed the most or the least in the aftermath of 9/11? Hispanic (44 percent) and white adolescents reported significantly greater PTG than did their Persian counterparts. The authors suggested that the latter response could result from a perceived religious alienation, because Iran was labeled by federal government leaders as part of an “axis of evil” after 9/11.<sup>48</sup> Likewise, in Ai et al.'s cross-campus study no Muslim students admitted to their Islamic religion, though they identified Muhammad as representing their spiritual higher power.<sup>49</sup> This discrepancy could also be due in part to fear or concern about value-based isolation.

The 9/11-related studies have begun to fill a large hole in the PTG literature, namely study of individual and collective gains from massive violence, involving large-scale mortality and destruction (e.g., wars). Terror management theory (TMT) asserts that *mortality salience* may lead to *cultural worldview defense* and related changes, a claim supported by hundreds of experimental studies conducted in different countries.<sup>50</sup> In other words, perceived threat to self, to personal identity, or to one's worldview could drive an individual to modify one's values and priorities, as well as related behaviors.<sup>51</sup> This change could, in turn, be shared among collectivities of quite diverse make-up. The similarity between Hispanic and white students in Milam et al.'s (2005) study, for example, might imply a 9/11-based rally toward cross-ethnic solidarity between mainstream and immigrant American youths facing a common threat in the form of international terrorism.<sup>52</sup>

Such a cross-subpopulation gain, based on an ideological bond after 9/11, is further supported by a three-year follow-up of a U.S. national sample.<sup>53</sup> Of 1,382 American respondents (white, 71.1 percent; female, 51.1 percent; age, 48.1±) to the national survey, the majority (57.8 percent) reported perceived social benefits of 9/11, regardless of age, generation, race, or ethnicity. Similarly, researchers in other Western countries observed post-9/11 PTG among individuals who experienced only vicarious exposure (i.e., via the media) to attacks but shared a general array of values with other Americans. In Canada, a follow-up of 40 Ottawa residents (age, 47.3±) found that a greater personal threat appraisal after 9/11 was related to higher levels of distress at 6–11 weeks after the event, showing the importance of *meaning* in 9/11 impacts.<sup>54</sup> Both threat and distress predicted positive life changes at 11 months after, controlling for empathetic concerns that were nonpredictive. A survey of 80 London residents (50 female; age, 34.5±) 3–5 months after 9/11 offered a more precisely identified mechanism to explain the shared PTG reaction across the Atlantic Ocean.<sup>55</sup> British citizens believing that terrorists attacked their own values or beliefs, or that 9/11 was the work of religious fanatics, were more likely to experience positive changes. Both studies indicated that Westerners who had closely identified with American ideology after 9/11 had undergone more substantive, positive changes.

Since most study populations were not directly victimized by 9/11, the international phenomenon of post-9/11 PTG may nonetheless bear some theoretical implications. First, the findings from all of these studies suggest that mere reports on the terrorist attacks of 9/11 on U.S. soil were strong enough to shake aspects of worldviews among certain populations based only on the *shared shaken worldview*. Consistently, these studies, large and small, revealed various changes, though it remained true that some indications of change could shrink somewhat after reaching their peak at two weeks after any trauma, according to Linley and Joseph.<sup>56</sup> Second, the U.S. national study could also represent a new stage in empirical approaches to *collective trauma*, for this was the first time that positive gains of a whole population, though largely indirectly

traumatized, were assessed with a representative sample.<sup>57</sup> Third, most benefit gains identified in this U.S. national study were at a group level, indicating large-scale cultural change among the American people. *Philosophical benefits* (e.g., understanding of the world) were classified by authors as a single category of gain in the *self*, indicating an individual's worldview change. By contrast, *political* (e.g., increased patriotism), *prosocial* (e.g., kindness, altruism, and closeness), *security* (e.g., of airports), and *religious* (e.g., prayer) *benefits* were classified as categories of changes in *other people* or within the *nation*, indicating collective changes.

Yet, these findings have also pointed to a major limit in PTG conceptualization. Thus far, the area of research has mainly focused on directly traumatized individuals in adverse events and has reflected positive gains only at the individual level. The value-laden collective trauma of 9/11 has called into question the use of existing PTG measures at collective or public levels. Already, Israel population research has linked individual growth with "right wing political attitudes" and "retaliatory violence."<sup>58</sup> Similarly, concerning positive gains at a societal level three-years post-9/11, the authors of the U.S. national survey did not sound so positive as did positive psychologists in their earlier Internet survey.<sup>59</sup> As reported by Poulin et al., *finding increased national faith as a benefit* at 2-months post-9/11 predicted subjective well-being, while pre-9/11 *religiousness* and *Republican political affiliation* predicted *religion-based social benefits*.<sup>60</sup> Based on the TMT theory, the authors concluded that the 9/11 social impact, leading as it did to cultural shifts toward religiousness, may have benefited only a certain segment of Americans, one that was more conservative or religious, which was mobilized for religious cultural defense by 9/11. This too would seem to be too restricted an empirical finding.

### The Paradox of Deep Interconnectedness and Deep Conflict

Whether the post-9/11 social benefit should be viewed as positive or negative, or both, may have to wait for history to form its own conclusion. Yet, the above studies, taken together, have already sounded the alert, drawing attention to an underinvestigated area of PTG—namely, that concerning existential, spiritual, and religious matters.<sup>61</sup> Wilson and Moran emphasized that traumatic events affect not only the psychological dimension of self, but also socially mediated and shared, collective faith systems that give meaning to life.<sup>62</sup> Salient in the 9/11 attacks, ideological, faith, and value systems were shown to play a central, distinctive role in 9/11 PTG. Post-9/11 PTG was meaning-provoking and worldview-based, and therein observed growth was not particularly tied to U.S. citizenship or even to geographic location (e.g., New York City or the United States). Rather, the triggered cultural change that occurred was associated with certain widely held values and/or with an enhanced social identity, as a *collective self*, among Americans and

others bonded with them by virtue of certain aspects of their worldviews. Confirming this value-based emphasis, all these studies have shown that not all Americans reported perceived gains, measured either in terms of personal growth or in terms of social benefits.

Indeed, some post-9/11 changes could clearly be seen to move in opposite directions, depending on individuals' worldviews and religious identities, though research thus far has focused mostly on positive changes. The existing data on post-9/11 PTG have offered only a less-than-satisfying answer to the question: Did Americans as a whole obtain positive changes due to 9/11? The ambiguity between negative and positive results may well lie in limits in the ways empirical research itself has been conducted, at odds with the actual phenomena of this traumatic event. Whereas science is generally assumed to be value-free, the events of 9/11 and responses to them are clearly value-driven. Social science often attempts to present linear logical thinking and yields conclusions based on statistically verified relations among directionally assessed constructs. Yet, history tends to follow its own dynamic, sometimes taking contradictory pathways. The value-laden, traumatic historical events, such as international terrorism, may also present challenges to a value-free position of their empirical observers. Thus, understanding 9/11 and its aftermath may require procedures that go beyond simple tools operationalized in this way.

Thus, viewed through finer, more discriminating lenses, it should be possible to see post-9/11 gains among Americans in terms of a more complex, growing sense of *deep interconnectedness*. In other words, 9/11 might well have helped to bring certain groups, even whole generational cohorts of Americans, especially younger ones, out of their own shells of daily living into a broader horizon, that is, into a more profound interconnection with aspects of the world-at-large. We define a sense of *deep interconnectedness* as a profound relation with a significant entity in life, which bestows grand purpose and meaning to the individual (also see the finding from our cardiac study).<sup>63</sup> Dilthey's student, Martin Buber (1878–1965), a Jewish existential philosopher, expanded the worldview concept to include certain fundamental human connections, a triad composed of *society*, *spirit*, and *nature*.<sup>64</sup> Buber was also inspired by Friedrich Schleiermacher (1768–1834), another philosopher, who is also known as the founder of modern theology, and by his friend Franz Rosenzweig (1886–1929), a Judeo-Christian interfaith scholar known, as Schleiermacher was, for articulating changing relations among God, world, and humanity over time.<sup>65</sup>

Each of the relations in Buber's triad can involve a meaningful interplay between humans and significant objects in the reality projected by various worldviews, and within this interplay a sense of deep interconnectedness would be embedded.<sup>66</sup> In fact, the triad can be further divided into two fundamental dimensions, *physical* and *nonphysical*, in life or of perceived human realities, to use positive psychologists' term (Peterson & Seligman).<sup>67</sup> Yet, a sense of deep interconnectedness in both dimensions could convey meanings,

forge transcendence, and enhance hope and motivations for changes.<sup>68</sup> A relation with spirit in the nonphysical dimension, for example, could generate a sense of spiritually complete dependence on God, not only of oneself but of all the interconnected processes of nature, a sense conveyed in nonmonotheistic religions in other ways (Schleiermacher, 1821).<sup>69</sup> For many persons, relations with nature or society in the physical dimension may give rise to a sense of interdependence with the environment or with other human beings, including people of faith. It should be noted, however, that a deep sense of interconnection reflects a complex, worldview-based, highly motivating need, one that for humans is rather different from basic needs for attachment, relatedness, and intimacy in other animals, as shown in pertinent literature.<sup>70</sup>

After 9/11, such a sense has clearly been broadened and deepened for many individuals and collectivities, indicated, for example, in collectively meaningful actions of Americans in dimensions of life, both more spiritual (e.g., prayer, religious attendance) and more secular (e.g., patriotic expression, donations, forming of close networks). An experiment on New Yorkers who experienced 9/11 found that terrorist attacks evoked not the need for intimacy but the need to *care for others* (nurturance motivation), a phenomenon that was, in turn, related to PTG.<sup>71</sup> Similarly, the national survey mentioned above also demonstrated that many Americans found non-partisan and nonrace-based political benefits, including greater political engagement and reduced partisanship.<sup>72</sup> Accordingly, both the general national support for the Republican president in the period immediately after 9/11, and the opposite, also general support for the eventual Democratic candidate and president-elect, most prominently among younger and new voters, eight years later, cannot be taken as historically coincidental. The national trauma wrought by the 9/11 attacks, became a lightning rod, presaging a series of chain reactions over at least the first decade of the twenty-first century.

A sense of deep interconnectedness, featured in post-9/11, is an especially significant indication of Americans' PTG, containing both positive and negative components and consequences, depending on levels of involvement and on standpoints from which judgments are made. What is, in effect, a cultural change is consistent with many dramatic events that have arisen in the world's history, linked as it is with seemingly paradoxical gains that were not achieved free of conflict or struggle. This observation is supported by Friedrich Schleiermacher's dialectic, and also by the opposing, more conventional dialectical ontology of Georg Wilhelm Friedrich Hegel (1770–1831), also a nineteenth-century philosopher. Schleiermacher was sensitive to the distinctiveness of individuals and to their complex interrelations and experiences at all levels, ranging from the feeling of deep interconnectedness to more organically complex levels of sensation, perception, thought, and conduct.<sup>73</sup> Hegel integrated contradictions and oppositions in terms of logical necessity, a universal law that he took to underlie all realities.<sup>74</sup> In Hegelianism, contradiction, negation, and dialectic integration of two opposite but related sides necessitate all dynamically forward movement in nature, in history, and in transcendence.

The dialectical approaches of Schleiermacher and Hegel, albeit quite different, both perceive the seemingly contradictory character of much that can occur in human history, in some ways reflective of the dynamic structure of the natural world itself.<sup>75</sup> This perspective implies that seemingly polarized aspects of behavior are actually interrelated and are meaningful only in terms of their contrast to each other. Deep conflict, internal struggle, and uncertainty that arise by virtue of the contradictory but interrelated pairs for multiple aspects of events are seen to be dynamic, complex phenomena, moving toward adaptation, pushing toward equilibrium and toward a possibly more positive future.<sup>76</sup> Based on these philosophical positions, central to the positive PTG is a seemingly negative process of struggle that paves a way toward a reestablished internal world and a sense of psychological well-being in face of worldview-shaking adversity.<sup>77</sup> Consistently, report after report on 9/11 noted its coexisting negative and positive impacts, indicated in polarized but parallel reactions, as shown earlier. The U.S. cross-campus survey found that peritraumatic positive and negative emotions were moderately correlated with each other.<sup>78</sup> The British study found that positive changes occurred alongside negative changes.<sup>79</sup>

Furthermore, post-9/11 PTG or benefits reported in U.S., Canadian, and British studies have related this perceived threat to attacked Western values (some manifested in religion or ideology-related self-identity).<sup>80</sup> A path-model analysis also illustrated that the phase I trauma symptoms (one to two weeks post-9/11) predicted phase II benefits (ten months later), controlling for phase II symptoms.<sup>81</sup> Despite inconsistent conclusions regarding the overall nature of such gains, these findings have at least added new evidence to a recent meta-analysis of perceived benefits and growth after trauma.<sup>82</sup> Based on reports in 87 cross-sectional studies, including two early reports on 9/11-related growth, the authors have concluded that severity of traumatization can be significantly associated with sequential growth and serious change.<sup>83</sup> Based on the above findings, it should be safe to say that the 9/11 traumatic impacts are at least as paradoxical in their effects as are those of other crises.

### **Parallel, Contradictive Pathways to PTG and PTSD**

Despite the advances in the 9/11 trauma research, an important question remains: How could these initial polarized reactions lead to both positively and negatively framed outcomes of 9/11—namely, PTG and PTSD? The existing findings have surfaced yet another limit in the 9/11 PTG evidence. Most studies tend to be chiefly descriptive (e.g., identifying patterns of growth), while some predictive studies (e.g., showing contributors to PTG) are also limited by using directional scales that may not quite reflect the contrasting, or even conflicting, phenomena regarding the nature of gains from trauma. To be more explanatory (e.g., to show the dynamics of growth) and to demonstrate what underlies the seemingly contradictory reality of the 9/11

events, it is necessary to elucidate comprehensively the co-existent pathways of deep interconnectedness and of deep conflict, dynamically leading both to post-9/11 PTSD and to post-9/11 PTG in one analysis. To address the issue, we employed path modeling to demonstrate the complex relations at multiple levels using a prospective design. Though still quantitative, it moves to accommodate meanings closer to what qualitative studies would reveal about the reality examined than does strictly linear logical thinking, based on empirically assumed directional relations.

Before describing our hypothetical model, it should be noted that, despite similar theoretical roots for the two concepts, PTG and PTSD research camps have not been well integrated; nor have they been precisely examined together in empirical models.<sup>84</sup> Nonetheless, following Frankl, most PTG theorists have highlighted the centrality of meaning-making in growth, while PTSD scholars have also tended to point out the importance of meaningful actions.<sup>85</sup> Indeed, encountering the unpredicted events of 9/11, the platform for meaning, built of elements such as values, faith, and beliefs held within one's worldview, could be shattered and thus contain contradictory outcomes as well. On the one hand, threatened individuals could seek meanings, purpose, hope, or support from their significant relation with a perceived higher power, or from families and friends.<sup>86</sup> On the other hand, severe traumatization could lead to doubt concerning one's faith, values, or ideology or to conflict regarding their authoritative sources. Interestingly, the two seemingly opposite themes after 9/11, namely (a) feelings of greater spiritual interconnection and/or looking to God for strength, and (b) questioning of one's faith, values, or ideology, or wondering why God should permit such evil, were reported both in a cross-campus student sample with diverse beliefs and in a Christian clergy sample.<sup>87</sup>

The above two themes can be seen to be manifestations of coexisting post-9/11 phenomena: (a) a sense of deep interconnection and (b) an experience of deep conflict or struggle—one aspect is assimilating the information as challenging aspects of an existing belief system, while another aspect is turning the belief-system around to accommodate the threatening information. As was asserted by Janoff-Bulman, however, accommodation—through struggle in this case—tends to require an abrupt shift in worldview, to be interpreted as a qualitative change rather than a gradual, simply quantitative change.<sup>88</sup> In fact, this meaning-based pair reflects two seemingly contradictory aspects of one thematic area, the new existential domain that arose in history most notably through post-9/11 PTG. This new and distinctive domain is highlighted especially in varied aspects of a fundamental *existential relationship*, to use Schleiermacher's term.<sup>89</sup> The new equilibrium attained by people in their facing conflicts between the two themes may well serve to transcend the present darkness of terrorist threats through *deep interconnections*. The power of such connections, with aspects of the world-at-large and/or with their Supreme Being or spiritual source, thereby may move them toward a more hopeful future.



Accordingly, first, in our path model we hypothesized that *deep interconnectedness* and *deep conflict*, triggered by 9/11 peritraumatic reactions, could both lead to PTG. Furthermore, as noted by Joseph and Linley, accommodation could be seen in either positive (e.g., attaining greater psychological well-being, or growth) or negative (e.g., feeling hopelessness and distress) directions.<sup>90</sup> In the latter case, we hypothesized, second, that undergoing *deep struggle*, but not attaining *deep interconnectedness*, could result in PTSD, mediated by pessimistic expectations, as was indicated in the national survey.<sup>91</sup> Correspondingly, we tested the parallel pathways that emerged for the two sides, or themes, so as to predict PTG and PTSD simultaneously in our follow-up of the cross-campus sample.<sup>92</sup> Based on Buber's triad, also evident in Milam et al.'s findings, the latent concept of *deep interconnectedness* was assessed at both spiritual and social levels, indicated by *perceived spiritual support* and *perceived social support*.<sup>93</sup> *Deep conflict* was assessed with one indicator, *spiritual struggle*, essentially reflecting an intensified relation with God or a higher spiritual source (e.g., Jesus, Mohammed, Buddha) in faith.<sup>94</sup> Different from an earlier report, we have been able to collect second-wave data only at the universities of Nevada and Washington, but not at Pennsylvania.<sup>95</sup> Also, the endpoint, distress, in Wave-I, was replaced with a mediator, PTSD, in Wave-I, which was assumed to predict both PTG and PTSD in Wave-II.<sup>96</sup>

Mostly consistent with our expectations, our final path model did indicate the parallel and complex pathways of deep interconnectedness and deep struggle to both post-9/11 PTG and PTSD, as roughly shown below (fig. 8.1). The illustrative model in this prospective study somewhat replicates one on post-9/11 depression and anxiety in a cross-sectional analysis.<sup>97</sup> Both models suggested the potential protection of spiritual support against post-9/11 PTSD, mediated through optimism. Expanding the previous model, however, the current model further demonstrates two coexistent, seemingly contradictory aspects of 9/11 collective trauma.

Note that the diagram in figure 8.1 is used only for illustration of major parallel pathways. The exact figure will be published in a forthcoming journal article. A dashed line indicates an inverse relation between the two sides. Otherwise, the relation between the two sides is positive.

As shown in the model, first, the model supports the notion of a worldview-based process in PTG along with the fact that 9/11 emotional turmoil (peritraumatic negative reactions) triggered both (a) *assimilation* and (b) *accommodation*.<sup>98</sup> Specifically, the notion (a) was manifested in a pathway between a meaningful action, *prayer coping*, and *spiritual support*, in which God's love was perceived, whereas the latter notion (b) was represented by the pathway of *spiritual struggle* in which God's power was questioned. Second, the model supports the role of Buber's triad relation, in which a sense of *deep interconnectedness* was embraced.<sup>99</sup> Specifically, as revealed in the assimilation pathways, the post-9/11 meaningful action contributed to the perception of both *spiritual support*, indicating a relation in a *nonphysical dimension*

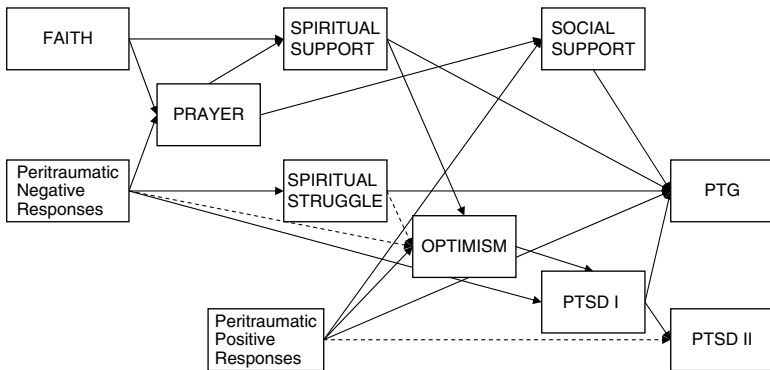


Figure 8.1 Major Parallel Pathways.

in life, and *social support*, indicating a relation in a *physical dimension* in life. Both spiritual and social support shared a similar function in their enhancing post-9/11 PTG. Third, the model supports the notion of a consequence of *negative accommodation* (spiritual struggle) in PTG, expressed in a resulting hopelessness (reduced optimism).<sup>100</sup> Yet, this negative pathway also supports the notion of *resource loss* (reduced optimism) playing a role in a sense of devastated subjective well-being or despair (PTSD in both Wave-I & II).<sup>101</sup> Finally, the most noteworthy finding in this model lies in its empirically evident support for a dialectical resolution of seeming contradiction, emphasized by Schleiermacher and Hegel.<sup>102</sup> Specifically, the *dynamic integration* of conflicting aspects, namely processes of *affirmation* (deep interconnectedness) and *negation* (deep struggle), can lead to *forward movement*, as is seen in post-9/11 PTG. In the context of massive traumatization after 9/11, our study thus reinforces complex crisis phenomena in the interplay of such factors as deep spiritual struggle, desperation, coping, faith, a sense of deep interconnectedness, and other manifestations of post-traumatic growth.

## Conclusion

As this chapter reaches its conclusion, U.S. history has already turned to a new page, offering its own answer to our original question: Yes, a substantive, fundamental change has occurred among Americans viewed at large, shown in part in an outpouring of support, not least among younger generations, for the first U.S. African-American president-elect in 2008. More specifically, the new leader is biracial and from an interfaith, cross-continentially extended family, one that has shared many features with millions of Americans born after the post-World War II era. For better or for worse, these features have

included immigration, migration for jobs, teenage pregnancy, single parent family, grandparent parenting, seeking education for success, and resilience in experiencing personal financial uncertainty over the half century of relative peace, prosperity, technological advance, and international superpower status enjoyed by inhabitants of the United States. This milestone championship was perhaps not so much about such personal characteristics, however.

Rather, by and large it was about the capacity to mobilize a large, growing majority in a single collective self-identity as “Americans,” a new spirit emergent after the national crisis of 9/11. The monumental engagement of Generations X and Y, and the following generation, in this political event, suggests that for many Americans, politics might no longer be perceived as a continual switching between partisan teams, at the hands of a few brilliant politicians or affluent successors. Instead, people could have their voices heard more directly in the shaping of U.S. policy, its economy, and its democratic institutions. More important, civic engagement, whether it lies within a relatively physical dimension (e.g., political, financial, volunteer, community participation, social services) or within a relatively nonphysical dimension (e.g., spiritual, existential, and informational), might well come to play a more important role in the life of Americans, especially of younger generations. In other words, the American dream might well come to be not so much about personal advancement in competition for a better job, a decent house, a car, and a dog as about collective efforts toward building a better nation, working toward a just and a peaceful world, and enhancing a common humanity on the global stage.

Indeed, potentially the ideological change that is now occurring at the public level might well be bringing with it new hope for all Americans, and eventually to the rest of the world. Yet, the sense of togetherness is still clearly mobilized, in part, by a common threat and by an attendant awareness of our interconnected world over the past eight years. Following 9/11, such a world-view-based communal sense has also been further boosted by a series of dramatic events that also bear global implications, including surging international terrorist attacks, ambiguity over the value and cost of ongoing wars, continual increases in global warming and other environmental devastation, unprecedented mortality following Asian-Pacific natural disasters, and, finally, the present international financial crisis. The impact of each link on this event chain has certainly been fueled by background trends that had already arisen over several decades before 9/11, not least economic globalization and fast-moving technology for transmission of information. Yet, arguably collective trauma at 9/11 injected an especially marked stimulus for cultural change among Americans themselves. The shockwave at 9/11 itself appears to have led to some profound changes within Americans’ collective worldview.

Even as the shock subsided, the challenge has led survivors to search their minds and souls, thereby also continually to seek to rebuild a *new Self* as “American,” a collective social identity, across many sociocultural boundaries. This post-9/11 PTG may well have opened new relations with other nations and led to new outlooks on life as an advancing awareness of community has

been forming at many levels. A sense of deep interconnectedness has arisen among the American people, a gain in existential and spiritual relationships that coexists with remaining various contradictions and conflicts. If World Wars I and World War II in the twentieth century had led the United States to leadership on the global stage, the 9/11 tragedy has brought a meaningful global perspective and hope to many people's hearts, alongside and despite other, more negative trends and catastrophes occurring around the world at the beginning of the twenty-first century. In this sense, 9/11, and its aftermath, have already made their marks, not only negatively but positively as well, on the changing history of Americans and of the world. We believe that further, more aptly sensitive research will display still more fully what an impressive mark this event has made and will continue to make.

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  97. Ibid.
  98. Joseph and Linley, "Positive Adjustment to Threatening Events."
  99. Buber, *I and Thou*.
  100. Joseph and Linley, "Positive Adjustment to Threatening Events."
  101. Hobfoll et al., "Refining Our Understanding of Traumatic Growth in the Face of Terrorism."
  102. Schleirmacher, *Dialectic, or the Art of Doing Philosophy*; Hegel, *The Phenomenology of Spirit*.

# Trauma and Tragic Transformation: Why We Learned Nothing from 9/11

*Walter A. Davis\**

A traumatic event shatters all of the defenses and beliefs on which the ego depends to maintain its identity and security. Where there was once smooth functioning there is now only massive anxiety. That is why traumatized subjects so often rush to anything that offers deliverance. The shattered ego seeks a solution that will return it to the way it was prior to the trauma. Indeed, most theories of trauma assume that the trauma is resolved only when catharsis, recovery, and closure have been attained, that is, when one has reclaimed the identity one had prior to the trauma.

An alternative view calls for a more radical journey. As Freud pointed out, an experience is traumatic because it exposes things that we've repressed and denied about ourselves. The truth of the ego is thereby revealed: the ego is a system of defenses constructed in order to deny reality. Rather than signaling the need to restore it, trauma signals the need to destroy it: to undertake a radical transformation based on the realization that one can never return to who one was or the way things were.

The response of the Bush administration to the trauma of 9/11 presents a particularly revealing, if extreme, example of the first and dominant response to trauma. First, a proclamation of our innocence and victimage. Second, a massive act of projective evacuation—the war in Iraq—as the only way to restore our identity. Any chance that 9/11 might have brought about painful

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reflections on America and its actions in the world are thereby banished. Blowback is blown away. The trauma is “resolved” in a way that perpetuates it. There’s a lesson in this for all of us who love to repeat Santayana’s great aphorism “those who fail to understand the past are condemned to repeat it.” Namely, that to avoid this fate we need to develop a response to trauma that takes up (and fully constitutes) the radical implications of the second view of trauma introduced above.

My subject is the failure of politicians, the media and those who’ve written the big books on 9/11 to offer anything but ideologically comforting resolutions to that traumatic event and how this failure can be rectified only when we see the need for a radically different way of responding to trauma and have developed rigorous procedures for carrying out that project. Two difficulties stand in the way. First, the political-cultural stage is so large and complex that only a book could hope to do justice to all the empirical details that must be discussed to deal with 9/11. Second, the theory of trauma I want to offer entails a challenge to the entire structure of assumptions and ontological guarantees that underlie and structure dominant canons of rationality, explanation, and discourse.<sup>1</sup>

What’s needed is an example that will dramatize the theory; something on the concrete and personal level that can serve as a model for a larger political and sociohistorical inquiry.

My effort to outline a radical theory of trauma begins accordingly not in New York on September 11, 2001, nor in Iraq today, but much earlier in a place far removed from both—death row in San Quentin. It was there in 1986 that a man sentenced to death for the brutal murder of a young woman began what he today refers to as “The Journey.” It was there also that I interviewed him for four hours in 2005. Those interviews provided the basis for a monologue play that I then wrote, which also forms the final chapter of my book *Art and Politics*. What I want to argue here is that the experience my friend has undergone in his years on death row exemplifies the basic structure of what a traumatized psyche must go through in order to live through that process in the right way: by making the trauma the basis for a complete psychological transformation. That is, I want to articulate the theory implicit in his action; to conceptualize the structure of a drama (and thus of what an audience at a performance or someone reading the play might experience). As we’ll see, that process is composed of ten distinct steps. My purpose in schematizing this process is to conceptualize each stage in a way that highlights its function in the overarching structure. For that reason it isn’t necessary to have read the play to understand what follows.<sup>2</sup> In effect, this overarching structure constitutes a new theory of tragedy, or the tragic, one in which there is no catharsis, no recovery, no resolution, no return of the ego to the way things once were—and I say this here not just of my friend but of what his journey offers the reader: a challenge to the assumptions on which our identity depends and the possibility of taking up a radically new relationship to ourselves. Only one thing is needed to engage this possibility. Each stage of the process activates a

desire to halt the process—to short-circuit the trauma—because it threatens a psychological need or guarantee necessary to the maintenance of the ego. Readers are thus offered a series of experiences of their particular resistances to trauma as well as the possibility of overcoming them. Finally, there's one other claim I'd make for my friend's journey. I think it describes what human beings must go through in relating to the disorders of their psyche in order to become ethical agents. And in that sense the overarching purpose of this essay is ethical: by analogy, to describe the structure of what we as a nation must go through in order to understand and not repeat the past and thereby to achieve a new way of relating to the world.

But idealism is only as good as the will to suffer that must inform it. So if you will bracket all assumptions, come with me now into the heart of darkness on a journey that, like Dante's, knows that the only way out of hell is to plumb its depths.

### **Bankruptcy**

*I fell off the edge of the world.* (Each section begins with a citation from the monologue that indicates the place in it under discussion.) A condition of hopelessness. With no exit. All the lies, displacements, defenses have collapsed. The ego has no way to protect itself from the assault that some other principle in the psyche wages on it. The basic truth is experienced. Ego identity has been a flight from knowing the very thing it has thereby brought to pass. This is the ground truth of all tragedies: the tragic outcome is something we bring upon ourselves by refusing to face the truth about ourselves. That truth now assaults us and with no way left to protect ourselves from living confined to the most primitive form of psychological suffering. The images of our most violent actions and experiences wage an assault which leaves the psyche in a constant state of psychotic anxiety. Trauma entails the threat of self-dissolution. That is the threat at the core of trauma that makes it so terrifying—and why most traumatized subjects will clutch at any lie as long as it eases the pain. A tragic agent is one who refuses that option. In that sense the prisoner here attains the beginning of tragic agency—the will to assault oneself with the truth about oneself.

Nevertheless, passivity here defines the psyche's relationship to the assault from within. To assault oneself in this way derives from a vital core of humanity. It has not yet, however, become a principle of active self-transformation.

### **Reading (oneself)**

*Books where a life is at stake on each page and/in a struggle with something that can destroy you.* The condition of catastrophic anxiety that now defines

the psyche offers the possibility of a genuine education. For there is now a principle of selection for determining what books are worth reading and a way to read them. The only worthwhile books are ones in which the author is actively probing the psyche's deepest disorders, willing to risk madness rather than compromise that search. The only way to read is to use such books (1) to discover all that you don't want to know about yourself (2) in a way that puts you at risk existentially. In #1 the psyche passively suffered the truth about itself. In #2 it actively engages in an effort to understand the causes of its condition. Reading here is an inquiry into the sources of unhappiness, suffering, and cruelty that constitute the human condition. That inquiry is driven by this goal: to know the worst about yourself so that you can undertake an effort to root it out of yourself. But with the understanding also that what you discover may bring about your destruction. Only by accepting and sustaining this condition can the inquiry keep itself free of the appeals of self-pity and the defenses of the ego. That is what it means to be existentially at issue, and that is the condition that is here attained.

### Traumatic Images

*The family like branches of a poison tree, a tree that could only grow downward.* There is one limit to #2 and it's a serious one. The entire effort takes place in the head. No matter how existential its contents this is still an intellectual space and thus prey to all the ways in which intellectualization can serve as a defense against experiencing the conflicts of the psyche in a primary way; that is, a way that allows no distance between the subject and his disorder. Tragic engagement begins only when we open ourselves to those traumatic images that force us to suffer again the most violent experiences and acts of our life. They constitute that *Memory*, which is different from all other forms of memory: the memory of the traumatic experiences that shaped the psyche. "An image is true insofar as it is violent." That maxim of Artaud's is never truer than here. The deepest register or crypt of the unconscious is composed of those images that preserve a permanent record of the traumatic experiences that threatened the psyche with self-dissolution. In remembering them, however, you must also live them in an entirely new way: not as individual items passively suffered but as events that must be related to one another in a way that reveals patterns, causes, and the structure of an overall disorder, which always has its origins in the family. Rather than blaming others, however, the psyche here experiences the family in terms of the way it participates in a disorder that it then perpetuates. The violence of the image is the bearer of the truth. All excuses are eradicated. Where previously, ruled by pity, we used bad luck, accidents and mitigating factors as explanations, we now see the scope of an *evil* and our active participation in its extension. We prove we've *internalized* what the traumatic images reveal, however, only when we take the appropriate *action* by passing the sentence of death or eternal

punishment on ourselves. After such knowledge there is no forgiveness. No way out of psychic turmoil. The only way is to go even deeper.

### Reliving the Traumatic Event

*A point of infinite density, my heart, like the inside of a black hole. . . .* The traumatic event can now be relived in the right way—from inside. Character is fate. The inevitability of the traumatic event is experienced with the cause located within. The traumatic event is the fulfillment of the basic pattern that has structured a life. Nothing is accidental and there are no external causes. The self-knowledge most people flee has been attained. The result indicates why it is fled. For to know the self in this way leaves the subject in a state of *abjection*. In killing all defenses and demanding the harshest judgment, the psyche has stripped itself of every protection. All that is left is a drift toward death.

### Regressive Flight

*The dead are the only ones who have a right to forgive—and they can't.* Every advance in the psyche's conquest of itself is accompanied by a regression; that is, the desire to return to an earlier, simpler condition in order to avoid the suffering entailed by each advance. In a sense one begins again though on a deeper level of *taking action within oneself*. This basic law of psychological development is here illustrated in what is perhaps its dominant form: the desire for religious deliverance: the search for some principle outside the psyche that can save it from itself. The pull of the system of guarantees is never greater than when one has attained the inner condition that would enable one to break with them forever. This stage marks the crisis that separates the tragic subject from those who prove incapable of that dignity. The task is to overcome self-pity, which is here experienced as the temptation to compromise the responsibility we must assume for ourselves. All sunny humanistic outcomes are eliminated. The only way to overcome the appeal of pity is by liberating the judgment on yourself from anything that would restrict it. The result is a renewed and deeper attack by the subject on itself. *Tragic self-actualization* is the process of repeatedly taking action within oneself. But each action must get at a deeper register of our subjectivity. We are still far from the center or core of our being but the turning point has been reached.

### Judgment Pure Like Hammer Strokes

*I saw my life, that's all, like dirty bathwater whirling down a drain. . . .* The first step in that process is a return to reading; that is, to intellectualization as an

attempt to think in a new way and thereby articulate the concepts required for the next journey. Earlier the prisoner read in search of finding the ways in which life is existentially at issue. He now attempts to maximize that possibility by finding those ideas that will enable him to enact an uncompromising judgment on himself. Reading has become, in effect, the construction of a tragic philosophy and thereby a system of ideas antithetical to the system of guarantees. This is a massive task (a deracination of everything that ties us to the ratio and the logos through the systematic articulation of another way of being-in-the-world, but only preparatory work. The danger once again is that everything will remain “in the head.” Genuine internal action begins only when the hammer is brought down on the psyche. The clearest sign of the difference between the intellect and the psyche becomes evident in the first form that such action takes.

### **Paranoid Self-Persecution**

*I was distilled into a jelly with the act of fear.* The violence of the judgment called for is indicated by the fact that initially the psyche can only conceive of it initially as something performed by an external agent who has necessarily taken on the form of a paranoid fantasy. In that agent we image the violence of what we must enact internally. That task is to take all that was projected outside back inside and make it a way of acting on oneself. Three distinct ways the psyche relates to itself need to be distinguished here. (1) The traumatic event was an act of projecting inner disorders on others in an attempt through externalization to escape the psyche. (2) That operation is here reversed: the violence is now directed on within the psyche, but the agent remains an externalized fantasy. (3) Once everything is taken back inside the ultimate drama has begun. The psyche will have identified with a principle of self-destruction it applies to itself, the only authentic super-ego. For that to happen, however, passive suffering must be transformed into an active agency of change through willed suffering. That is, suffering must become the very logic of change and inner action. That is what has happened once the prisoner no longer needs the Black Man. “Spirit is the life that cuts back into life; with its suffering it increases its knowledge.” Nietzsche great formula for self-consciousness has only one defect—it privileges knowledge over a process that must be far more concrete and with a far more radical end. That process has now become possible. All that follows charts its development.

### **Solitary Confinement**

*My madness—the only thing left that was mine.* Isolation is the condition that defines all tragic figures. To attain an active relationship to the disorders of



the psyche is to be utterly alone with nothing left to distract from the confrontation with who we are. Such a condition constitutes one form of what we call madness. All projections have returned inside where they assault the psyche, which has no way to get outside that assault. To will the continuance of such suffering is the choice that defines tragic agency. But solitary confinement within the psyche isn't enough. We must go down into the Hole; that is, into the terrors within our psyche in an attempt to suffer them again but in a way that will transform our relationship to them. There's only one thing needed to liberate this formulation from intellectualization. The journey we are about to take is wholly one of emotion and will reveal emotion as the being of the psyche.

### **Reversal—The Dialectic of Emotional Suffering**

*Emotion. That's what we are. All we are.* What transpires here is marked by a dialectical series of stages that constitute as a whole what emotional self-transformation requires. All I can hope to do is outline each basic step in its necessity.<sup>3</sup> Spinoza's fundamental insight into emotion is the starting point. It takes us to the heart of what we are as subjects: emotional beings forced by that fact to seek the emotions that will release us from the burden and suffering of other emotions. This, in brief, is the source of the terrible things we do to one another and to ourselves. Trauma reveals that fact in a way that puts emotion on trial. We replace one emotion after another seeking the one that will resolve the problems of the psyche in a way that puts an end to anxiety. That emotion becomes the feeling that regulates the psyche's relationship to itself. That is, it is the emotion we choose whenever pushed, whenever confronted with conflicts that create anxiety. Each of us seeks such an emotion and once we find it we invest our being in it. The trauma is the outcome of the emotion that replaced all other emotions because it dissolved all previous conflicts in a feeling of self-reifying power. Rage performs that function in the prisoner's life and in the murder he commits that rage reaches a culmination. There is only one way out of the hells we create for ourselves. To engage both the condition and the process of existential emotional change. Change requires reversing the power of the emotion that rules our psyche in order to recover the feelings (and with them alternative possibilities) it has displaced. There is only one way to do this, however. That emotion must be turned back against itself, applied by the psyche to itself in an effort to reverse the entire history of our emotional self-determination. To condense this process into an image: the brute bully who identified himself with the cruelty acted on him must become the wounded child who felt that cruelty in a more primordial way—as the violation and betrayal of a vulnerability that can be sustained only if one can suffer humiliation and cruelty without identifying with the aggressor. The

subject thereby adopts a completely new relationship to its own emotional history, diving back into the past in search of those feelings and experiences that rage fled because they involved a suffering now embraced as a means of reversal and self-transformation. Whereas rage externalizes flight from our condition, suffering creates a *womb* of reclaimed possibilities. But only if we refuse to discharge the burden of emotional suffering. All that is remembered and suffered again must become “spikes driven through the brain straight into the heart.” Remorse is thereby reclaimed as a creative way of feeling freed from the appeals of self-pity. Grief is transformed into an identification with the suffering of others. In putting on that suffering we attain the possibility of a new relationship toward our own suffering. Our life returns as something we can grieve in a way that unites us with the victim of our deeds which are thereby understood for the first time in terms of their human cost. The most terrible thing about the murder the prisoner committed, for example, is that it deprived the victim of the chance to ever know herself. That is, it deprived her of the possibility of undergoing the very journey that the prisoner has gone through. She died long before she could make a beginning. That’s why there can be no forgiveness. A new way of acting must replace that pathos. Its origin is found at the very moment that the prisoner’s grief for his victim maximizes his knowledge of the enormity of his crime. For it is then that love is re-born in him and spreads out from him to encompass everyone.

### Compassion

*Love spreading out from me like spokes of some great wheel.* He has undergone a complete change. Rage has been replaced by compassion. Compassion, in contrast to pity, is that emotion that relates to others in terms of the necessity of the tragic journey and the attempt to help them sustain it. We now know that to reverse their private hell every suffering subject must go through the same journey. Compassion is relating to all others in terms of creating that possibility. Qua perception it means seeing all the ways others are suffering and try to hide or flee that suffering. Qua action it means offering them overtures to the tragic by relating to the wound in the other rather than to all things the other has become and done in order to flee it. Compassion is thus that way of relating to others that preserves the tragic logic of change. Our own suffering opens us to the suffering in others as what must be sustained. Relating to others becomes the attempt to address the other at the tragic register of the psyche. So acting is the attainment of the only ethical agency adequate to the existential exigencies of our condition. The logic of suffering is the only logic of change capable of reversing the traumatic wounds that form the origin of the psyche.

### The O'Reilly Factor

I hear O'Reilly, Hannity, Limbaugh joined by a host of others from all sides of the political spectrum chafing at the bit to point out the basic flaw in my argument. My example is drawn from a guilty murderer. But 9/11 was an act of terror perpetrated on innocent victims. Accepting that dogma is the fundamental act that must control all discussions of 9/11.

If he's achieved nothing else, perhaps George Bush has put us in a position to see this dogma as a prime example of resistance to tragic knowledge: a way to forestall and foreclose inquiry into all that we would prefer not to know about our history and our actions in the world. Some readers may, however, wish to undertake that journey. I leave them with these traumatic images as signposts. *Ground Zero*. What's in a name? This term was originally coined to identify the spot where the first atom bomb was detonated in Hiroshima. For those who know the actual history of that decision, the term points to the first act of global terrorism.<sup>4</sup> An act that has been exorcised now that the term identifies the United States as the innocent victim of an unprecedented terror. Flash forward to one outcome of the subsequent War on Terror. The use by the United States of depleted uranium weaponry in Iraq is an act beyond genocide. A new term is needed to access it. *Ecocide*: the deliberate production of a condition of permanent radiological, biological, and chemical contamination whereby death comes to inhabit an entire ecosystem.<sup>5</sup> That, not liberation, is what the United States has brought to the people of Iraq as the only way to sustain the disorder that first announced itself on August 6, 1945: Love of Thanatos as the emotion that defines us as a culture.<sup>6</sup> Such psychohistorical connections as these set the task for a tragic historian: to undertake for history a journey similar to the one undertaken by my friend on death row. For each nation, each culture, each subculture reveals the most important and elusive assumption informing its self-understanding and its perception of the world when we view it from the perspective of tragic insight, as what it fundamentally is: a collective psyche in flight from the traumatic realities of its own history and the imperatives of its own tragic journey.

### Notes

1. This is the challenge that artistic cognition poses to the western logos. A different way of knowing a reality that exceeds and overturns dominant ways of knowing.
2. Those who wish can find it, however, on my website at: <http://www.walteradavis.com/works/2007/09/chapter-8-art-a.html>. A playwright interpreting his own work becomes one critic among many. Here the critical act is an attempt to comprehend the structure of a dramatic work in terms of the theory of

psyche implicit in it. In terms of a possible psychological experience for the reader, the structure of concepts outlined here poses a challenge. But those concepts pale in comparison to what the prisoner concretely goes through in the monologue. Art always exceeds the concepts we formulate in attempting to apprehend it.

3. The process outlined here entails a complex rethinking of emotion and a critique of all attempts to relegate it to a secondary status in the constitution of the psyche. I'm currently writing a book developing a new theory of emotion. For a first articulation, of see Walter A. Davis, *An Evening with Jonbenet Ramsey* (Nebraska: iUniverse, 2004), 138–140; Walter A. Davis, *Art and Politics* (London: Pluto P, 2007), 119–134.
4. On the true reasons for the bombing of Hiroshima and the implications of that subject for the writing of history, see Walter A. Davis, *Deracination: Historicity, Hiroshima and the Tragic Imperative* (New York: SUNY P, 2001).
5. On the use of depleted uranium in Iraq (including a bibliography on this subject), see Walter A. Davis, *Death's Dream Kingdom: The American Psyche since 9/11* (London: Pluto P, 2006), 45–63.
6. In *Deracination* I attempt to rethink Freud's dialectic of Eros and Thanatos in terms of an existential and tragic theory of the psyche. See pp. 133–150 for a metapsychological articulation of that theory.

Section II

# **Generational Effects**

# The Effects of Horrific Trauma on Children and Youth

*David Elkind\**

“I watched my brother drown,” a young man told me when I asked if he had ever had a traumatic experience. “We were vacationing in Hawaii, he went swimming and got caught in a strong current, he tried to fight it but couldn’t. The Life Guard tried to reach him on his surf board, but my brother was already too far away.”

At all times in human history and in all places on earth, children have experienced horrific traumatic experiences. Some of these experiences are sudden, short lived, and individual, such the one described above. Other events are sudden, short lived but common to a large number of children. The 9/11 attack, the Katrina Hurricane, and the Tsunami in Asia are examples of this kind of shared trauma.

Other traumas are prolonged, such as the terrors experienced by African children in Darfur, by the children of Northern Ireland and by Jewish children in Europe during the Hitler era. I review this wide range of traumatic experience to remind us that events of 9/11, while unique in many ways, have many historical and geographical parallels. But the uniqueness needs to be commented on as well. 9/11 was different than other traumatic events in that it was an act of terror committed in America by terrorists of foreign nationality,

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it was unprecedented in its use of passenger planes as weapons of destruction, and in the scale of death and devastation that it produced.

Although the media usually pay almost too much attention to the large magnitude traumatic events such as 9/11, we usually hear little or nothing in the media of the traumas experienced daily by many American children in their homes and communities. Yet these are significant in numbers:

Each year in the United States approximately five million children experience some form of traumatic experience. More than two million of these are victims of physical and/or sexual abuse. Millions more are living in the terrorizing atmosphere of domestic violence. Natural disasters, car accidents, life-threatening medical conditions, painful procedures, exposure to community violence, all can have a traumatic impact upon the child. Traumatic experiences can have a devastating impact upon the child, altering their physical, emotional, cognitive, and social development. In turn the impact on the child has profound implications for their family, community and, ultimately, us all.<sup>1</sup>

Despite the extent to which children in our society experience traumatic events, there is not a great deal of systematic research on the subject. A lot of the extensive research on this topic was stimulated by the 9/11 attacks. Much of this work has focused upon those young people who lost a parent or other loved ones on 9/11, or upon those children who directly experienced the attacks or its effects. In addition there have been a number of publications, by clinicians who have treated children who have experienced trauma, describing the general patterns of response to horrific events by children at different stages of development. Accordingly after reviewing some of the research on 9/11 children, I will report on some clinically agreed upon conclusions about how trauma affects children of different age levels, as well as some of the strategies that will help children who have psychologically injured by trauma.

### **Quantitative Research on the Children of 9/11**

Almost 3,000 children under the age of 18 lost a parent in the attacks of 9/11. The average age of these children ranged from babies to those of college age. As to be expected, a lot of attention was paid to these children immediately after the event. Many different groups and organizations offered everything from counseling, summer camps, scholarships and mentoring. But with time, sympathy for these children has diminished along with the organizational support that went with it. Yet the aftermaths are long lived as the studies of these children attest. Some of the data is quantitative, other qualitative but it adds up the fact that for these children the losses suffered on 9/11 have long-term, life altering effects.

*Children Who Lost a Loved One*

In one of the few longitudinal studies of these children, Cynthia Pfeffer and her colleagues, compared 45 children (mean age 9 at start of study) who had lost a loved one on 9/11 to a comparable control group of 34 children who were not bereaved.<sup>2</sup> The children were assessed at six month intervals over a two year period. Over the 24 months of the study, the rate of psychiatric illness among the bereaved children rose from 32 to 73 percent. More than half of the children experienced one or another form of anxiety disorder including posttraumatic stress disorder. Surprisingly, anxiety disorders were more in evidence than depression—to be expected on the loss of a loved one. As we shall see later, this may have been due to the fact that preschool children do not yet fully appreciate the meaning of death and believe the loved one will return. For these children mourning often first hits them when they reach adolescence.

A different perspective on psychological impact of 9/11 was provided by a 2006 survey of 9/11 victim's families.<sup>3</sup> The survey explored the parent's sense of financial security, ongoing challenges, and quality of life. The majority of the children were very young at the time of their loss. Single parents, mostly women, are raising 90 percent of the children. Almost 75 percent of the parents interviewed said that their greatest challenge, in rearing a child who had lost a parent on 9/11, was meeting their children's mental and emotional needs. According to Michele Weaver, president of the Twin Towers Orphan Fund, "Parents are concerned that their children are not being provided with the tools they need to one day get into an institution of higher learning. . . . The economic setbacks of the tragedy make a bad thing even worse by hindering these children's chances of ever going to college."<sup>4</sup>

This survey makes the important point that the death of a parent often has serious financial as well as mental and emotional aftermaths. This is true for many children who lose the parent who provided the financial support of the family. Economic insecurity and concern about the future can exaggerate and seriously complicate the effects of the loss itself.

*Children Who Directly Experienced the Events of 9/11*

One of the factors that might contribute to individual differences to response to trauma, including the loss of a loved one, is whether or not the child has had a previous horrific experience? A retrospective study (Chemtob, 2008) of 116 preschool children who were directly exposed to World Trade Center attacks, provided an answer to that question. Children were regarded as having been exposed to a high intensity trauma exposure if they had experienced one or more of the following: seeing people jumping out of the towers, seeing dead bodies, seeing injured people, witnessing the towers collapsing, and lifetime



history of other trauma exposure. Children who had only exposure to the 9/11 trauma were at increased risk for sleep disorders and anxiety/depression syndromes but did not have clinically significant emotional problems. Children who had prior exposure to severe traumatic events, were found to have clinically significant emotionally reactive anxious/depressed, and sleep related behavioral problems. Prior exposure to traumatic events apparently amplifies the emotional reaction to any experience of additional trauma.

### Qualitative Reactions of Children to 9/11

The following remarks are from young people who attended a summer program, Project Common Bond, for children from around the world who had experienced the sudden loss of a loved one due to terrorism or war. They reflect the many different ways grief and loss can be experienced and expressed.

#### *Brielle Saracini*

Brielle Saracini's father was captain of the hijacked United Airlines Boeing 767 that crashed into the southern tower. Now 17, she is a pretty, articulate schoolgirl who finds she can't remember her father's face clearly any more. "Some of my memories are fading and it scares me" she says. "I remember his voice because it is still on his voicemail." "Hi, this is Victor; I'll get back to you as soon as I can." Brielle pauses and looks away. "Sometimes it bothers me that he won't get back to me. But it has taken me all of these years to realize that."

#### *Erik Abrahamson*

"After 9/11, I used to hate everybody around me, I was just so-mad," said Erik Abrahamson, whose father William, was working in the World Trade Center during the terrorist attacks. Erik, just 11 years old when his father was killed, is about to start college. He looks like any average American teenager—black T shirt, brown floppy hair, a little awkward—but when he talks about that day, his jaw tightens.

"I used to hate just everyone, how they looked at me, everything," he says, "It's only this year that I've started to really come to grips with what went on, and how much I have changed."

#### *Martin Hart*

Martin Hart was 17 when he lost his father, Giles, in the London terrorist attacks of July 7, 2005. He lives with his mother, Danute, and his sister Marla,

in Homchurch, Essex, and is now at college studying drama. This summer (in 2008), he attended Project Common Bond with children from all over the world who had lost a parent to terrorism.

“When my dad was killed it felt like I didn’t have time to grieve. There was so much to do. Suddenly I was the man of the house and all the responsibility that entails fell on me. I had to take care of so many new jobs, as well as trying to offer support to my mum and my sister. There just was no space for me to grieve.”

“As a boy you are expected to be manly and crying is not a manly thing to do.

I cried a bit at my dad’s funeral, but otherwise I’ve kept my feelings to myself. But you just don’t get over losing a parent in that way. Three years on there are daily reminders of what I have lost. My dad helped me a lot with my studies and after he died, I really struggled. Just the other day I wished that he was here to show me how to do something on the computer and I constantly feel the lack of a male person to look up to and relate to.”

“This summer at Project Common Bond was the first time I was able to express my grief openly, which was a huge release. I guess it was because all the kids here understand.”

Grieving is always both personal and social as these remarks make clear.

At the same time different children find their way through the mourning period in their own way, given their personalities and family circumstances.<sup>5</sup>

### **Developmental and Clinical Predictions as the Responses of Children to the Children to the Events of 9/11**

Child, psychiatrists, psychologists and pediatricians, child psychologists working with both healthy and emotionally troubled children are in a unique position to describe some of the psychological end results of the 9/11 attacks. Schonfeld, for example, made the point that children’s reactions to the attacks would vary with their level of cognitive, social, and emotional development, the presence of preexisting psychological problems and the kind and amount of support they received from parents, community, and other sources.<sup>6</sup> The importance of age, as perhaps the single most salient factor in how children respond to traumatic events was echoed in the Hooker and Friedman review of the literature on children who had been exposed in one way or another to the 9/11 tragedy.<sup>7</sup> A review of what developmentalists and clinicians believe to be age differences in response to experiencing traumatic events is presented below.

#### *Infants and Young Children 0–6*

For infants and young children, who still lack the ability to conceptualize and understand the meaning of traumatic events, reactions mirror those of their

primary caregivers. Atwood and Donnelly, for example, wrote that infants would sense the changes in their parent's anxiety levels and see tension and anxiety in their parents.

One possible reaction is confusion because of their lack of understanding as to what had brought about their parent's distress. In addition if they watched television coverage of the event, they might believe it was a different event each time the same event was presented. Atwood and Donnelly also predicted possible regressive behaviors, wanting a bottle or pacifier, bowel and bladder accidents, wanting to sleep in parent's bed, and clingy behavior.

For infants and young children who have actually lost a loved one, there is no immediate recognition of the loss. Young children prior to the age of eight or nine, do really not understand the concept of death.<sup>8</sup> Life and death are biological concepts that presuppose an understanding of the nature of living things. An understanding of death first appears about the age of eight or nine along with the child's first biological insights. Many children when they first comprehend the concept of death frightened and depressed particularly at the thought of their own parents dying. Children who lose a parent before they have really attained a concept of death, usually do not really mourn their parents until they reach adolescence.<sup>9</sup> At this age they have the mental ability to reconstruct their childhood and to imagine what their lives might have been like had their parent lived. It is also the age at which adopted children go in search of their biological parents.

### *School Age Children 6-12*

School age children have a concrete understanding of their world and can grasp basic units of time and space. Yet an event like 9/11 is still of too enormous a scope for them to grasp. Unlike the younger children, however, school age children are able to understand that their parent's reactions are related to a tragic event. At this age children not only mirror parents reactions they also fear that whatever bad happened may happen to their parents as well. This kind of fear and anxiety may be expressed in regressive reactions, clinging to caregivers, sleeplessness, and nightmares are also not uncommon. Some children of this age may also engage in counter phobic aggressive play using toy weapons to act out their fears by becoming the aggressor.<sup>10</sup>

### *Adolescents*

Adolescents have attained a new level of intellectual development that Inhelder and Piaget have called "formal operations."<sup>11</sup> These new mental abilities enable adolescents to grasp geographical space, historical time, and contrary to fact propositions. Thanks to this new level of understanding they are able

to appreciate the full magnitude of an attack like 9/11. Their ability to construct contrary to fact scenarios also allows them to imagine the possibility of future attacks. While adolescents fear for their families, they may also fear for their own future, their education the possibility of being called into the armed forces. In response to major traumatic events some adolescents may try and help by collecting food and other supplies or by donating blood. Still other adolescents may engage in reckless behavior and exercise poor judgment.<sup>12</sup> Other adolescents may use denial and act as if nothing had happened and as if nothing had happened.<sup>13</sup>

## Helping Children Cope

### *Advice for Caregivers*

Although we have little empirical evidence for the effectiveness of various interventions for children and youth, most experts who have worked with young people are in general agreement as to what would be most helpful to children and youth at a time of crises or trauma.<sup>14</sup>

There is general agreement among the experts that talking with children about a traumatic event they have witnessed or heard about is top priority. How a parent approaches the subject, of course, depends upon the child's level of intellectual, social, and emotional maturity. To get some guidance as to how to proceed it is always useful to ask the child, if he or she is old enough to answer meaningfully, what they think has happened and why the parents seem unhappy, worried, or upset.

It is important to listen to the child and take seriously any comments they may make, even if they are quite far from what has really happened. You lose credibility if you challenge the child's reality.

One way to approach it is to say, "Yes, that is one way of looking at it, but here is another way." Most experts agree that it is best to give children the facts in simple language they can understand. For young children there is no need to go into motivation and details. One need only say something to the effect that, "there was very, very bad accident and a lot of people were hurt." For older school age children it is again important to first listen to their understanding of events and to accept it as legitimate interpretation even though it deviates from what really happened. For these children, it is appropriate to go into a little more detail about the events and the extent of the destruction. For both age groups it is important to be supportive and reassuring that they will be all right and that nothing is going to happen to the parents.

With adolescents the discussion can be at a more comprehensive level. Here again, it is still important to start with hearing about what the adolescent makes of the traumatic events. Adolescents are likely to have an understanding of the even comparable to our own. Nonetheless some may, for personal reasons,

have an idiosyncratic view of what has happened. Rather than challenge the adolescent's reality (which more than likely with only serve to entrench them in it), one might say "that is an interesting way of looking at it, hadn't thought of it in that way. The way I thought of it was. . . ." With adolescents, as with the younger children it is important to provide assurance and support, it was an extraordinary occurrence and is not likely to happen again. It is also important for parents to recognize and accept the child's feelings and emotions. For younger children in particular, it often useful to label their emotions for them, "I know you are feeling sad and unhappy, and that is what people should feel when something like this happens."

### *Other Measures Caregivers Can Take*

In addition to intellectual and emotional dialogues and support it is important to return as quickly as possible to the normal routines of life. Routines give children a sense of continuity and security that words alone can't bring. If some breaks in the routine are necessary for awhile, for example, it is important to find activities to parallel the routine. During the usual school hours the child might read a book, work on arithmetic problems, or other academic activity. Of course there are wide individual differences and some children require routines more than others. Those children who need routines will require more structure in the event of interrupted routines than those children who deal more comfortably with deviations from the norm. We have to adapt our reactions to the child's personality and temperament.

It is also important to give young people an opportunity to express their feelings about the event. Sometimes, particularly with adolescents, providing an opportunity to talk about their feelings may lead them to clam up. It is important to say then, "That is okay, you may not want to talk about it now, but I'll be happy to listen any time you feel you would like to talk about it." Some school age children may not have the verbal ability, or emotional labels to express what they are experiencing. Providing these children with materials to draw, paint, or write about their feelings gives them a different outlet for their emotions. For the youngest children dolls, blocks, and other toys may help them express their feelings through their play, when they cannot do it in words. It is important not to impose our interpretations on either their artistic productions or their play. It has personal meaning for them, which our interpretations can sometimes disrupt and rob them of their therapeutic value.

It is also necessary for parents to look for signs of posttraumatic reactions.

Some children may seem to deal with events with no untoward emotional reactions.

Weeks or months later these same children may waken with night terrors, develop phobias, or show sleep and eating disorders. These are children who have developed powerful defense mechanisms that often require professional

help to remedy. This is true because for these children the emotional problems are too buried for them to consciously access and express. They require other avenues to deal with their response to the trauma.

### *What Schools Can Do*

In some respects schools are in a difficult position when it comes to dealing with children who have been exposed to traumatic events. Parents vary widely in what they expect and want to schools to do. Some parents would prefer that the school not deal with the issue at all, and leave it to the parents. Yet other parents would like the school do help children deal with their ideas and feelings about the traumatic event. Certainly teachers should be aware of any children who are acting differently than usual and note this to the parents. If children ask about the event, teachers need to be factual, use language the children can understand and without going into great detail about the effects.

A number of authors have suggested that schools be pro-active and provide programs that teach self-management, social skills, and coping strategies.<sup>15</sup> A number of such programs are available, but it is not clear how effective they have been. In addition it is simply a fact that children learn their coping and self-management skills from parents and caregivers, not from schools. This is true because children learn these kinds of skills by example not by verbal lessons, or school exercises. A more effective approach was suggested by Squires, who recommended that children be taught the meanings of the words they were hearing from the media.<sup>16</sup> Children might feel they have a better grasp of events if they were given age appropriate definitions of words like "terrorism" and "horrific."

Whatever actions the schools take in relation to terrorist attacks, parents should be advised as to what the schools are doing and request parental input and cooperation. Parents and teachers can share their observations of children's reactions and of the uncharacteristic behavior of some children who might need more individual attention. Building a sense of cooperation between parents and the school helps give children a sense of community that can be very supportive of their healthy reactions to horrific traumatic events.

### **Summary and Conclusion**

This chapter has attempted to provide an overview of real and predicted reactions of children at different age levels to extraordinary traumatic events. Research and discussions of the reactions of children who directly or indirectly experienced the events of 9/11 were presented as a possible paradigm for all children who have suffered similar trauma. In addition, the paper also

presented a summary of suggestions as to what caregivers and schools can do both in reaction to traumatic events and to prepare children for dealing with such events in the future.

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# How Has Terrorism Impacted the American Family?

*Deborah A. O'Donnell and Jessica Powers\**

Americans typically enjoy a number of luxuries that people in other parts of the world do not. Many of us experience relative safety in our communities, confidence in a strong governmental infrastructure, and a high probability that tomorrow will be similar to today and yesterday. Things changed following the terrorist attacks of September 11, 2001. American families, in all of their forms and functions, were impacted. The impact of the terrorist attacks on families involved acute/immediate effects, transpiring in the hours and days following the attacks, and lingering long-term effects, some of which still persist today. Exposure to violence appears to initiate a cascade of effects prompting negative changes in physiological, emotional, behavioral, and cognitive states.<sup>1</sup> As the most proximal unit of socialization, family plays a central role in moderating the experience of trauma and fear in both parents and children.

Some families were impacted directly. 9/11 produced the largest number of parentally bereaved children from a single terrorist incident.<sup>2</sup> Affected families suffered the death of family members, directly witnessed the attacks and/or their aftermath, or lived in close proximity to Ground Zero or the Pentagon. Hundreds of thousands of other American families were exposed to the tragedy vicariously, through television coverage, altered governmental restrictions, and shaken feelings of safety.

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One thousand, six hundred and nine people lost a spouse or partner in the attacks while 3,051 children lost a parent.<sup>3</sup> Eight percent of Ground Zero children and 11 percent of New York City residents outside of Ground Zero had family members escape, sustain injuries or die in the attacks. Seventy-six percent of New York City public school students experienced at least one form of direct exposure, 67 percent spent “a lot” of time learning about the attacks from television, and 7 percent had a family member who was in the World Trade Center on the day of the attack but escaped unhurt. Approximately 2 percent reported having a family member escape with injuries. One percent was forced to move from their home.<sup>4</sup> These families became refugees in the face of terrorism.

### Views of “Family”

The U.S. Census Bureau defines a family as two or more people living in the same residence who are related by birth, marriage, or adoption. The typical contemporary American family consists of approximately 3.19 people.<sup>5</sup> Following the terrorist attacks, our definition of “family” temporarily broadened, prompting behavior and attitude changes. Ten percent of Americans volunteered to help victims of the terrorist attacks. Much of this volunteerism was motivated by a view of victims as part of an “American family.”<sup>6</sup> In a study of school-age children’s essays on the topic of gratitude that was carried out before and after 9/11, the most common themes at both time points were family, basic needs, friends, and teachers/school. Rescue workers and the United States and its values (e.g., freedom) appeared more frequently in 2001 than 2000.<sup>7</sup> Adult respondents, in a separate study, placed a high value on self-esteem, self-actualization, accomplishment, and self-respect before 9/11. After the attacks, respondents placed a much higher value on the importance of survival, and safety and security values like world peace, freedom, family security, national security, love, salvation, and friendship.<sup>8</sup>

In research conducted with University of Pennsylvania undergraduates before and after 9/11, measures of self-identification with country, family, ethnic group, religious group, and university revealed significant pre- and post-9/11 trends. Among female students, the importance of family was rated higher after 9/11 as compared to before, and was the opposite for males (higher self-reported importance of family before 9/11). Both males and females reported higher levels of identification with country and university following 9/11 as compared to before.<sup>9</sup>

### Post-9/11 Emotion Expression in Families

Protection of physical safety was foremost on the minds of most American families as the events of 9/11 unfolded. Survival became paramount, and our

ability to control our environment was compromised by confusion and broken ties in communication. In the days, weeks, months, and years following 9/11, our nation's psychological health was impacted. The family context became a place where emotion, coping, and cognition interacted to form a web of support for many Americans.

Emotion expression is an important coping strategy following tragedy. Open communication can serve a variety of positive functions including lower levels of negative affect, healthy adaptation to stressful events, and increased levels of family cohesion.<sup>10</sup> Open communication supports and enhances one's ability to accurately process and cope with distressing events. Parental discourse about emotions has been found to be correlated with a child's awareness and understanding of emotions, use of emotional language, development of empathy, and judgment about emotions. Others assert that emotion-focused coping is associated with higher levels of psychological distress, while problem-focused coping is positively correlated with reduced levels of depression and anxiety.<sup>11</sup>

Research examining the role of emotion expression in post-9/11 healing has found that children who openly discussed their emotions had parents who reported fewer depressive symptoms. Mothers who openly expressed emotion had children who openly engaged in discussion following the terrorist attacks.<sup>12</sup> In one study of family communication post-9/11, 38 percent of parents reported talking with their child about terrorism for one hour or more in the week prior to being interviewed for the study. Topics of terrorism-related parent-child discussions included the child's fears for his or her safety, taking precautions against anthrax, and avoiding large gathering places. Children's emotional and behavioral reactions were positively associated with the frequency of parents' discussions about these topics.<sup>13</sup> In a study of dreams following 9/11, time spent talking with family was found to help individuals more fully process the day's events as manifest in dreams with thematic rather than specific images.<sup>14</sup>

### **Post-9/11 Parenting Practices and Role Perceptions**

The expectations and attitudes that parents possess regarding how to raise their children and what role to play in their development can greatly impact parenting styles and behaviors. As an abrupt and unexpected event within American culture that disrupted daily life on multiple levels, the events of 9/11 served as a recalibration tool for many parents. The terrorist attacks altered perceptions of safety and danger, and produced a "loss of the assumptive world" in many.<sup>15</sup> The trauma and stress brought about by terrorism can lead parents to feel overwhelmed by their diminished ability to protect their child from harm.<sup>16</sup>

Research indicates that parenting is a reciprocal process, whereby parents and children influence each other in a mutually reinforcing cycle.<sup>17</sup> In the

context of 9/11, parents were affected by their children's trauma experiences and children were influenced by their parents' trauma exposure.<sup>18</sup> In a study that examined changes in parenting practices at two time points following 9/11, a cluster of parenting variables changed for those who work in proximity to the Ground Zero site. Soon after 9/11, parents placed greater importance on bonding and loving, providing for and protecting, and being sensitive to their children's individual needs than prior to 9/11. Over time, only sensitivity in parenting remained at elevated levels. Disciplining and setting limits for children decreased post-9/11, but ultimately returned to pre-9/11 levels. Educating, guiding, and teaching children showed no significant changes post-9/11.<sup>19</sup> Other research has found that parental responses to traumatic experiences can include adopting a more controlling parenting style and being less psychologically available to the child.<sup>20</sup>

### Post-9/11 Family Mental Health

As a large scale tragedy, 9/11 produced a wide range of psychiatric symptoms in both children and adults. Reverberations of the trauma were felt within the family context. A large scale study of public school students in New York City following the terrorist attacks revealed important information about the role of family in post-9/11 dynamics.<sup>21</sup> Family exposure may be more important than personal physical exposure in predicting who will be affected by trauma. Rates of posttraumatic stress disorder (PTSD) within the family context reveal interesting associations between degree of psychological closeness and clinical impairment. Rates of PTSD associated with knowing someone who died or survived were higher if the person involved was a family member rather than an acquaintance. Rates of PTSD were highest if the person involved was a parent or sibling. Fully half of children who lost a parent or sibling developed PTSD, and a quarter of children who had a parent or sibling who survived the attack developed the disorder.<sup>22</sup> Both direct and family exposure was associated with more feelings of social mistrust.<sup>23</sup>

Thirty percent of parents reported more than four terrorism-related emotional or behavioral reactions in their child.<sup>24</sup> The rate of family exposure was higher among public schools outside of Ground Zero than in schools within Ground Zero. Separation anxiety, a chronic and intense fear of separation from a parent figure, developed in over 12 percent of children in New York City public schools, and persisted for six months after the attack. Younger children were more likely than older children to meet criteria for PTSD, agoraphobia or separation anxiety disorder. Latinos and parents with lower household incomes reported greater terrorism-related reactions in children.<sup>25</sup> Hispanics were also found to be at higher risk than members of other races/ethnicities for developing PTSD and had the highest prevalence of separation anxiety disorder, agoraphobia, and panic attacks.

Families of first responders represent a unique subset of families in the wake of 9/11. Consisting of fire fighters, police officers, and emergency staff, first responders were directly affected by 9/11. They reported to the World Trade Center and Pentagon in the capacity as helpers. They witnessed horrible death and destruction. They handled dead bodies, worked in the face of great uncertainty, and pushed themselves physically, emotionally, and psychologically. This exposure impacted many first responders and their families. Research has demonstrated that children in close contact with traumatized first responders may develop posttraumatic symptomatology through secondary traumatization. Parental psychological functioning has been identified as a predictor of children's mental health problems following disasters.<sup>26</sup> In one study, the highest rate of PTSD (18.9 percent) occurred in children with emergency medical technician family members.<sup>27</sup>

### **Post-9/11 Family Grief and Bereavement**

Families mourn the death of loved ones in a variety of ways. Factors such as ethnic background, culture, and religious belief system can influence the customs and practices surrounding dealing with loss. 9/11 brought on an intense peak in death, graphic images of it replayed repeatedly by television stations and watched by people of all ages. Americans were confronted with the need to understand the act and integrate it into their sense of reality. Families directly affected by the attacks were faced with this task in particularly important and complex ways.

#### *Ambiguous Loss*

Ambiguous loss can occur in situations such as 9/11 when some bodies are not recovered. This can lead family members to wonder if their family member might still be alive. Approximately 1,700 families never received the remains of their loved ones to mourn.<sup>28</sup> The mayor of New York City offered death certificates for the missing, aiming to facilitate closure in families. While many found the death certificates helpful, thousands have not been picked up.<sup>29</sup> For families of the missing, churches sometimes allowed families to bury their dead without a body, either burying empty coffins or coffins full of musical instruments, bowling balls, photos, or other keepsake items.<sup>30</sup> The symbolism and meaning inherent in these ceremonies was aimed at facilitating closure.

Ambiguous loss can exacerbate and protract grief. This type of grief can slowly become a part of family members' continuing reality rather than a reaction to a past event. Because there is no finality to ambiguous loss, families sometimes fail to reorganize family roles and responsibilities.<sup>31</sup> When a family

experiences ambiguous loss, parents may ignore their roles as caretakers or have a difficult time making decisions. Daily tasks are not completed, family members are ignored, and family rituals and celebrations are put on hold or cancelled. Other common problems following events such as 9/11 include depression, anxiety, and addiction.<sup>32</sup> In families where a spouse went missing, the remaining spouse may become depressed and preoccupied with their missing loved one. In these cases, family members can become psychologically absent and serve to worsen the grieving process of the physically missing family member. Family communication after ambiguous loss can become suppressed. The subject of the loved one may become taboo. Family members do not want to make one another sad, sometimes leading to “no talk rules” and family secrets.<sup>33</sup>

### *Race, Culture, and Ethnicity*

Culture molds how families will respond to trauma and crisis. Significant differences in terrorism-related topics discussed and symptoms reported among different cultural and sociodemographic groups suggest that the impact of terrorism may be unevenly distributed across society.<sup>34</sup> Some scholars assert that cultures who are able to tolerate ambiguity fare better in the face of stress. These cultures tend to be less mastery and control-oriented, and admit to not having all the answers. This, combined with spirituality, may allow members of these cultures to maintain dichotomies in their minds that facilitate resilience.<sup>35</sup>

Of special interest is the effect of 9/11 on families of Middle Eastern descent. Approximately 1.2 million Americans are of Arab descent.<sup>36</sup> As increased subjects of discrimination, fear, and hostility following the terrorist attacks, 9/11 put special strains on the many residents of the United States from Arab countries. One qualitative study looked at Arab American couples living in New York City and New Jersey after 9/11.<sup>37</sup> Five themes emerged in the interviews: perceptions of the terrorist attacks, backlash against Arabs in the United States, identity issues, coping, and experiences of immigration. This study also revealed that Arab American couples had a strong emphasis on family cohesion and loyalty. These couples articulated that their most formidable struggles post-9/11 included making meaning of the attacks, grieving losses with family and friends, and coping with the anger they experienced from some Americans. Some couples reported that 9/11 triggered memories of terrorism and war they had experienced in their home countries.<sup>38</sup>

In a study that examined collectivist coping strategies used by Asian American families following 9/11, coping strategies that arose through thematic analysis of interviews emphasized individualistic coping, intracultural coping, relational universality, forbearance, fatalism/spirituality, and indigenous healing methods.<sup>39</sup> Individuals from collectivist cultures tend to shy away

from seeking help from therapists, preferring to rely on family for this type of support.<sup>40</sup>

Latino families affected by 9/11 were mostly Catholic. Healing rituals among these families included experiencing the symbolic presence of the missing, celebrating a mass on the missing person's Saints Day, celebrating the birthday of the missing by cooking the person's favorite meal, keeping their clothes untouched, having conversations with the vision or spirit of the loved one, and acknowledgement of 9/11 anniversaries.<sup>41</sup>

### **Post-9/11 Interventions for Families**

When a country experiences a terrorist attack of the magnitude of 9/11, support for affected families is essential. The most effective intervention strategies were largely implemented at the family and community-levels. The matrix of loss, sadness, and shaken feelings of safety and agency prompted by 9/11 seemed to be best addressed in familiar settings.

One form of family intervention involved government advisory notices regarding disaster preparedness. These messages from the federal government in the aftermath of 9/11 focused on how to prepare for biological, chemical, and radiological attacks. Advice consisted of practical suggestions including meeting points, emergency phone numbers, duct tape to seal windows in the event of a biological attack, and stocking food and water supplies. They also provided scenarios involving how to handle disruptions in critical infrastructure such as food supply and transportation routes. Websites, press releases, and ads on city buses were used as public service campaigns. FEMA designated September as "National Preparedness Month." The government also provided each family who lost a family member a casualty assistance care officer (CACO), who stayed with the family to help them negotiate issues related to sudden death.<sup>42</sup>

Despite these governmental efforts, surveys have indicated that the public is still largely deficient in preparation for future terrorist attacks. In the aftermath of Hurricanes Katrina and Rita only 43 percent of families reported having a family emergency preparedness plan that all members of the family know about. Of those who reported having a plan, less than a third reported having all the major elements that are part of an emergency plan (i.e., two days food and water, a flashlight, a portable radio and spare batteries, emergency phone numbers and a meeting place). In a December 2005 survey, only 11 percent of respondents were "very worried" that they or someone in their family would be a victim of terrorism. This figure was virtually unchanged from a survey one year earlier (13 percent) and only slightly lower than immediately after 9/11 (18 percent).<sup>43</sup>

Another type of family intervention following 9/11 involved parenting advice articles. One team of researchers carried out a thematic analysis of

websites offering parenting advice following 9/11.<sup>44</sup> Ninety percent of the 20 websites that were analyzed contained statements in which parents were portrayed as needing professional input in deciding how best to care for their children. None commented on differences that might be likely to occur in parents' feelings or actions. Parents were encouraged in most of the websites to seek out professional input due to dealing with unfamiliar territory. Professionals highlighted in the websites generally sought to empower parents, and they attempted to address real concerns about children's development including academic, social, and emotional issues.

Child direct exposure to the World Trade Center disaster, as well as parent and child mental health symptoms one to three months post-9/11, were significant predictors of parent help seeking.<sup>45</sup> An example of an effective family-based treatment approach was sponsored by Project Union Outreach, representing 75,000 World Trade Center service workers, many of whom were lost after 9/11.<sup>46</sup> Project Union Outreach organized a series of multifamily group meetings that met twice monthly, and continued for three years following 9/11. The meetings were attended largely by Latino immigrant families who lost a family member in the attacks. The purpose of the group was to provide a supportive healing community and to normalize the struggles of families. Participants articulated that the pivotal connecting points among the therapy group attendees were Spanish language, collective values and belief systems, and culturally based rituals. Over the course of the therapy sessions, children began drawing fewer pictures of burning World Trade Center towers.<sup>47</sup>

Another group-based treatment approach involved a number of family meetings held at Union Hall in New York City. This location was preferred over a therapist's office. The meetings began on a monthly basis, and then became bimonthly for a year following 9/11. In the years following, these meetings transformed into community-based activities with a focus on family recreational activities.<sup>48</sup> Family and community-based treatment approaches seemed to be most effective when they allowed family members to understand their losses and resume daily activities. Typical family meeting activities included sharing food, talking, and engaging in group talk with other families.<sup>49</sup> Two-thirds of parents also reported activities in their child's school in response to terrorism, such as conducting special classroom activities or assemblies (44 percent), providing counseling for students (44 percent), and providing materials or information for parents (44 percent) to help children cope.<sup>50</sup>

Most families did not seek professional support, relying instead on family and friends. A wealth of evidence suggests that most emotional support comes from a person's informal social networks. When people are asked what they want after exposure to adversity, they respond that the first thing is practical support, and the second is to talk to family, friends, and colleagues. Professionals often come low on the list.<sup>51</sup>

In our contemporary world climate where powerful machines of human destruction are a reality, families serve many functions. The family unit

provides housing, security, warmth, and understanding. Especially for young children, family acts as an important template for understanding the world. The values, coping strategies, and resources of a family impact how each member will respond to trauma and stress. The form and function of the American family has been changing dramatically in recent history, and will continue to adapt to altered government policies, social norms, and natural and man-made disasters. As researchers continue to follow the longitudinal pathways of adaptive success of individuals following 9/11, we will learn more about the short- and long-term impact of the 9/11 terrorist attacks. Community-based programs will continue to serve as a scaffold for familial and societal success. As a nation, along with others worldwide, we will continue to struggle to find humane and effective strategies to ensure our survival. As the most proximal environment of human development, family will undoubtedly play a central role in mitigating the fear and uncertainty that accompany acts of terrorism and other disasters.

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# The Impact of 9/11 on Stress, Health, and Health Risk Behaviors among Adolescents

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When a morning alarm wakes us, we usually assume that we know how the day will unfold. Weekdays mean going to school or work for most of us, and weekends provide a chance to do errands, play sports, be with family, hang out with friends, and relax. Each day includes a largely predictable sequence of events that we often take for granted. The relative predictability of life events and perception of control provide a psychological calm that is healthful but which can become monotonous. So, it's nice to mix things up a bit. Positive surprises (including compliments, positive social interactions, and humorous events) certainly bring a welcomed lift to life, but extreme thrills can be stressful. Negative surprises (including close calls in traffic, an argument with a significant other or coworker, bad news about health) clearly are stressful, but also can strengthen us and increase appreciation for the good times. Humans, like other mammals, deal well with short-term stressors and often are strengthened by the experiences and responses. However, when the stressors or stress responses persist, we suffer physically and psychologically. The nature of the stressor and our preparedness to meet the stressor both affect long-term stress reactions.

The morning of September 11, 2001, was filled with negative surprises. The unpredictable, unexpected, and unprecedented deadly attacks on New York

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City and Washington, DC, stunned the nation and world. The magnitude, unpredictability, and implications of the events of the 9/11 attacks potentiated the stress of that day. This chapter focuses on the stress of these events on adolescents and the potential implications for subsequent health and health risk behaviors. The chapter begins with a brief discussion of stress and its health consequences. Next, adolescence, cohorts of adolescents, and stress during adolescence are discussed. Then, the chapter addresses reactions to 9/11 by adolescents and parents, including health risk behaviors. Four categories of possible consequences of exposure to 9/11 during adolescence are presented. Finally, a summary and conclusion are presented with suggestions for 9/11 remembrances.

### Stress

Stress is the process by which environmental demands tax or exceed the adaptive capacity of the organism.<sup>1</sup> The stress response occurs as a result of positive stimuli (“eustress”) and negative stimuli (“distress”).<sup>2</sup> Stressors can be acute, repeated acute, or chronic. Acute events are often intense and short-lasting (e.g., a car crash), but their consequences can be long-lasting. Chronic events can last for many months or years (e.g., caring for a sick family member). The events of 9/11 constituted an extreme acute stressor or *disaster*. A disaster is an event that involves severe damage and disruption of people’s lives and can be one of the most threatening situations experienced.<sup>3</sup>

Responses to stress and disasters vary greatly. Some individuals and communities are paralyzed for years, others appear to be unaffected initially but reveal deep problems later, and others may be strengthened by the experience. Figley and colleagues offered criteria to determine the impact of a disaster: magnitude of loss, knowledge of the hazard, recurring risk, scope of impact to community functioning, and chance of escaping during or immediately after the disaster.<sup>4</sup> Considering these criteria, 9/11 ranks high among American disasters. Seven years after the tragedy of September 11, 2001, simply hearing or reading the numbers “911” are sobering and remind us that each day is filled with uncertainty of survival. The fact that we live with the possibility of a reoccurrence and with the uncertainty of when, where, and who will strike, exacerbate the psychological impact of 9/11.

Stress research has established that uncontrollable and unpredictable events produce more pronounced biological and psychological responses. Man-made disasters, as opposed to natural disasters, may be especially psychologically toxic because they are: unpredictable, lack a clear “low” point at which “the worst is over” and people can focus on healing and rebuilding, and knowledge of how to deal with the events and its aftermath is limited.<sup>5</sup> 9/11 is the most potent example of these parameters in modern times.

Walter B. Cannon suggested that organisms respond to stressful events or challenges to restore homeostasis or balance within the body.<sup>6</sup> Cannon further suggested that mammals have a fight-or-flight response to help survive stressors. Therefore, immediate psychological (behavioral, cognitive, and motivational) and biological responses to stressors are beneficial, but continued exposure to stress and long-term consequences of stress are usually destructive.<sup>7</sup> More specifically, stress activates the autonomic nervous system (ANS), including the sympathetic nervous system (SNS), which releases catecholamines (e.g., adrenalin or epinephrine, dopamine) that increase heart rate, blood pressure, respiration blood flow to skeletal muscles, and blood glucose. The ANS response also stimulates the counteracting parasympathetic nervous system, which calms the body by decreasing heart rate, blood pressure and respiration, and dilating the blood vessels. Stress also activates the hypothalamus-pituitary-adrenal (HPA) axis, which releases corticotrophin-releasing factor (CRF) from the hypothalamus in the brain, adrenocorticotropin (ACTH) from the pituitary in the brain, and cortisol from the adrenal cortex (or center) of the adrenal glands that sit atop the kidneys. This hormonal system helps to buffer actions of the SNS, plays an important role in the adaptation to acute stress, but can have deleterious and life-threatening effects when prolonged.

Research also has revealed that stress responses can continue after the stressor has stopped, causing what have been called “after-effects.” Glass and Singer suggested that after a stressor stops, an individual has to pay the price for the adaptation that was necessary to meet the demands of the stressors.<sup>8</sup> For example, many people find that they can withstand and cope with a given stressor when it is present, but that they get physically sick or psychologically drained after the stressor is discontinued because they have exhausted their resources and let their guards down.

The unprecedented events of 9/11 caused extreme stress for Americans. Given the magnitude of the stress, uncertainty, unpredictability, lack of control, and possibility of recurrence, 9/11 must be categorized as a powerful stressor. Even for those people who successfully coped with the events of 9/11, there may have been stressful after-effects.

### **Health Consequences of Stress**

Prolonged stress responses that can follow any type of stressor (acute, repeated acute, or chronic) also can have direct and indirect deleterious health effects. Direct health effects include physical and mental health. Indirect health effects include changes in behaviors that affect physical and mental health (i.e., health risk behaviors).

It has been estimated that 75 to 90 percent of visits to physicians are the result of stress (e.g., symptoms of extreme pain, fatigue, high blood pressure).<sup>9</sup> With regard to physical health, stress can increase cardiovascular diseases,

gastrointestinal diseases, skeletomuscular disorders, and immune-mediated conditions.<sup>10</sup> With regard to mental health, stress can increase the likelihood of anxiety, depression, eating disorders, post-traumatic stress disorder (PTSD), and suicide attempts.<sup>11</sup>

Stress also can increase the likelihood of health risk behaviors, including substance abuse, unhealthy diet, lack of exercise, sleep disturbances, unprotected sex, violence, and impulsivity.<sup>12</sup> In addition, stress can decrease compliance with health-protective behaviors, including taking medications.<sup>13</sup>

Effects of health risk behaviors are particularly important when focusing on adolescents because most adolescents are healthy and their behavior has a profound effect on their current and future health. In fact, adolescence has been labeled a time of a “health paradox”—physically, it is the healthiest time of life, yet it is a time of increased injury because of risk-taking and reckless behaviors.<sup>14</sup> Under stress, people are more likely to engage in health-risk behaviors.

### Adolescence

Adolescence is the period of transition from childhood to adulthood. Its age range is roughly from 10 to late teens, when physical growth is nearly complete. During adolescence, we grow physically, cognitively, and socially. Puberty is a hallmark of adolescence in animals and humans and is the period of sexual maturation that allows for sexual reproduction. It includes physical growth and development of reproductive organs and secondary sex characteristics. The average age of onset for puberty is 12 years old for males, 9 years old for African American females, and 10 years in Caucasian females (range of 7–13.5). The length of puberty tends to last three years for males and four years for females.<sup>15</sup>

Erik Erikson believed that adolescence is characterized by a struggle to develop personal identity.<sup>16</sup> Although most psychologists no longer refer to adolescence as a time of identity crisis, it is widely accepted to be a time when young people try new behaviors, interests, and ideas.<sup>17</sup> Socially, peer relationships become extremely important and may overshadow family relationships during adolescence, but parents and family remain influential.<sup>18</sup> Dating and sexual interactions increase during adolescence, including opportunities for intimacy, empathy and sexual experimentation. Adolescents need frequent and immediate gratification and show increased self-consciousness and self-focus.<sup>19</sup>

Adolescence also is a period of tremendous growth in knowledge, awareness, and cognitive abilities. Around age 12, abstract reasoning improves markedly which increases ability to understand learn academic subjects and to consider and critique philosophical, moral, ethical, religious, and political positions. Jean Piaget noted that adolescents gain the ability of abstract and deductive reasoning, whereas younger children solve problems by trial

and error.<sup>20</sup> Some of these cognitive changes have been linked with particular brain structure changes that occur during adolescence, including the frontal lobe region, corpus callosum, cerebellum, and reward pathways.<sup>21</sup> In the frontal lobe, the area responsible for executive functioning (planning, problem solving, impulse control), there is large growth just before puberty. The frontal lobe also is involved in problem memory, language, social and sexual behaviors. This area of the brain probably does not reach full maturity until the early 20s. It has been suggested that some risk taking during adolescence reflects the immature prefrontal cortex. The corpus callosum is a fiber system that relays information between the hemispheres of the brain and influences language learning and associative thinking. It grows more rapidly than surrounding regions before and during puberty, and declines shortly thereafter which restricts language acquisitions. These changes may explain why pre-pubescent children have an easier time picking up a new language and why foreign accents only occur when learning a language after adolescence. The mesocortical pathways between the ventral tegmental area and the nucleus accumbens are central to reward and dopamine is released during stimulating activities such as sex, drug use, and gambling. This area has lower activation during adolescence so it may need additional stimulation to achieve the same pleasurable effect that less stimulation would produce in adults.<sup>22</sup>

### **Cohorts of Adolescents**

Demographers and market analysts love to name generations of Americans. The World War II generation (people who were young adults during WWII) gave birth to the baby boom generation (born mid-1940s through late 1950s), which constituted the largest number of people to date. Generation X (born 1960s and 1970s) followed and then came generation Y (born 1980s through mid-1990s). Generation Y or Gen Y or Gen Why or millennials rival baby boomers in numbers and now exceed baby boomers in market attention. Within Gen Y are the echo boomers (born late 1980s–early 1990s). Gen Y are particularly interesting in the context of 9/11 because they were entering or in adolescence on that stressful day. Some health reports hold that Gen Y is particularly stressed, anxious, depressed, and already showing signs of chronic physical and health disorders.<sup>23</sup> Interestingly, Gen Y also is said to be resilient, self-reliant, determined, lifestyle centered, global and civic minded.<sup>24</sup> Perhaps these wildly different characterizations make sense in light of 9/11.

### **Adolescence and Stress**

Stress can occur at any point in the lifespan: prenatally, during early life (e.g., childhood), during adolescence, during adulthood, or late in life. It is unclear if stress during one life period may have more of a lasting impact than stress



during another life period. However, it is clear that adolescence is a pivotal period of life. The body is transitioning from childhood to adulthood, the individual is developing a sense of individual identity and relationships outside the nuclear family, cognitive and brain development are profound. These myriad and robust psychological, social, and biological changes during a relatively short period of life are unique and may make adolescence an especially critical or sensitive period of life.

The notion of “critical” periods was first proposed by ethologists as a period of time when the individual is biologically prepared to acquire certain adaptive behaviors but needs the support of an appropriately stimulating environment.<sup>25</sup> Child development experts later argued that “sensitive” period is a more appropriate term to describe periods of time that are optimal for certain capacities to emerge and in which the individual is especially responsive to environmental influences.<sup>26</sup>

If indeed adolescence is a sensitive period, then extreme events that occur during adolescence are likely to have pronounced effects on the adolescents that may last for years or even life times. 9/11 was a significant stressor for all Americans and it may have affected a generation of “sensitive period” people (i.e., adolescents) in powerful ways. In other words, some of the characteristics attributed to Gen Y may reflect long-term reactions to 9/11 and may be exaggerated by the annual remembrance of 9/11 that includes photographs and video replay of explosions, toppling buildings, and distraught citizens.

### **Reactions to 9/11**

Common reactions to 9/11 included attention difficulties,<sup>27</sup> shock and disbelief,<sup>28</sup> and feelings of loss of control.<sup>29</sup> Some reactions were clinically significant with roughly 8 to 20 percent of New Yorkers meeting criteria for posttraumatic stress disorder (PTSD)—an anxiety disorder that includes symptoms of re-experiencing a trauma (e.g., intrusive thoughts, nightmares), avoidance of stimuli associated with the trauma, and hyperarousal symptoms (e.g., hypervigilance).<sup>30</sup> There are some suggestions that PTSD responses to 9/11 were higher in women and in individuals directly affected by the attacks.<sup>31</sup> There also were some positive responses to 9/11, including increases in altruistic and prosocial behavior (e.g., giving money, donating blood), searching for positive meaning, and increases in social contact (seeking comfort from family and friends).<sup>32</sup>

### **Adolescents and 9/11**

Reactions of children and adolescents to traumatic events depend on developmental level and cognitive ability.<sup>33</sup> They can be traumatized by repetitive media exposure to a frightening event such as 9/11, even when that event has

occurred in a distant place. Stress levels can be exacerbated by parents' negative reactions or maladjustment to an event.<sup>34</sup> Fortunately, most children recover over time with appropriate interventions.<sup>35</sup>

Few studies to date have examined child and adolescent reactions to 9/11. There are reports that children with direct exposure to the events of 9/11 (excluding children who lost a parent) displayed sleep difficulties, symptoms of anxiety and depression, and behavior difficulties.<sup>36</sup> Another study reported that 52.5 percent of adolescents who were not directly affected by 9/11 reported that they still felt threatened.<sup>37</sup> A study of late adolescents and young adults (mean age of 19) in New York City reported that these older teens displayed and reported symptoms of PTSD, depression, hopelessness, anger, and global distress. Among young adults, the PTSD symptoms were reported to be greater in women and individuals previously under distress or exposed to trauma.<sup>38</sup> Other research post-9/11 has reported that rates of PTSD are higher for urban city youth and youth that have been previously exposed to trauma.<sup>39</sup> In fact, there appear to be several factors that predispose children and teens to negative reactions following a traumatic event in general and 9/11 in particular. These factors include: a close relationship with a victim, direct witnessing of the event, feeling that their life was threatened, separation from parents, disruption of environment, prior trauma or psychopathology, lack of family or community support, parental depression, high amounts of previous stress, avoidant coping style, and low self-regulation.<sup>40</sup>

Similarly, few studies have examined the relationship between youth reactions to 9/11 and subsequent health responses. Gump and colleagues reported that 9.5 year old children displayed greater cardiovascular responses (specifically greater stroke volume and cardiac output) directly after 9/11 than they did before the terrorist attacks or one year later.<sup>41</sup> Heightened cardiovascular response to acute stressors predicts future hypertension.<sup>42</sup> Other studies have examined effects of 9/11 on health and risk behaviors, but only in adults.

### **Parental Responses to 9/11**

Gil-Rivas and colleagues reported that parents played an important role in predicting adolescents' symptoms in response to the 9/11 attacks. If parent distress was high, then adolescent distress also was high.<sup>43</sup> In contrast, if parents were supportive, assisted with positive reframing, emotional expression, and acceptance, then adolescents' feelings of safety increased and distress decreased. Interestingly, two well-meaning parental strategies increased adolescent distress: telling adolescents to seek help and advice from others, and offering recommendations that involved planning (i.e., "come up with a strategy about what to do"). If parents told adolescents to seek advice from others, then the adolescents' perception of the dangers of 9/11 may have increased. If parents encouraged talking to others, then adolescents may have interpreted

that suggestion as a parental inability to listen to and support the adolescent.<sup>44</sup> Another study reported that parents who were controlling, had inconsistent discipline styles, or had avoidance coping styles increased adolescent distress. In fact, after controlling for maternal characteristics and perceptions of parents, adolescents' own characteristics were unrelated to their distress. In other words, only parent characteristics and adolescents' perception of their parents made the difference between distress and no distress.<sup>45</sup> This idea has been echoed by others. Parents' functioning, particularly parental psychopathology<sup>46</sup> may be a more important determinant of youths' stress reactions following disasters than the child's direct exposure to the disaster.<sup>47</sup> Clearly, parental responses and family responses play a critical role in how children and adolescent respond after a crisis.<sup>48</sup>

### **9/11 and Health Risk Behaviors**

Trauma and stress increase substance use, including legal (e.g., alcohol) and illegal (e.g., heroin) substances.<sup>49</sup> There are reports that drug use and relapse to drug use increased on and after 9/11. Men had greater relapse than women, however, women were more emotionally affected by the events.<sup>50</sup> In addition, cigarette smoking increased among New Yorkers immediately following 9/11 and particularly among dependent cigarette smokers.<sup>51</sup> Teens who witnessed or were a victim of physical assault in the last year and/or had childhood abuse of any kind had much higher rates of cigarette smoking initiation between the ages of 15–22.<sup>52</sup> Michael Resnick, director of the Healthy Youth Development Prevention Research Center at the University of Minnesota Medical Center in Minneapolis has been quoted to say that traumatic experiences during adolescence result in subsequent self-destructive behaviors.<sup>53</sup> Stress also increases the likelihood of other health risk behaviors, including excessive food consumption, starvation, and sleep disruptions.<sup>54</sup> There are, however, no available reports in the literature about health risk behaviors following 9/11 in adolescents at that time, either in 2001 or in subsequent years. This lack of information is unfortunate because such information may help to explain long-term physical and mental health and health risk behaviors in Gen Y.

### **Possible consequences of Exposure to 9/11 during Adolescence**

The "adolescents of 9/11" are the Gen Y young adults who now are in college, graduate and professional schools, military services, and the job force. These settings and situations are stressful and can precipitate health risk behaviors (such as binge drinking) and PTSD, especially in people who were previously exposed to extreme stress (such as 9/11). Previous research has reported that trauma during childhood can alter physical, emotional, cognitive, and

social development.<sup>55</sup> So, exposure to 9/11 stress during adolescence might result in increased sensitivity to subsequent stressors. In contrast, surviving stress successfully (as most people did after 9/11) can have positive effects because people appreciate life or reinforce their resilience and coping strategies. Because there is so little information comparing health and health risk behaviors in the “adolescents of 9/11” with perceptions and reactions to 9/11 *per se*, it currently is anyone’s guess whether the long-term impact on health and health risk behaviors was negative, positive, mixed, or depended on the individual. Our own take on this question is that there are four possible consequences of 9/11 on Gen Y that relate to health and health risk behaviors. We postulate that for Gen Y, the unpredictable, uncontrollable threat of death that occurred during 9/11 either:

1. increased subsequent hedonic behaviors (including drug use, sexual activity, consumerism, lack of allegiance to work or relationships) to focus on self and to enjoy today to the detriment of long-term physical health;
2. increased anxiety, depression, worry, and other psychological responses that continue to make life less pleasant and to deleteriously affect mental and physical health;
3. increased focus on survival (including improved nutrition, exercise, sleep hygiene) to ready oneself to withstand future attacks and, therefore, improve physical and mental health;
4. increased altruism and helping others (including individuals, groups, communities) as a means for mutual social support and cooperation for group survival and, likely, improve physical and mental health.

We believe that these postulated responses to 9/11 should be considered to better understand Gen Y, health, and health risk behaviors. Studies that consider these four types of responses could provide valuable information to enhance the positive responses and to attenuate the negative responses.

### **Summary and Conclusion**

Stress is a part of life and humans must cope with stress to survive. People are particularly well-suited to cope with acute stressors, physically and psychologically. In fact, positive and negative acute stressors often strengthen us and add zest to life. When stressors are great in magnitude, have disastrous consequences, are unpredictable, persist in real time or in our minds, then the long-term effects on physical and mental health can be dire. Alternatively, people who survive particularly stressful events may have enhanced resilience and an altered perspective on the value of life. Adolescence is a remarkable time of physical, psychological, and social development and may be a

sensitive period when major events have especially great effects. If that is so, then those people (today's Gen Y) who were adolescents during 9/11 may show exaggerated long-term effects of that experience, including effects that may increase or decrease health and health-risk behaviors. In addition, some of the characteristics attributed to Gen Y (e.g., a focus on the here and now) may be a continued reaction to 9/11. It would be valuable to consider the health and health-risk behaviors of Gen Y in the wake of 9/11. In addition, 9/11 remembrances should focus on ways to enhance positive responses, such as to increase resilience, altruism, and community service, rather than to perpetuate images of disaster and loss of control. Perhaps, the anniversary of 9/11 could become an annual focus on health enhancement for individuals, groups, and society.

### Notes

The opinions and assertions contained herein are the sole ones of the authors and are not meant to reflect those of the Uniformed Services University, Department of Defense, or U.S. Government.

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# Death and Intergenerational Behavior: A Tale of Power and Immortality

*Daniel C. Feiler and Kimberly A. Wade-Benzoni\**

On September 11, 2001, the United States faced its greatest modern tragedy. The airplane hijackings that led to crashes in New York City, Washington, DC, and western Pennsylvania shocked and horrified Americans. For weeks, millions of eyes were glued to televisions screening images of destruction, death, and fear, repeatedly watching the visuals of the airplanes careening into the World Trade Center towers, causing the epic and terrible collapse. As more than 3,000 people died as a result of those attacks, people across the globe were faced with the vulnerability of their own existence and the impendency and unpredictability of their own death. It was a time when people's mortality awareness was heightened, arguably more so than any other time in recent history.<sup>1</sup> In this chapter, we will discuss the manner in which mortality awareness, such as that elicited through the events of 9/11, can affect intergenerational behavior. We highlight the pro-social intergenerational effects that can emerge in the midst of tragic circumstances that lead to death awareness.

By simply looking at its ingredients, one might conclude that intergenerational decision making is a recipe for disaster. It resides at the intersection of two dimensions: interpersonal and intertemporal choice. Interpersonal tradeoffs are those between one's self and others, while decisions that affect

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multiple time periods are intertemporal. Together they provide two potentially compounding effects: (1) an inherent self-interest, leading to egocentric behavior at the expense of others, and (2) a propensity to discount the future, with a clear preference for immediate gratification. Furthermore, in many intergenerational contexts, the future generation is not present (or even alive) at the time of the decision, and consequently has no ability to defend their future interests in the present.

In light of this mixture of egocentric self-interest, lack of self-control, and power asymmetry, one might conclude that the future looks grim for those to come. In this chapter, however, we discuss how the combination of these dimensions leads to phenomena distinctive to intergenerational contexts that can counter-balance short-term self-interested tendencies. Furthermore, we will discuss how these distinct phenomena are affected by mortality awareness such as that raised by 9/11. Then, we will explain why behavioral responses to death awareness can vary depending on the degree to which people are reflective at the time of the mortality reminder. Last, we discuss implications of these findings for the next generation and the future at large.

### Intergenerational Contexts

As introduced above, intergenerational decisions are characterized by the intersection of interpersonal and intertemporal dimensions. In other words, intergenerational decision making involves tradeoffs between the self in the present and others in the future. The substantial literatures on egocentrism and intertemporal choice separately demonstrate self-interested biases and preferences for immediate gratification. Indeed, the field of economics is largely based on the assumption that individual humans act as rational, self-interested utility maximizers—*homo economicus*. As Adam Smith, one of the founders of economics, writes, “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest.”<sup>2</sup>

Empirically, research has shown that people making resource allocations are subject to egocentric biases.<sup>3</sup> Individuals tend to allocate more resources to themselves than others, and justify their allocation on the basis of fairness. Numerous experiments demonstrate that perceptions of the fairness of an outcome are biased in a self-serving manner.<sup>4</sup>

Additionally, research on intertemporal choice has demonstrated that people are biased toward present as compared to future consumption.<sup>5</sup> Specifically, people tend to tradeoff significant amounts of future benefit for immediate gratification, demonstrating a discounting of future outcomes. Consistent with these findings, research in intergenerational contexts has shown that the longer the time delay between the intergenerational decision and the consequences of that decision to future generations, the less benevolently people act toward future generations.<sup>6</sup>

Although, the separate bodies of literature on interpersonal and intertemporal decision making suggest that the well-being of future others may be doubly discounted by current decision makers, this dimensional union leads to unique outcomes of its own. First, intergenerational contexts are a perfect outlet for behavioral motivations to extend one's actions and impact into the future. A beneficent action toward a future generation can have a more enduring impact than an action toward others in the current generation. A second outcome of the interpersonal and intertemporal union is the power asymmetry between present and future generations that puts the present decision maker in a position of responsibility for the well-being of the future generation. In many intergenerational contexts, the future generation has little or no voice in the present. Consequently, current decision makers have ethical concerns about their intergenerational decisions due to a desire for fairness toward the next generation. Feelings of responsibility are particularly acute when the future generation is completely powerless.

Intergenerational decision making is more than just the combination of interpersonal and intertemporal tradeoffs. Intergenerational contexts compel current actors to take responsibility for the well-being of those to come, and enables them to make a connection with future others that will outlive themselves.<sup>7</sup> Interestingly, these resulting dynamics are further affected by people's awareness of their mortality. To understand the manner in which mortality awareness alters behavioral motivation, it is important to understand the framework in which it operates. Next we will present one of the primary contexts in which mortality awareness has been studied: terror management theory.

### **Terror Management Theory**

"The idea of death... is a mainspring of human activity"

*Ernest Becker, 1973*

Inspired by the works of Pulitzer Prize winning author, Ernest Becker,<sup>8</sup> terror management theory (TMT) scholars study, quite literally, how people manage the terror of facing the prospect of death.<sup>9</sup> The theory builds from the observation that humans share a primal, self-preservative survival instinct with all forms of life. Humans are unique, however, in the cognizance of the inevitability of their own death, leading them to feel potentially debilitating fear when faced with death. This juxtaposition demands that humans develop cognitive measures to cope with the anxiety caused by death awareness. TMT suggests that a primary way people cope with these fears is by developing perceptions of themselves as significant parts of a meaningful reality. Humans form "cultural worldviews" that allow them to perceive life as ordered and meaningful. These views also provide a framework for

building personal significance through actions in accordance with the prescribed behavior of one's worldview and connections with one's family, religious group, nation, corporation, or other social entity.<sup>10</sup> When a person's mortality is made salient, it becomes increasingly important to her to defend her worldview, as being definitively part of that greater entity relieves death anxiety. Hundreds of studies have demonstrated that when mortality is made temporarily salient, individuals show an increase in both their liking of people who support their worldview and hostility toward those that hold alternative worldviews.<sup>11</sup> Furthermore, death anxiety can activate the desire to extend one's self into the future through the legacy one leaves for future generations.<sup>12</sup> This consequence of mortality salience leads to counterintuitive outcomes in intergenerational decision contexts. For more discussion of TMT, terrorism, and human coping mechanisms see the chapter by Kosloff, Landau, Weise, Sullivan, and Greenberg of this volume.

### *Immortality Striving and Intergenerational Decisions*

I intend to live forever, or die trying.

*Groucho Marx, 1890–1977*

Intergenerational theory suggests that when a person's mortality is salient, the inherent goal to extend one's self into the future is activated or magnified. This phenomenon of "immortality striving," the desire to extend the self into the future beyond the limits of life, can be manifested in a literal desire for immortality or an attempt to symbolically extend one's self into the future.

Many religions (e.g., Christianity, Islam, Buddhism, and Hinduism) provide avenues for literal immortality through belief in an afterlife or reincarnation. Actions and beliefs in the current life can provide qualification for eternal life after death.<sup>13</sup> People can assuage their death anxiety by turning to a belief system that provides an afterlife, avoiding death altogether. This can help relieve the anxiety caused by mortality awareness.

Alternatively, or simultaneously, symbolic immortality can be achieved through a personal legacy or connection to a larger, more lasting social entity. Creating works of art, having children, making a significant donation to a cause or group, or joining an established, lasting organization are all ways in which people can achieve a piece of symbolic immortality.<sup>14</sup> Each of these actions either involves leaving a personal legacy or making a connection with an entity that will outlive themselves. It is important to note that these actions are not mutually exclusive. As Wade-Benzoni wrote, "a given person can believe in an afterlife, have children, and be driven to have enduring lifetime achievements (such as writing a book)—all of which may be ultimately linked to immortality striving and help the individual to reduce death-awareness anxiety."<sup>15</sup>

This connection between immortality striving and mortality awareness is also supported by generativity research.<sup>16</sup> The study of generativity has examined changes in behavior over the cycle of life. Findings have suggested that as people age they become more aware of their mortality, leading them to feel a greater need to make lasting contributions and be connected with others.<sup>17</sup> The studies of mortality awareness and generativity have both uncovered an inherent desire in humans to attach themselves to a social entity larger and more lasting than themselves. Intergenerational contexts appear to be the perfect outlet for behavioral motivations to extend one's actions and impact into the future.<sup>18</sup> Wade-Benzoni and colleagues have found in several studies that mortality salience positively increases beneficence toward future others.<sup>19</sup> In this research, people allocated more resources to future generations than to contemporary others under conditions of mortality salience, supporting the notion that pro-social actions toward future generations are more desirable when one is motivated to have a lasting impact. This finding is in striking contrast to resource allocation preferences observed in traditional intertemporal choice contexts, which reflect the phenomenon of time discounting.

In addition to increasing immortality striving, mortality awareness leads individuals to be more concerned with the ethical implications of their actions. When mortality is salient, people become more conscious of the nature of the legacy they are leaving behind. Leaving a positive legacy becomes increasingly important and desirable with mortality awareness as it motivates individuals to consider the ethical consequences and lasting implications of their actions, and thus leads them to engage in more pro-social behavior.<sup>20</sup>

### *Power, Responsibility, and Intergenerational Decision making*

For unto whom much is given, of him much shall be required.

*The Bible, Luke 12:48*

The importance of fairness, ethics, and justice has been studied in many subjects including economics, game theory, perceptions of process, and negotiations.<sup>21</sup> A second critical feature of intergenerational decision making that arises from the integration of interpersonal and intertemporal dimensions is power asymmetry. Current decision makers often have unmitigated power when deciding the relative outcomes to themselves and future generations.<sup>22</sup> Future generations can be voiceless in the present, yet the decisions of the present generation significantly affect them. Such power asymmetry can lead to the activation of social responsibility norms for decision makers in the present.

Research on the dynamic between people acting as resource allocators and powerless recipients shows that power imbalance can elicit feelings of social responsibility in the allocators, causing them to be more generous to the

powerless others.<sup>23</sup> Several studies have demonstrated that when decision makers are confronted with recipients that have some power, they act competitively toward the recipient.<sup>24</sup> In contrast, if the recipients are completely powerless, then the allocators act more beneficently toward them reflecting stewardship tendencies.<sup>25</sup> These findings imply that decision makers may act more competitively within their generation, as contemporary others have some voice, and more pro-socially across generations, as future generations have little or no power in the present. With greater power asymmetry, decision makers factor more heavily the ethical element of tradeoffs between themselves and others. This effect operates in conjunction with the heightened sensitivity to the moral consequences of one's action that results from death awareness and contributes to greater beneficence to future generations.

### *Death Awareness: Pro-Social or Self-Protective Motivation?*

Mortality awareness undeniably impacts human behavior; it not only actuates the desire to extend one's self into the future, but also raises awareness of the consequences of one's actions. Although being reminded of their mortality can motivate people to help others, research also shows that such reminders can cause people to become self-protective or aid only those close or similar to themselves.

Here we discuss the circumstances under which mortality awareness leads to these divergent effects. As discussed above, the terror management literature suggests that individuals perceive themselves as a significant part of a meaningful reality in an effort to buffer the anxiety of death awareness. Empirically, TMT studies have largely focused on how mortality salience affects worldview defense.<sup>26</sup> Terror management studies have examined the effects of momentary mortality salience, generally finding greater affinity for individuals sharing one's beliefs and greater hostility toward individuals holding different beliefs. This evidence suggests that mortality salience produces a self-protective motivation; it pushes individuals to be biased in favor of those similar to them and against those different from them. While this self-protective motivation can lead to positive, pro-social behavior toward people in one's ingroup, it can lead to many antisocial behaviors, such as prejudice, stereotyping, and discrimination, toward those belonging to an outgroup.<sup>27</sup>

On the other hand, more pro-social, and less self-protective, motivation has been found in response to mortality awareness in the areas of developmental and clinical psychology. Generativity research, as mentioned earlier, has found that as people age and become aware of their own mortality, they feel a greater need to make lasting contributions and be connected with others.<sup>28</sup> On another front, posttraumatic growth research has studied the personal development in individuals that have undergone traumatic experiences.<sup>29</sup> Common personal growth demonstrated by individuals that have experienced these

life-threatening circumstances include increased value placed in social connections and increased compassion and altruism. Posttraumatic interpersonal growth yields decidedly pro-social motivations including greater self-sacrifice and giving to others.<sup>30</sup> After near-death experiences, many individuals develop a greater appreciation of life, increased concern for others, and a motivation to find meaning in life.<sup>31</sup> However, these people usually seek a general, “world-view-free” spirituality rather than organized religion, as the latter is perceived as a human creation rather than a deeper understanding of life.<sup>32</sup>

### *Death Anxiety and Death Reflection*

The different areas of research reviewed above point to divergent outcomes as a result of mortality salience. Building from existing theory on the foundation of empirical evidence, Grant and Wade-Benzoni have proposed a theoretical model suggesting that mortality awareness may take one of two distinct forms, depending on the nature of the exposure to death.<sup>33</sup> The first is *death anxiety*: the emotional, experiential, and impulsive response to mortality awareness. Death anxiety is a visceral reaction that occurs primarily outside the reach of conscious or verbal-linguistic awareness as a result of “hot” psychological processing<sup>34</sup> and activates self-protective behavioral motivation.

The second form of mortality awareness is *death reflection*: a state in which individuals “put their lives in context, contemplate their meaning and purpose, and review how others will look upon them after they have passed.”<sup>35</sup> Death reflection involves cognitive, “cool” psychological processing and rational, deliberate judgment activating pro-social motivations.<sup>36</sup> This form is consistent with the generativity, posttraumatic growth, and near-death experience findings.

This theory suggests that *death anxiety* leads to (a) an increase in pro-social behavior toward ingroups and (b) a decrease in pro-social behavior toward outgroups, while *death reflection* evokes pro-social behavior toward present others and, to an even greater extent, future others.<sup>37</sup> Consistent with this theory, one experimental study examined the effect of death awareness on greed. Among participants asked to think about dying, researchers found less greed when these participants were also asked to reflect on their lives and take the perspectives of those close to them.<sup>38</sup> The “life review” and taking the perspectives of those one cares for are aspects that researchers of posttraumatic and near-death experiences have pointed to as the key factors of personal and pro-social growth.<sup>39</sup> In this case, death anxiety increased greed while death reflection decreased greed.<sup>40</sup>

In further support of Grant and Wade-Benzoni’s theory, a different study examined Americans’ willingness to donate money to charity under conditions of mortality salience. When reminded of death, American participants were more generous to charities aiding Americans than to charities aiding

foreigners. This difference was not present when participants were not made aware of their mortality. These findings support the contention that death anxiety leads to greater pro-social behavior toward only those that are part of one's ingroup.<sup>41</sup>

In sum, mortality awareness can have divergent effects on behavior depending on how thoughts of death are processed. The degree to which one takes the time to reflect on life and think about one's potential death from the perspectives of loved ones changes the resulting motivations. It appears that death anxiety leads to pro-social behavior strictly within one's ingroup, while mortality reflection leads to greater pro-social concerns, particularly those with consequences that extend into the future.

### *Post-9/11 Behavioral Responses*

In the aftermath of 9/11 people faced insecurity about their safety and uncertainty about their future. Further, as they reassessed their values and goals, people placed greater emphasis on social responsibility and activities aimed at having a lasting impact (i.e., immortality striving).

As discussed above, the desire for literal or Symbolic immortality becomes magnified under conditions of death awareness. Further, anxiety caused by death-awareness can be assuaged by feeling connected to something that will outlive the corporeal self. After 9/11, church attendance spiked to an incredible high; the head count at many churches almost doubled.<sup>42</sup> This likely happened for several reasons. First, people wanted to be reassured that they lived in an ordered and meaningful world—that a higher power was overarching this chaos. People sought answers to their questions about the meaning of life to decrease their feelings of uncertainty and anxiety. Second, people sought to be part of an established social entity, such as a church, that would continue to exist after they pass away, providing psychological security in the face of death anxiety.<sup>43</sup>

Reverend Allen Ewing-Merrill, pastor of First United Methodist Church of Hudson said, "There is this predisposition that we seem to possess, that when all around us seems insecure, we seek security in the eternal."<sup>44</sup> A belief in life after death can be the most powerful death anxiety relief of all, because it offers an opportunity for actual immortality. After 9/11, millions of people flocked to organized religion to seek answers and soothe their anxiety.

There has also been talk of a "baby boomlet" nine months after 9/11.<sup>45</sup> Procreation is another effective avenue for humans to symbolically extend themselves into the future. Not only will one's children likely live beyond one's death, but they may grow up and have children of their own, continuing the genetic lineage. There has been mixed evidence of this boomlet occurring, but immortality striving is certainly a part of the explanation of such outcomes.<sup>46</sup>

The mortality awareness caused by 9/11 also heightened people's sense of social responsibility and concern about the nature of the legacy they leave



behind. In the months after September 11, 2001, there was a tremendous outpouring of generosity. Ordinary citizens donated vast amounts of money in aid to the families and people most affected by the attacks. Some estimates suggest that within a year of 9/11 private donors had given two billion dollars to help the victims as well as increasing donations to charities unrelated to 9/11.<sup>47</sup>

### *Death, Intergenerational Decisions, and the Future*

The specific intergenerational implications of 9/11 are unclear, as the consequences are still unfolding and the tragic event has co-occurred with so many other societal changes. Informed by research, however, it seems likely that mortality awareness has helped change Americans' perspective on intergenerational decisions. Death reflection as a result of 9/11 may have contributed to people's willingness to address critical intergenerational issues such as climate change and national debt.

At a time when global integration and interdependence is at an all-time high, it is increasingly important that global problems are tackled internationally. Where death anxiety may lead people to be self-protective and condemning of others who are perceived to be different from themselves (such as those of another nationality), death reflection can help us to perceive ourselves as part of a global community that must coordinate to solve our problems. This notion further suggests that in response to an event such as 9/11, we must take the time to reflect on our lives before we act hastily to defend ourselves and ostracize those who are different from us.

The research discussed here highlights the importance of reflection and perspective-taking when faced with reminders of mortality. Even when death anxiety is subtle or small in magnitude, empirical findings suggest that taking time to reflect on death can help people to respond less self-protectively and to act with greater consideration for the future and the well-being of others.

The tragic events of 9/11 laid plain to millions of American citizens, and billions of global citizens, the vulnerability of life and the ever-presence and imminence of death. In this chapter, we have discussed two ways that an event such as 9/11 may affect human behavior and intergenerational decision making and outlined the mechanisms that underlie pro-social behaviour resulting from death awareness. First, people pursue symbolic immortality to help them feel that their existence will extend into the future and to assuage their death anxiety. Second, mortality awareness leads people to consider the ethical consequences of their actions, as they think about the legacy that they will leave behind when they die. In turn, they are motivated to be socially responsible in their actions. Last, we discussed how reflection and perspective-taking can be the key determinant between pro-social behavior and self-protective responses as a result of mortality awareness.

The events of September 11, 2001, were unlike any most of us had ever experienced. The terrorist attacks on the World Trade Center twin towers may be a defining moment for our generation. Much like those who experienced the assassinations of John F. Kennedy in 1963 or Martin Luther King Jr. in 1968, people will always remember where they were and what they were doing when they first heard about the attacks of 9/11. Let us hope that this defining moment at start of the twenty-first century will nudge us toward interpersonal growth and international cooperation rather than self-protective destruction.

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Section III

# **Terrorism and Education**

# Militarized Knowledge and Academic Soldiers: Arming the University

*Henry A. Giroux\**

If Michel Foucault is right that war is now “the motor behind institutions and order” and “a battlefield runs through the whole of society, continuously and permanently,” then we must try to understand what forces generate this permanent state of war and which side of the battle we want to be on, because, as Foucault insisted, “There is no such thing as a neutral subject.” If we are to heed Foucault’s warning that “We are all inevitably someone’s adversary,”<sup>1</sup> then we must make our decisions carefully based on an understanding of what kind of world we are currently living in and what kind of world we want to pass on to future generations of young people. Indeed, the war we are faced with today is global in scope as the forces of neoliberalism are on the march, dismantling the historically guaranteed social provisions provided by the welfare state, defining profitmaking as the essence of democracy, imposing rapacious free-trade agreements, saturating noneconomic spheres with market rationalities, and equating freedom with the unrestricted ability of markets to “govern economic relations free of government regulation.”<sup>2</sup>

Embracing the “market as the arbiter of social destiny,”<sup>3</sup> neoliberalism extends the domain of economics into politics, while neoliberal market

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rationality organizes, regulates, and defines the basic principles and workings of the state. Gone are the days when the state “assumed responsibility for a range of social needs.”<sup>4</sup> Instead, the state now pursues a wide range of deregulations and privatizations, which amount to an abdication of its responsibility to represent the interests of a democratic citizenry. As Wendy Brown points out, “neoliberalism reaches from the soul of the citizen-subject to educational policy to practices of empire.”<sup>5</sup> Transnational in scope, neoliberalism now imposes its economic regime and market values on developing and weaker nations through the heavy-handed policies of the World Bank, the International Monetary Fund (IMF), and the World Trade Organization (WTO). Western financial and commercial interests now manage and transfer resources and wealth from the poor and less developed nations to the richest and most powerful nation-states as well as to the wealthy corporate defenders of capitalism.

With the dawn of the new millennium, the Gilded Age—however devalued as a result of the economic meltdown—with its “‘dreamworlds’ of consumption, property, and power” returned with a vengeance.<sup>6</sup> Market rationalities and entrepreneurial subjects are produced within a growing apparatus of social control while a culture of fear and a battered citizenry are the consequence of the militarization of everyday life. As war has become “the organizing principle of society,”<sup>7</sup> the state has been transformed from a social state into a punishing state, reinforcing what neoliberalism and militarism share in common: a hatred of democracy.<sup>8</sup> What, for Foucault, was once a “coded war” has become an all-out attack on democracy as dissent is now answered not with the rule of law, however illegitimate, but with the threat or actuality of violence.<sup>9</sup>

In a post-9/11 world, neoliberalism has been weaponized and the high-intensity warfare it promotes abroad is replicated in low-intensity warfare at home. While both militarism and neoliberalism have a long history in the United States, the symbiotic relationship into which they have entered and the way in which this authoritarian ideology has become normalized constitutes a distinct historical moment. Both neoliberalism and militarism produce particular views of the world and then mobilize an array of pedagogical practices in a variety of sites in order to normalize their related modes of governance, subject positions, forms of citizenship, and rationality.<sup>10</sup> Moreover, the ever-expanding militarized neoliberal state marked by the dominance of finance capital, an authoritarian order, and a vast war machine now serves as a powerful pedagogical force that shapes the lives, memories, and daily experiences of most people in North America. While higher education in Canada and the United States has long been a major site for producing the neoliberal subject, it is only in the proliferation of a post-9/11 security culture that the university has also become an intense, if not unapologetic, site of militarization—offering up the underside of a suspect society that sacrifices democracy, critical education, and most importantly human lives as part of its ubiquitous war on terror.

While there has been a growing concern among academics and progressives over the corporatization of the university, the transformation of academia into a “hypermodern militarized knowledge factory”<sup>11</sup> has been largely ignored as a subject of public concern and critical debate.<sup>12</sup> Such silence has nothing to do with a lack of visibility or *covert* attempts to inject a military and security presence in both higher education and the broader society. Military symbols, representations, talk, and images now dominate the cultural and political landscape. And, yet, the idea that “military is to democracy as fire is to water”<sup>13</sup> has been overlooked by almost all major political figures, the media, and most academics since the tragic events of September 11, 2001. As a result, a creeping militarism has materialized into a full-fledged coup, fuelled by a war on terror, the military occupation of Iraq and Afghanistan, and endless cases of kidnapping, torture, abuse, and murder by the U.S. government.<sup>14</sup> And the election of Barack Obama does not suggest that there will be a shift in policy. While collaboration between the national security state and higher education may produce little debate and even less resistance, the post-9/11 resurgence of patriotic commitment and support on the part of faculty and administrators toward the increasing militarization of daily life run the risk of situating academia within a larger project in which the militarized values and pedagogical practices of the warfare state become normalized. As the ensemble of institutions, relations, and symbols of militarization loom large in the civic culture, it becomes all the more important for higher education to be defended as a vital public sphere crucial for both the education of critical citizens and the defense of democratic values and institutions. Yet faith in social amelioration and a sustainable future appears to be in short supply as neoliberal capitalism performs the multiple tasks of using education to train workers for service sector jobs, create lifelong consumers, construct citizen-warriors, and expand the production of militarized knowledge, institutions, and research.<sup>15</sup> Given the current threat posed by the national security state to higher education and democracy, I want to engage the question of what the role of higher education might be when “the government has a free hand to do whatever it wants in the name of national security”?<sup>16</sup> More specifically, I want to offer an alternative analysis of the fate of higher education as a democratic public sphere, one that refuses to simply serve the expressed needs of militarization, neoliberalism, and the national security state, all of which appear to be pushing *Western democracy* towards a new form of authoritarianism.<sup>17</sup>

### The Biopolitics of Militarization

War, as the matrix for all emerging relations of power, spreads the discourse and values of militarization throughout a society that has shifted, as Hardt and Negri argue, from “the welfare state to the warfare state.”<sup>18</sup> After the events of 9/11, the United States became no longer simply a militarized state

but a militarized society. Militarization suggests more than simply a militaristic ideal—with its celebration of war as the truest measure of the health of the nation and the soldier-warrior as the noblest expression of the merging of masculinity and unquestioning patriotism—but an intensification and expansion of the underlying values, practices, ideologies, social relations, and cultural representations associated with military culture. What appears new about the amplified militarization of the post-9/11 world is that it has become biopolitical and normalized, serving as a powerful pedagogical force that shapes our lives, memories, and daily experiences, while erasing everything critical and emancipatory about history, justice, solidarity, and the meaning of democracy.<sup>19</sup> As a biopolitical force, military power produces identities, goods, institutions, knowledge, modes of communication, and affective investments—in short, it now bears down on all other aspects of social life and the social order.<sup>20</sup> Civil society now not only “organizes itself for the production of violence,” according to Michael Geyer, but the new biopolitics coincides with what Catherine Lutz describes as “the less visible deformation of human potentials into the hierarchies of race, class, gender, and sexuality.”<sup>21</sup> And in reorganizing society in ways that support violence and discrimination, militarization not only undermines the memories of democratic struggles and possibility, it also criminalizes dissent.

As the punishing state replaces the social state and a culture of fear spurs a gradual erosion of civil liberties, military power and policies are being expanded to address not only matters of defense and security but also problems associated with the entire health and social life of the nation, which are now measured by military spending, discipline, and loyalty, as well as hierarchical modes of authority.<sup>22</sup> As citizens increasingly assume the roles of informer, soldier, and consumer willing to enlist in or be conscripted by the totalizing war on terror, we see the very idea of the university as a site of critical thinking, public service, and socially responsible research being usurped by a manic jingoism and a market-driven fundamentalism that enshrine the entrepreneurial spirit and military aggression as means to dominate and control society. This should not surprise us, since as William G. Martin, a professor of sociology at Binghamton University, indicates, “universities, colleges and schools have been targeted precisely because they are charged with both socializing youth and producing knowledge of peoples and cultures beyond the borders of Anglo-America.”<sup>23</sup> But rather than be lulled into complacency by the insidious spread of corporate and military power, we need to be prepared to reclaim institutions such as the university that have historically served as vital democratic spheres protecting and serving the interests of social justice and equality.

### **Militarizing Higher Education**

The impact of militarization on higher education in the United States is suggested by the presence of over 150 military-educational institutions designed

to “train a youthful corps of tomorrow’s military officers”<sup>24</sup> in the strategies, values, skills, and knowledge of warfare. *But it is confirmed* by the existence of hundreds more colleges and universities that conduct Pentagon-funded research, provide classes to military personnel, and design programs specifically for future employment with various departments and agencies associated with the warfare state.<sup>25</sup> Daniel Golden, writing for the *Wall Street Journal* in 2002, noted that in the aftermath of 9/11 an increasing number of faculty and universities—capitalizing on both a new found sense of patriotism and a less politicized sense of self-interest—were turning to the 16 intelligence agencies and offering them their services and new recruitment opportunities.<sup>26</sup> Moreover, as universities recognize that the intelligence agencies have deep pockets for funding opportunities, the CIA benefits from this new receptivity and reciprocates by “turning more to universities... to develop high-tech gadgets that track down terrorists and dictators.”<sup>27</sup> In addition, the CIA is developing more federal scholarship programs, grants, and other initiatives in order to attract students for career opportunities and to involve faculty in various roles that address “security and intelligence goals.”<sup>28</sup> As corporate money for research opportunities dwindles, the Pentagon fills the void with millions of dollars in available grants, stipends, scholarships, and other valuable financial rewards, for which college and university administrators actively and openly compete. Indeed, the Department of Homeland Security, as William Martin indicates, “handles a \$70 million dollar scholarship and research budget, and its initiatives, in alliance with those of the military and intelligence agencies, point towards a whole new network of campus-related programs.”<sup>29</sup> Indeed, Robert Gates, the Secretary of Defense under both the Bush administration and the current Obama regime, has produced a number of programs that would establish closer relations between the Pentagon and higher education. For example, he has recently proposed the creation of what he calls a new “Minerva consortium” the purpose of which is to fund various universities to conduct social science research that serves the interest of national security. Gates has no political or ethical qualms about turning universities into militarized knowledge factories more willing to produce knowledge, research, and personnel in the interest of the warfare and Homeland (In)Security State than to assume the important role of tackling the problems of contemporary life or supporting educational programs that enable students to hold governments accountable by questioning how their core values and presence in the world alter and shape democratic identities, values, and organizations.

Rather than objecting to this new military presence in higher education, the National Research Council of the National Academies published a report called *Frameworks for Higher Education in Homeland Security*, which argued that the commitment to learning about homeland security is an essential part of the preparation for work and life in the twenty-first century, thus offering academics a thinly veiled legitimization for

building into undergraduate and graduate curricula intellectual frameworks that mirror the interests and values of the warfare state. Similarly, the Association of American Universities argued in a report titled *National Defense Education and Innovation Initiative* that winning the war on terrorism and expanding global markets were mutually informing goals, the success of which falls squarely on the performance of universities. This group argues, with a rather cheerful certainty, that every student should be trained to become a soldier in the war on terror and in the battle over global markets, and that the universities should do everything they can to “to fill security-related positions in the defense industry, the military, the national laboratories, the Department of Defense and Homeland Security, the intelligence agencies, and other federal agencies.”<sup>30</sup>

Now that more and more universities cooperating with intelligence agencies, with few objections from faculty, students, and other concerned citizens,<sup>31</sup> the *Wall Street Journal* claims that the CIA has become a “growing force on campus.”<sup>32</sup> A November 2002 issue of the liberal magazine *American Prospect* published an article by Chris Mooney calling for academics and the government intelligence agencies to work together.<sup>33</sup> Such collaboration seems to be in full swing at a number of universities. For example, major universities have appointed former CIA officials as either faculty, consultants, or presidents. Michael Crow, a former agent, is now president of Arizona State University and Robert Gates, the former Director of the CIA, was a former president of Texas A & M. The collusion among the Pentagon, war industries, and academia in the fields of research and development is evident with companies that make huge profits on militarization and war, such as General Electric, Northrop Grumman, and Halliburton, which establish through their grants crucial ties with universities and promote a self-image to the larger society as philanthropic institutions.<sup>34</sup>

As the university is increasingly militarized, it leads to what John Armitage calls “the militarization of knowledge, namely, in the militarization of the facts, information, and abilities obtained through the experience of education.”<sup>35</sup> The priority given to such knowledge is largely the result of the huge amount of research money increasingly shaping the curricula, programs, and departments in various universities around the country. Money flows from the military war machine in the post-9/11 world, and the grants and research funds that the best universities receive are not cheap. In 2003, for example, Penn State received \$149 million in research and development awards while the Universities of California, Carnegie Mellon, and Texas received \$29.8 million, \$59.8 million, and \$86.6 million respectively, and they are not even the top beneficiaries of such funds.<sup>36</sup> The scale, sweep, range, and complexity of the interpenetration between academia and military-funded projects are as extensive as they are frightening. As of 2004, the Department of Defense was “the third largest federal funder of university research (after the National Institutes

of Health and the National Science Foundation).” And with the Department of Defense’s budget increasing by billions each year, Nicholas Turse concludes, “it doesn’t take a rocket scientist to figure out that the Pentagon can often dictate the sorts of research that get undertaken and the sorts that don’t.”<sup>37</sup>

Indeed, it would be naive, as Jay Reed points out, to presume that “an abundance of funding from the military” does not affect the research projects and agendas that are considered worthy of scientific inquiry.<sup>38</sup> For example, the Department of Defense and a number of other departments and agencies largely support the research conducted on space-based armaments and so-called Future Combat Systems. The space weapons being researched in universities around the country include “microwave guns, space-based lasers, electromagnetic guns, and holographic decoys” while the future combat weapons include “electric tanks, electro-thermal chemical cannons, [and] unmanned platforms.”<sup>39</sup> Such research is carried out at universities such as MIT, which gets 75 percent of its funds for its robotics program from the Department of Defense. How these funds shape research and development and the orientation of theory toward the production of militarized knowledge is evident in MIT’s design and production of a kind of RoboMarine called “the Gladiator,” which is a tactical unmanned ground vehicle containing an MT40G medium machine gun, surveillance cameras, and slots for launching paint balls and various smoke rounds, including “tear gas, or stingball and flashbang grenades.”<sup>40</sup> One Pittsburgh paper called it “a remote-controlled ‘toy,’ [with] some real weapons” and “containers for hand grenades that can be used for clearing obstacles and creating a footpath on difficult terrain for soldiers following behind. It also features what looks like organ pipes to produce smoke, and it has a mount on top for a medium-size machine gun or multipurpose assault weapon.”<sup>41</sup> Critical commentary apparently not included. In fact, the Gladiator is designed for military crowd-control capabilities, reconnaissance, surveillance, and direct fire missions. Carnegie Mellon University received a \$26.4 million Defense Department grant to build six Gladiator prototypes. The University of Texas received funding from the Department of Defense for its Applied Research Laboratories, which develops in five separate labs everything from Navy surveillance systems to “sensing systems to support U.S. ballistic missile targeting.”<sup>42</sup> MIT, one of the largest recipients of defense research money, has also been using its talented research-oriented faculty and students to develop remote sensing and imaging systems that would “nullify the enemy’s ability to hide inside complex mountain terrains and cityscapes.”<sup>43</sup> Universities around the country are funded to do similar military-oriented research, producing everything from global positioning systems to undersea surveillance technologies.

But, of course, the problem with Pentagon-funded research is about more than how and what kinds of knowledge are obtained, shaped, and used by different elements of the military-industrial complex; it is also about

the immense pressure that can be brought to bear by the Department of Defense and the war industries on colleges and universities to orient themselves towards a society in which non-militarized knowledge and values play a minor role, thus devaluing one of higher education's fundamental purposes: to help students be ethical citizens and learn how to take risks by connecting knowledge to power in the interest of social justice and democratic ideals, values, and institutions.<sup>44</sup>

While the receptivity to the military's incursion into higher education on the part of university administrators and faculty can be attributed to the scramble for research funding, it is only one factor in the equation. The CIA is also making an appeal to students. At a time when college students are in desperate need of jobs in an increasingly fragile market, the CIA, because of its political prominence in fighting the war on terrorism, is expanding rather than shrinking its employment opportunities and is viewed by many students—who seem to be beating a path to the agency's employment officers—as a promising career choice. Equally important is the upsurge in patriotic correctness following 9/11 coupled with the ongoing right-wing campaign to squelch “un-American” dissent in the university. Hence, amid the resurgence of political quietism and hyper-patriotism and growing job insecurities among college graduates, an unparalleled detente has emerged between academia and the CIA at the beginning of the new millennium.

One of the most controversial post-9/11 programs sponsored by the CIA is the Pat Roberts Intelligence Scholars Program (PRISP). The program is named after Senator Pat Roberts,<sup>45</sup> who was the head of the Senate Select Committee on Intelligence under the Bush administration until the takeover of the Senate by Democrats in 2006. The Roberts Program was designed to train 150 analysts in anthropology, each of whom would receive a \$25,000 stipend per year, with a maximum of \$50,000 over the two-year period. The program also provided tuition support, loan paybacks, and bonuses for the immediate hiring of those candidates considered to have critical skills. In return, each participant in the program agreed to work for an intelligence agency for one-and-a-half times the period covered by the scholarship support. In this case, two years of support would demand that an analyst work for a government intelligence agency for three years. Students who receive such funding cannot reveal their funding source, are not obligated to inform their professors or fellow students that they are being funded for and will work for an intelligence agency, and are required to attend military intelligence camps.<sup>46</sup> The association of such a program with Senator Roberts seems particularly apt given that Roberts was well-known for siding with the Bush administration on warrantless domestic spying programs, blocking a vote to investigate the program, consistently stonewalling an investigation into Bush's use of pre-war intelligence to justify the war in Iraq, defending Guantanamo Bay Prison, and refusing to investigate the CIA's complicity in the abuse and torture of detainees.

Defenders of the Roberts program and the more general issue of academics working with intelligence agencies often claim that if academics participated in the process of intelligence-gathering, many of the problems and abuses that the agencies have committed could be corrected in the future. But such a position ignores the fact that the intelligence agencies are guided not by rationality and open inquiry but by politics, and often by a politics that is utterly indifferent both to the rights of citizens of other countries and to the democratic interests of the larger international community. One example recently surfaced at the 2006 American Anthropological Association's annual meeting. Scholars attending the meeting were appalled to discover that the work of some of their colleagues in the field of cultural anthropology has been used by the U.S. Armed Services to develop interrogation techniques at Abu Ghraib prison. This type of knowledge appropriation is particularly indicative of the increasing militarization of the field of anthropology and the emergence of anthropological counterinsurgents such as Dr. David Kilcullen, and Australian anthropologist and lieutenant colonel, who unabashedly works (on loan) with the U.S. State Department's counterterrorism office and refers, with no apologies, to counterinsurgency as "armed social work."<sup>47</sup> In such cases, as Roberto J. Gonzales, a professor of anthropology at San José State University, points out, "Anthropology . . . appears as just another weapon to be used on the battlefield—not as a tool for building bridges between peoples, much less as a mirror that we might use to reflect upon the nature of our own society."<sup>48</sup> Gonzales played a prominent role in convincing the American Anthropological Association to unanimously condemn "the use of anthropological knowledge as an element of physical and psychological torture."<sup>49</sup>

Other criticisms of the U.S. military and CIA initiatives like the Roberts Program have emerged among a few prominent academics, including Dave Price, David Gibbs, and William Martin. Price, an associate professor of anthropology at St. Martin's College in Olympia, Washington, argues that the Roberts Program permits the CIA not only "to return to its historical practice of operating within universities"<sup>50</sup> but also to revert to its old habit of collecting information on professors, dissenting students, and what goes on in general in the classroom.<sup>51</sup> Phil Baty writing in the *Times Higher Education Supplement* furthers this argument by insisting that such a program places the lives of all anthropologists in the field at risk of physical danger because they might be suspected of being spies and a danger to the people whom they study. Gibbs, an associate professor of history and political science at the University of Arizona, Tucson, argues that any close relationship between the intelligence services and higher education compromises the ability of academia to make power accountable by undermining the possibility of academics to criticize the policies and practices of intelligence agencies. He argues that the secrecy imposed on scholars working for the CIA is antithetical to the notion of the university as a democratic sphere that fosters critique, open dialogue, and engaged debate. He also insists that the CIA practices of engaging in disinformation and



propaganda tactics along with its long and continuing history of destabilizing democratic governments, committing human rights abuses, engaging in acts of abduction and torture, and undermining popular democratic movements put it at odds with any viable notion of what higher education should represent.<sup>52</sup> At the very least, the research that is supported in many universities under the funding of the intelligence agencies raises serious questions about what kind of relationship is taking place between these agencies and academia, and whether such a relationship is capable of producing the ends for which it is purportedly espoused in the first place.

Perhaps the most stinging criticisms come from William Martin, whose comments are aimed not merely at the CIA, but at all Homeland Security Programs working in conjunction with higher education. Martin suggests that the government's efforts to redirect general educational funding towards specific programs not only impoverishes universities and renders them increasingly dependent on alternative sources of funding (such as corporations whose financial support also comes with strings attached) but also denies universities the kind of institutional autonomy needed to conduct important research not directly related to governmental goals and values. Moreover, we should heed Martin's warning when he suggests that "The forgotten exposés of the 1970s demonstrate what these kinds of programs produce: an academy not simply compromised and at risk, but riddled with secret military and intelligence projects, slowly spreading all over the world in service of misguided imperial ambitions."<sup>53</sup> Unfortunately, Martin's argument appears to be lost on a majority of academics. What is overlooked in the growing, enthusiastic collaboration between the military-industrial complex and academe within the context of developing a powerful post-9/11 national security state is that the increasing militarization of higher education is itself a problem that may be even more insidious, damaging, and dangerous to the fate of democracy than that posed by terrorists who supposedly "hate our freedoms." Heretofore, the university has been one of the few remaining sites where genuine criticism, critical scholarship, spirited debate, and organized resistance to the abuse of government power could take place.

But there is another set of relations that connect higher education to the military-industrial complex that appears far more ominous and revealing about the antidemocratic tendencies at work in the United States. In this relationship, the dark side of power is displayed not simply through the buying of knowledge, research, and influence, but through the tools of the punishing state, one that shrouds itself in secrecy, suppresses dissent, perpetuates a culture of fear, and puts society in a full lockdown mode.<sup>54</sup> Elements of the new lockdown mode are evident not only in the heightened emphasis on security and safety—exemplified in acts of harassment, torture, abuse, humiliation, and widespread violation of civil liberties, but also in the wild zone of power and politics committed increased surveillance, the dismantling of public debate, and the punishment of those who dare to hold the United States accountable

for its ongoing violations of human rights. One example of the ever-expanding landscape of the punishing and lockdown landscape can be found in the ways in which the suspect society views and deals with higher education. Michael Gould-Wartofsky offers a compelling set of instances that reveal the ongoing attempt by the U.S. government to construct what he calls the homeland-security campus.<sup>55</sup> Under the guise of the war on terror, higher education is viewed as a hotbed of radical activity and subject to a range of militarized actions that increasingly transform it into “the latest watchtower in fortress America.”<sup>56</sup> For example, as the government extends the methods of its full lockdown mode to higher education, dissidents are increasingly subject to domestic spying programs aimed at tracking potential terrorists; campus police now routinely double as FBI agents, often monitoring and interrogating student and faculty activists; campus police are increasingly being armed with Tasers, handguns, and other deadly weapons; over half of all colleges now use cameras for surveillance, turning students and faculty into objects of the suspect society. Finally, not only are student records now mined for purposes of investigation, recruitment, and tracking but these databases are shared between universities and various federal agencies. And as security operations are outsourced to private corporations, the relative autonomy and notion of the university as a democratic public sphere is reduced to another commodity legitimated through the alleged war on terrorism, which increasingly appears to mimic the very forces it claims to be fighting.<sup>57</sup>

### Conclusion

To prevent higher education from becoming “hypermodern militarized knowledge factory,”<sup>58</sup> educators need to reclaim higher education as a democratic public sphere, one that provides the pedagogical conditions for students to become critical agents who connect learning to expanding and deepening the conditions for the struggle toward genuine democratization. Students should be versed in the importance of the social contract (in spite of its damaged legacy), provided with classroom opportunities to become informed citizens, and given the resources to understand politics in both historical and contextual terms as part of the broader discourse of civic engagement. This means refusing to instrumentalize the curriculum, giving the humanities a larger role in educating all undergraduate students, putting into place curricula, programs, and courses that stress a critical education over job training, and enabling students to learn how to read the political and pedagogical forces that shape their lives not as consumers and soldiers but as critically engaged citizens.

Educators need to more fully theorize how pedagogy actually constructs particular modes of address, modes of identification, affective investments, and social relations that produce consent and complicity in the ethos and

practice of neoliberalism and militarization.<sup>59</sup> Clearly, there is a need to refute the notion that neoliberal hegemony and militarization can be explained simply through an economic optic, one that consequently gives the relationship of politics, culture, and education scant analysis. Any serious opposition to militarization and neoliberalism will have to engage pedagogy as a form of cultural politics that not only requires analyses of the production and representation of meaning, but also how these practices and the subjectivities they construct are implicated in the dynamics of social power. As Antonio Gramsci reminds us, educational practice is always necessarily part of a pedagogy of persuasion, one that makes a claim to “speak to vital human needs, interests, and desires.”<sup>60</sup> Pedagogy as a form of cultural politics is fundamentally concerned with the relations among politics, morality, and cultural and material production, and takes place not only in schools but also through the myriad technologies and locations that produce and shape the educational force of the wider culture. Lawrence Grossberg insists that popular culture and its shaping of the popular imagination provides the space in which people “decide whether and in what (or whom) to invest the power to speak for them”—it is far too important as part of a larger political and educational struggle not to be taken seriously by educators.<sup>61</sup>

Students need to learn more about how the educational force of the culture actually works pedagogically to produce neoliberal and militaristic ideologies, values, and consent—how the popular imaginary both deploys power and is influenced by power. They need a better understanding of how neoliberal and militarized discourses, values, and ideas are taken up in ongoing struggles over culture, meaning, and identity as they bear down on people’s daily lives.<sup>62</sup> At stake here are a number of pedagogical challenges such as overcoming the deeply felt view in American culture that criticism is destructive, or for that matter a deeply rooted anti-intellectualism reinforced daily through various forms of public pedagogy offered by talk radio, newspapers, and the television info-tainment sectors.<sup>63</sup> Central to such a task is challenging the neoliberal/militarized mode of governmentality that locates freedom in individual responsibility, views military supremacy as central to national identity, celebrates the armed services as the highest expression of national honor, and reduces citizenship to a notion of market entrepreneurship. How might educators and others engage pedagogical practices that open up spaces of resistance to neoliberal/militarized modes of governance and authority through a culture of questioning that enables people to resist and reject neoliberal assumptions that reduce social responsibility and critical thinking to expressions of military valor, values, and battle?

And, speaking more generally, what are the implications of theorizing pedagogy and the practice of learning as essential to social change and where might such interventions take place? How might the related matters of experience and learning, knowledge and authority, and history and cultural capital be theorized as part of a broader pedagogy of critique and possibility? What

kind of pedagogical practice might be appropriate in providing the tools to unsettle hegemonic “domains of cognition”<sup>64</sup> and break apart the continuity of consensus and common sense as part of a broader political and pedagogical attempt to provide people with a critical sense of social responsibility and agency? How might it be possible to theorize the pedagogical importance of the new media and the new modes of political literacy and cultural production they employ, or to analyze the circuits of power, translation, and distribution that make up neoliberalism’s vast apparatus of public pedagogy—extending from radio and screen culture to the Internet and print culture? These are only some of the questions that would be central to any viable recognition of what it would mean to theorize pedagogy as a condition that enables both critique—understood as more than the struggle against incomprehension—and social responsibility as the foundation for forms of intervention that are oppositional and empowering.

Over 17 million students pass through the hallowed halls of academe, and it is crucial that they be educated in ways that enable them to recognize the creeping militarization and its effects throughout society, particularly in terms of how these effects threaten “democratic government at home just as they menace the independence and sovereignty of other countries.”<sup>65</sup> But students must also recognize how such antidemocratic forces work in attempting to dismantle the university itself as a place to learn how to think critically and participate in public debate and civic engagement.<sup>66</sup> In part, this means giving them the tools to fight for the demilitarization of knowledge on college campuses—to resist complicity with the production of knowledge, information, and technologies in classrooms and research labs that contribute to militarized goals and purposes.

Opposing militarization as part of a broader pedagogical strategy in and out of the classroom also raises the question of what kinds of competencies, skills, and knowledge might be crucial to such a task. One possibility is to develop a kind of praxis that addresses what I call an oppositional pedagogy of cultural production, one that defines the pedagogical space of learning not only through the critical consumption of knowledge but also through its production for peaceful and socially just ends. What is at stake here is the crucial need for students to learn how to do more than critically engage and interpret print, visual, and media texts, as significant as such a task might be as part of their learning experience. This means that as the forces of militarization increasingly monopolize the dominant media, students, activists, and educators must imagine ways to expand the limits of humanities education to enable the university to shape coming generations of cultural producers capable of negotiating not only the old media forms, such as broadcasting and reporting, but also the new electronic media, which have come to play a crucial role in bypassing those forms of media concentrated in the hands of corporate and military interests. The current monopolization of the media suggests that students will have to be educated in ways that allow them to develop alternative public spheres where

they can produce their own films, videos, music, radio talk shows, newspapers, magazines, and other modes of public pedagogy. The militarization of everyday life—from the production of video games to the uncritical analysis of war and violence in the nightly news—must be challenged through alternative media. Examples of this type of oppositional public pedagogy is evident in the work of a wide range of individuals and groups who make cultural politics and public pedagogy central to their opposition of a number of antidemocratic forces such as militarization and neoliberalism. For instance, the work of the Media Education Foundation produces a range of excellent documentaries and videos for youth, many of which address the militarization of the culture,<sup>69</sup> from war games to the Global Network Against Weapons and Nuclear Power in Space (an organization that consists of songwriters and singers who produce music protesting the militarization of space).<sup>70</sup>

In the fight against the biopolitics of militarization, educators need a language of critique, but they also need a language that embraces a sense of hope and collective struggle. This means elaborating the meaning of politics through a language of critique and possibility, on the one hand, and a concerted effort to expand the space of politics by reclaiming “the public character of spaces, relations, and institutions regarded as private,” on the other.<sup>71</sup> We live at a time when matters of life and death are central to political sovereignty. While registering the shift in power toward the large scale production of death, disposability, and exclusion, a new biopolitics must also point to notions of agency, power, and responsibility that operate in the service of life, democratic struggles, and the expansion of human rights. Such struggles must be made visible, and can be found among AIDS workers in Africa, organized labor in Latin America, and Palestinians acting as human shields against Israeli tanks in the West Bank and Gaza. We can also see a biopolitics of resistance and hope at work in a long tradition of anti-militarist struggles in the United States, which have taken place not only in the wider public sphere but also in the military itself.<sup>72</sup> In contemporary times, this suggests that educators should pay more attention to how different modes of domination inform each other so that strategies for resistance can be layered, complex, and yet held together by more generalized notions of hope and freedom. As Jean Comaroff has recently argued, progressives need a more adequate theory of power, and, as I have argued, a more complicated notion of politics.<sup>73</sup> For example, any redemptive biopolitics of demilitarization would have to be understood in relation to an equally powerful biopolitics of capital, raising fundamental questions about how capital in its neoliberal incarnation and militarization in its various forms connect and inform each other on the level of the local, national, and global. We might, for instance, raise the question of how neoliberalism with its fragmenting of democratic solidarities, privatized notions of agency, and eviscerated conception of politics paves the way for the production of militarized subjects, as well as the normalization of military mentalities and moralities, and how these practices affect generations of young people.

If higher education is to come to grips with the multilayered pathologies produced by militarization, it will have to rethink the space of the university as a democratic public sphere and offer pedagogical and political possibilities for strengthening the social bonds of democracy, that is, understand classrooms as new spaces from which to cultivate the capacities for critical modes of individual and social agency, and crucial opportunities to form alliances to collectively struggle for a critical education that expands the scope of vision, operations of democracy, and the range of democratic institutions. At its best, higher education should produce a certain kind of citizen whose education provides the essential conditions for democratic public spheres to flourish. Cornelius Castoriadis, the great philosopher of democracy, argues that if public space is not to be experienced as a private affair, but as a vibrant sphere in which people experience and learn how to participate in and shape public life, it must be shaped through an education that provides the decisive traits of courage, responsibility, and compassion, all of which connect the fate of each individual to the fate of others, the planet, and global democracy. To confront the “dark times” in which we live, artists, cultural workers, youth, and educators need to create new discourses of understanding and criticism, but also offer up a vision of hope that creates the conditions for multiple collective and global struggles that refuse to use politics as an act of war and markets as the measure of democracy. Democracy’s promise demands more justice, more hospitality, more struggle, not less. Democracy is more than an event and ritual, it is a site of struggle whose outcome is always uncertain but whose future should never remain in doubt.

### Notes

1. Michel Foucault, *Society Must Be Defended: Lectures at the College de France 1975-1976* (New York: Palgrave, 2003), 50–51.
2. Stanley Aronowitz, *How Class Works* (New Haven: Yale University Press, 2003), 101.
3. James Rule, “Markets, in Their Place,” *Dissent* (Winter 1998): 31.
4. George Steinmetz, “The State of Emergency and the Revival of American Imperialism; Toward an Authoritarian Post-Fordism,” *Public Culture* 15:2 (Spring 2003): 337.
5. Wendy Brown, *Edgework: Critical Essays on Knowledge and Politics* (Princeton: Princeton University Press, 2005), 40.
6. Mike Davis and Daniel Bertrand Monk, “Introduction,” *Evil Paradises* (New York: The New Press, 2007), ix.
7. Michael Hardt and Antonio Negri, *Multitude: War and Democracy in the Age of Empire* (New York: Penguin, 2004), 12.
8. Jacques Rancière, *Hatred of Democracy* (London: Verso, 2006). I am not suggesting that there was a golden period in American history when war and intervention did not exist. What I am suggesting is that under the imperial

- presidency, matters of force and empire have become the regulative principles organizing American foreign policy and establishing the foundation for an utterly militarized society, which is new. On the complicated nature of American history and the culture of force, see Christopher Newfield, "The Culture of Force," *South Atlantic Quarterly* (Winter 2006): 241–263. On the increasing militarization of American society, see Henry A. Giroux, *The University in Chains: Confronting the Military-Industrial-Academic Complex* (Boulder: Paradigm, 2007); Chalmers Johnson, *Nemesis: The Last Days of the American Republic* (New York: Metropolitan Books, 2006); and Andrew Bacevich, *The New American Militarism: How Americans are Seduced by War* (New York: Oxford University Press, 2005). On the spread of U.S. militarism abroad, see Catherine Lutz, ed. *The Bases of Empire: The Global Struggle Against U.S. Military Posts* (New York: New York University Press, 2009).
9. Hardt and Negri, *Multitude*, 341.
  10. These ideas come from Kathy E. Ferguson and Phyllis Turnbull, *O, Say, Can you See?: The Semiotics of the Military in Hawai'i* (Minneapolis: University of Minnesota Press, 1999), 197–198.
  11. John Armitage, "Beyond Hypermodern Militarized Knowledge Factories," *Review of Education, Pedagogy, and Cultural Studies* 27 (2005): 221.
  12. Some notable exceptions include: Rebecca S. Lowen, *Creating the Cold War University: The Transformation of Stanford* (Berkeley: University of California Press, 1997); Noam Chomsky et al., *The Cold War and the University: Toward an Intellectual History of the Postwar Years* (New York: The New Press, 1998); Christopher Simpson, ed., *Universities and Empire: Money and Politics in the Social Sciences During the Cold War* (New York: The New Press, 1998); Cary Nelson, "The National Security State," *Cultural Studies* 4:3 (2004): 357–361; Armitage, "Beyond Hypermodern Militarized Knowledge Factories," 219–239; Michael Perelman, "The Role of Higher Education in a Security State," *Thought & Action* (Fall 2005): 179–186; and Greg McCole and Sherman Dorn, "A University's Dilemma in the Age of National Security," *Thought & Action* (Fall 2005): 163–177.
  13. Beck, *The Reinvention of Politics*, 78.
  14. Some of the better work on militarism in American life can be found in Chalmers Johnson, *The Sorrows of Empire: Militarism, Secrecy, and the End of the Republic* (New York: Metropolitan Books, 2004); Bacevich, *The New American Militarism*; and Carl Boggs, *Imperial Delusions: American Militarism and Endless War* (Denver: Paradigm Publishers, 2005); Chalmers Johnson, *Nemesis: The Last Days of the American Republic* (New York: Metropolitan Books, 2006); Andrew Bacevich, *The Limits of Power* (New York: Metropolitan Books, 2008).
  15. On the warrior ethos, see Christopher Coker, *The Warrior Ethos: Military Culture and the War on Terror* (New York: Routledge, 2007).
  16. Perelman, "The Role of Higher Education in a Security State," 179.
  17. I have taken this question up of an emerging authoritarianism in the United States in three books. See Henry A. Giroux, *Against the New Authoritarianism: Politics After Abu Ghraib* (Winnipeg: Arbeiter Ring

- Publisher, 2005); Henry A. Giroux, *America on the Edge: Henry Giroux on Politics, Culture, and Education* (New York: Palgrave, 2006), and *Against the Terror of Neoliberalism* (Boulder: Paradigm Press, 2008).
18. Hardt and Negri, *Multitude*, 17.
  19. I have borrowed this idea from the criticisms made of the Israeli Defense Force by the writer Yitzhak Laor. See Laor, "You Are Terrorists, We Are Virtuous," *London Review of Books* 28:16 (August 17, 2006). Available at: [http://www.lrb.co.uk/v28/n16/print/laor01\\_html](http://www.lrb.co.uk/v28/n16/print/laor01_html) (accessed January 7, 2007)
  20. See Michel Foucault, *Society Must Be Defended: Lectures at the Collège De France 1975-1976*, translated by David Macey (New York: Picador, 2003); Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton: Princeton University Press, 2007).
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  24. Nicholas Turse, "The Military-Academic Complex," *TomDispatch.com* (April 29, 2004). Available at: <http://www.countercurrents.org/us-turse290404.htm> (accessed January 7, 2007).
  25. These figures are taken from Turse, "The Military-Academic Complex." See also Johnson, *The Sorrows of Empire*, especially 97–130.
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  29. Martin, "Manufacturing the Homeland Security Campus and Cadre," 1–7.
  30. Ibid.
  31. Dave H. Price, "The CIA's Campus Spies," *Counterpunch* (March 12/13, 2005). Available at: [www.counterpunch.org/price03122005.html](http://www.counterpunch.org/price03122005.html) (accessed January 7, 2007).
  32. Golden, "After Sept. 11 CIA Becomes a Growing Force on Campus."
  33. Chris Mooney, "Good Company," *The American Prospect* (November 18, 2002). Available at: <http://www.prospect.org/print/V13/21/mooney-c.html>.
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# Terrorism Education since 9/11

*Ted W. Reynolds and Stephen Sloan\**

## The Early Days

Given the high profile terrorism now has as a threat to national and international security it is hard to believe that until the 90s threats and acts of terrorism were essentially viewed with the United States “to be what happened to other people in other countries.” Despite the ancient lineage of terrorism even until the 60s the threat and understanding of the nature of terrorism was largely placed on intellectual, policy, and operational backburners. Intellectually, terrorism was largely viewed to be an aspect of the historical record essentially beginning with the French Revolution and the Reign of Terror, or an instrumental element of how modern totalitarian government originated and maintained their position. Moreover there was not a particular academic home that claimed the study of terrorism as theirs although early work could be found in the disciplines of history and political science. In the realm of policy and operational concerns there was a focus on terrorism primarily related to tactics and strategies of terrorism as an aspect of anti and post-colonial insurgencies. As in the case of any of the intellectual approaches, terrorism did not have its own unique place in the policy arena and the operational arts. Changes, largely driven by technology would usher in a new age of terrorism. The skyjacking in the 60s and 70s affirmed the emergence of a form of terrorism that was not solely territorially based. This

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“non-territorial terrorism” resulting from the introduction of commercial jet aircraft enabled terrorists to strike in a matter of hours globally and literally ignore the arbitrary boundaries of the nation-state. At the same time the dramatic events of the Munich Massacre in 1972 was a manifestation of another transformation in the development of modern terrorism. The terrorists, through the medium of television and satellite communication, could now spread their message of fear and intimidation to a global audience. Yet despite profound changes, except for the pioneering work by such individuals as Brian Jenkins at the Rand Corporation and Paul Wilkinson in the United Kingdom, there was little in the way of systematic studies of terrorism as a distinct field of inquiry. In addition, one could not identify a specific program on the study of terrorism at the university and college level in the United States. There were individuals who pioneered courses on the topic, but such courses were not part of a fully recognized program of study and research.<sup>1</sup> Even the seizure of the American hostages at the U.S. embassy on November 4, 1979 and for the next 444 days, which would have a major impact on both domestic politics and foreign affairs, did not stimulate the growth of terrorism studies. Despite the reality of the threat overseas by such groups as the Baader-Mienhof Gang, the Red Army Faction, the Japanese Red Army, and numerous Middle Eastern groups; the United States, while experiencing the bombings and other actions of domestic radicals essentially had a parochial view to a transforming and growing threat. Somehow the conventional wisdom dictated that America was “zoned against” international terrorism and threat of incidents on its own soil. In an agenda of both academic interest and security concerns, threat and understanding of terrorism ranked low. Forced by future events this “comfort zone” narrowed but it would take time for the public, officials, and academics to recognize an existing danger and at the outset that recognition would go from a continuation of a posture of under reaction to one of overreaction with the coming of the War on Terrorism.<sup>2</sup>

### **Condition of the Field Prior to 9/11**

#### *The First WTC Attack: February 26, 1993*

The government response to this attack was a concerted effort to find those responsible for the bombing of the World Trade Center. The FBI took charge of the investigation and in doing so “set the pattern for future terrorist incidents.”<sup>3</sup> *The 9/11 Commission Report* discusses four significant factors of this event. First, it represented a new challenge with regard to terrorism. This new type of terrorism was seen to have no limitation on the destruction or loss of

life that had previously constrained other terrorist acts. Second, the work that was performed by the FBI and the Department of Justice in identifying and apprehending the perpetrators created a false sense of security. The rapidity and effectiveness of the investigation “created an impression that the law enforcement system was well equipped to cope with terrorism.”<sup>4</sup>

The third factor pointed out by the commission was the failure to recognize the need to understand the extent of the threat to the United States by these new terrorists. The legal system that was used to prosecute those responsible was not able to bring the full extent of the problem to the attention of the public or the policymakers in Washington. The linkage to bin Ladin and his network was not brought forth for analysis after those responsible were brought to justice.

Lastly, while this bombing was able to raise awareness with regard to the new terrorist threat, the swift prosecution of the bombers left the impression to the public that these individuals were rank amateurs, caught as a result of one of the perpetrators returning to claim a \$400.00 deposit on the truck used in the attack. This impression led to a serious underestimation of the true threat.

The systematic study of terrorism as a discrete field of academic inquiry was still to be evolved. The causes, dynamics, and outcomes of campaigns and acts of terrorism were not viewed to be in the *mainstream* of the social sciences, much less the discipline of political science.<sup>5</sup> Terrorism studies and those who studied terrorism focused on the contemporary phenomena of hijackings, bombings, kidnappings, and assassinations that were the pattern of the previously studied groups. Studies conducted in attempts to develop a terrorist profile often proved unsuccessful and led to theories that ranged from a terrorist psychopathology, to frustration-aggression and narcissism-aggression theories and the discussion of terrorism as a rational choice when conventional avenues of redress have proven unsuccessful. Currently, the varied theories used to understand why one becomes a terrorist have yet to be proven or operationalized.

Following the 1993 WTC bombing, there was little effort to promote area studies or terrorism studies that focused on religiously motivated groups like the Bin Laden network, the Taliban, or al Qaeda. An Informaworld Search for articles about the 1993 WTC bombing written prior to 9/11 provided only ten journal articles.

### *The Oklahoma City Bombing: April 19, 1995*

When it was determined that this attack was not another Islamist bombing, focus shifted to understanding the threat from domestic terrorists. While some academics and senior intelligence officials continued to consider the rising Islamist movement as a potential threat, the major concern was regarding the

rise of extremist groups within the United States. The publication of *American Extremists: Militias, Supremacists, Klansmen, Communists, & Others* by John George and Laird Wilcox in 1996 included only three pages to the discussion of the bombing of the Murrah Building in Oklahoma City as a prelude to the discussion of militia's. The Informaworld and JSTOR search of this event produced two journal articles published prior to 9/11 that dealt with this event in anything other than a passing reference ("Did the Oklahoma Bombers Succeed" by Jordan Steiker; and "Terrorism in the United States" by Lynn M. Kuzma).

### *Changes after Embassy Bombings*

The "from a distance" response by the U.S. government, through the use of cruise missiles, gave the illusion that Osama bin Laden and his terrorists were being dealt with, however, within the academic community there were growing concerns about the growth of the Islamist movement, and this is obvious by the rise in the number of articles (78) published prior to 9/11 that addressed Islamic terrorism.

While senior intelligence officials reporting to Congress included in their reports the threat posed by bin Laden, the Taliban, and the radical Islamist movement, only a few academics were following the development of this movement as is evidenced by fact that only 18 articles were written about the Taliban, al Qaeda, and bin Laden prior to 9/11. Notably, however, Yossef Bodansky (1999) in *Bin Laden: The Man Who Declared War on America*, points out that the stature of Osama bin Laden within the Muslim community, "has had dire ramifications for the security of the United States and its allies—namely the radicalization and motivation of Muslim youth for generations of jihad."<sup>6</sup> He states that since the missile attacks following the embassy bombings, Bin Laden had achieved the status of a "cult figure."<sup>7</sup>

Walter Laqueur, in his book *The New Terrorism* (1999), also recognized the threat of Osama bin Laden and his network of terrorist groups. When discussing the potential for a radical group to commit acts of terrorism that disregarded the previous constraints placed on casualties and the use of "weapons of ultra-violence" he states:

The Jihad organization, which masterminded the bombing of the World Trade Center, and the planning of the Holland and Lincoln Tunnels, the Manhattan office of the FBI, and the United Nations, could well be regarded as the prototype of such a fanatic group. Its members could have come out of a novel by Joseph Conrad; they included a blind and half-crazy sheikh with some charisma; a young chemical engineer with three or four identities, who two years earlier had been neither a practicing Muslim nor politically engaged; an Iraqi agent who provided money and technical

help; and Egyptian counteragent; a Sudanese diplomat; and a Saudi billionaire acting as paymaster from afar.<sup>8</sup>

Following each of the three previously mentioned events, the focus of the government was on the securing of facilities and the hardening of our embassies and other government buildings against future attacks. There seems to have been little support for understanding who was joining these radical groups, what their motivations were for joining and what drove them to go operational and commit terrorist acts?

In testimony before the Senate Select Committee on Intelligence on the “Worldwide Threat in 2000: Global Realities of Our National Security” on February 2, 2000, George Tenet’s discussion of terrorism included one short paragraph that discussed the number of terrorist that had been brought to justice since 1998, “more than two dozen....more than half were associates on Osama bin Laden’s Al-Qaeda organization.”<sup>9</sup> One additional paragraph discussed the threat posed by bin Laden and his organization, the growing use of surrogates to commit terrorist attacks, and the growing alliances of other Islamic groups with bin Laden’s al Qaeda.

### *Increase in Publications*

An Informaworld search of journal articles performed on November 10, 2008, for the following topics indicates that the academic community, from the time of the 1993 bombing, was not focused on the growing terrorist threat even after the first World Trade Center attack. It is clear that following the 9/11 attacks, the body of literature exploded and continues to grow (see table 15.1)

**Table 15.1** Increase in publications

<i>Event</i>	<i>Pre-9/11</i>	<i>Post-9/11</i>
1993 WTC bombing	10	18
1995 Oklahoma City bombing	2	771
Islamic terrorism	78	2791
Al Qaeda	1	2075
Taliban	7	1551
Osama Bin Laden	10	945
September 11, 2001, attacks	—	2769

Source: <http://www.informaworld.com>

## Terrorism Studies Education Post-9/11

### *Immediate Effect*

There was an immediate desire by the public to understand what had just happened. In order to facilitate this understanding colleges and universities adapted existing courses to address the phenomenon of Islamic terrorism and the multiple effects of the latest attack, socially, psychologically, politically, and militarily. The diversity of study meant that the goal of achieving an autonomous subject area of terrorism studies within academia would not happen. Although there were many more courses with more students interested in studying the differing aspects of terrorism, these interests have yet to coalesce into support among university administrators and faculties for formal terrorism studies programs. Programs that have benefitted from this increased interest in understanding terrorism include Security Studies, studies in Homeland Security and Emergency Management, in addition to area focuses like Arab or Middle Eastern Studies.

The biggest problem with the growth in the number of courses added to catalogs in response to the demand for understanding was the shortage of academics qualified to address the theory and substantive knowledge involved in studying terrorism. Many courses were taught by guest lecturers from outside academia in an effort to provide a product to the students. In 2002 UCLA added 50 courses related to 9/11, 15 of which dealt with terrorism, 4 were courses on Islam, and 31 were in other subject-related areas.<sup>10</sup>

Standing in stark contrast to the inability of institutions within the United States to create an independent field of terrorism studies, the United Kingdom has taken the lead in providing students the opportunity to acquire undergraduate and graduate degrees in terrorism studies. Jessica Shepherd reported in 2007 that new courses, particularly for postgraduates, are beginning everywhere. Schools like Warwick University, the University of St. Andrews, Salford University, the University of East London, and the University of Wales all now offer graduate degrees in terrorism studies.<sup>11</sup> While funding for the programs is increasing, there is concern regarding the ability to produce independent terrorism research that is not tied to some sort of counterinsurgency agenda particularly driven by U.S. involvement in Iraq and Afghanistan. However, it cannot be denied that the United Kingdom had taken the lead in offering advanced students the opportunity to study terrorism thereby creating the next generation of scholars and teachers.

### *Government Involvement/Support*

Following 9/11 the federal government began to allocate considerable funding for research and education programs to provide for homeland defense.



Subsequently, after the formation of the Department of Homeland Security, funds were allocated for the creation on new Centers of Excellence on university campuses bringing together leading experts and researchers in a multidisciplinary effort to conduct research and education that will help to provide solutions to the challenges of providing for homeland security. These centers are led by a university in collaboration with other institutions, agencies, think tanks, and entities in the private sector. The focus of these centers are diverse and include such areas as border security; explosives detection, mitigation, and response; maritime, island and port security; transportation security; risk and economic analysis; and the protection of the national food supply as well as protecting against foreign animals and animal born diseases. Funding for these centers ranged from \$2 million per year to over \$18 million per year.

It is clear that the majority of the funding made available since 9/11 has been focused mainly toward creating defensive capabilities. In *Mapping Terrorism Research*, edited by Magnus Ranstorp (2007), Paul Wilkinson, recounting a meeting regarding the possible research projects in terrorism, states, “the overwhelming majority of the projects outlined were being put forward by scientists and technologists interested in such problems as identifying explosives more reliably and accurately, biometric techniques of identifying personnel, access control and the physical protection of potential targets.”<sup>12</sup> Wilkinson questions the value of these measures without gaining a more complete understanding of, “the belief systems, motivations, intent and combat doctrines of the major terrorist groups we confront today?” He also considered it imperative to understand the social dynamics of the terrorist groups, the influence of their leaders, in addition to understanding how terrorists obtain and manage their finances.

The National Consortium for the Study of Terrorism and Responses to Terrorism (START) begun in 2005 with an initial budget of \$12 million for three years represents the only funding of an academic program specifically charged with acquiring knowledge and understanding as it relates to terrorism, radicalization, and the growth of terrorist organizations. START brings together researchers from a wide variety of disciplines to engaged in the collection and analysis of data related to three core research areas, Terrorist Recruitment and the Formation of Terrorist, Terrorist Group Persistence and Dynamics, and Societal Responses to Terrorist Threats and Attacks, in addition to training a next generation of scholars to carry on this crucial research agenda in the future.

START is also home to the Global Terrorism Database (GTD), the world’s largest open-source database on international and domestic terrorism events, including wide-ranging data about perpetrators, target types, weapons used, and location of attacks. The GTD contains data related to more than 80,000 events between 1970 and 2004. START was awarded \$12 million over three years.

While funding received much support at the beginning of these programs, it appears that this support is beginning to wane as time passes. Funding for DHS education programs continues to be cut by Congress. As a result of questions regarding how well, or even if, the money allocated has been spent, Congress has reduced funding from \$71 million in 2004, to \$51 million in 2007, a 28 percent reduction. Current economic condition within the United States should create concern within the terrorism studies community regarding the future of these and other research programs, particularly given Congress's doubts regarding the department's ability to deliver tangible results.

### *DHS Scholarship and Fellowship Program*

Understanding that the academic community offers an advantage in the development and implementation of counterterrorism measures, the Department of Homeland Security instituted the DHS Scholarship and Fellowship program with research areas that include: Explosives Detection, Mitigation and Response; Social, Behavioral, and Economic Sciences; Risk and Decision Sciences; Human Factors Aspects of Technology; Chemical Threats and Countermeasures; Biological Threats and Countermeasures; Food and Agriculture Security; Transportation Security; Border Security; Immigration Studies; Maritime and Port Security; Infrastructure Protection; Natural Disasters and Related Geophysical Studies; Emergency Preparedness and Response; Communications and Interoperability; Advanced Data Analysis and Visualization.

The undergraduate scholarships and the graduate fellowships provide full tuition, monthly stipends, and funds are provided for summer internships at the DHS or a DHS affiliate. There is a one year service requirement in a relevant Homeland Security field as a part of these programs.

Historically, the DHS program has awarded many scholarships and fellowships. The following is a review of this history since the beginning of the program in 2003 (table 15.2).

While this program does continue to receive funding, of great concern is the significant reduction in the number of applications and awards and whether this represents a loss of interest in the field by the students and the government or a separation of academic interests as it relates to the government's policy driven research focus.

### *Influence of the Computers and the Internet on Terrorism Studies*

From a research perspective, the Internet has become an integral part of conducting historical research, obtaining and utilizing current data, and in some cases has facilitated the administration of questionnaires and the collection of data via online survey sites. Online access to scholarly journals,

**Table 15.2** Department of Homeland Security Scholarship and Fellowship Program Awards

<i>Year</i>	<i>Number of applications</i>	<i>Number of awards</i>	<i>Ratio (%)</i>
2003	2500	100	4.0
2004	900	105	11.6
2005	700	130	18.5
2006	900	103	11.4
2007	609	28	4.5
2008	157	25	16.0

theses, and dissertations are helping to dissipate the sense of isolation that many terrorism scholars and graduate students have felt. Additionally, online journals such as *Prospective on Terrorism* offered through the Terrorism Research Initiative allow graduate students, researchers, and academics additional venues where they may have their work published and made available to the terrorism studies community. Given the two-three year lag time from the beginning of research to publication in traditional journals, the online journals and blogs facilitate a more current view that can only be beneficial to the research community.

The growth of online sites like [www.counterterrorismblog.org](http://www.counterterrorismblog.org) that provide for the dissemination of knowledge among terrorism scholars are another reason to be encouraged about the future of the field. The stated purpose of the site is to be “The first multi-expert blog dedicated solely to counterterrorism issues, serving as a gateway to the community for policymakers and serious researchers....designed to provide real-time information about terrorism cases and policy developments.” With over two dozen regular contributors and a list of other academics and experts who make contributions, this site also provides links to over 70 websites and centers involved in terrorism research.

Another important aspect of the impact of the Internet is the growth of a “virtual school” of terrorism studies. Online courses and certifications provide students who do not have courses available through their own institutions the opportunity to gain knowledge in the field. As an example, the University of St. Andrew in Scotland currently offers an online graduate certificate in Terrorism Studies through the Centre for the Study of Terrorism and Political Violence, and has recently added an online MLitt in Terrorism Studies to its catalog. Further, the collaborative nature of online terrorism studies and counterterrorism websites is enabling joint research projects to be more viable and productive. This trend can be expected to grow, particularly as the use of computer modeling and data analysis programs are integrated more fully into the field. Collaborative efforts between those who study terrorism and those who

are adept at computer based data analysis should be encouraged as students of terrorism seek to develop their own analytical skills.

There have been repeated calls within the field for the necessity to increase the complexity of analysis and develop analytical methodologies that will provide for more quantitative analysis leading to findings that have inferential and predictive qualities. However, the field remains for the most part, mired in the historical/descriptive mode of doing business. While it is recognized that there has been progress in modeling regarding potential targets and loss risk, and there is a budding growth of quantitative work in the field, the use of advanced analytical techniques and methodologies as they relate to the study of terrorists, their motivations and the factors involved in the radicalization of individuals and the creation of terrorist groups, have not advanced to taking full advantage of the tools that are available.

The use of these software based analytical tools must be considered as necessary when new students of terrorism engage in their area of study. These tools can be invaluable to one who is engaged in cross cultural education, and the application of language and area studies to field of terrorism studies. While the use of sophisticated computer programs alone will not prove a "silver bullet" to understanding terrorism, they most certainly can serve to enhance the findings of in-depth research from the merely descriptive to the inferential and potentially providing analysis with predictive qualities.

## **Academia**

### *Current Direction of Academia*

With the bulk of research funding focused toward the DHS centers of excellence, it would be reasonable to consider that degrees relating to these programs would be most prevalent. The Center for Homeland Defense and Security list of Colleges and University programs shows that while there is considerable focus on homeland security and emergency management degrees and certifications, the actual study of terrorism as an academic field is highly under-represented. Degrees in Homeland Security, with 17 at the bachelor's degree level and 19 at the master's level, and Emergency/Disaster Management, with 19 at the bachelor's degree level, and 23 at the master's level comprised the majority of the traditional degree opportunities. Terrorism Studies had only two bachelor degree and two master's degree opportunities. Online courses were predominantly focused on certifications, again mainly on Homeland Security and Emergency/Disaster Management. This creates serious concern regarding the future of the field and the growth of the pool of terrorism scholars. While certification programs offer some knowledge, they do not prepare one for the rigors of academic research or provide the opportunity to teach others who seek to understand terrorism. It is regrettable to

note that there is not one doctoral program in terrorism studies on the list within the United States.

As stated previously, the dearth of programs dedicated to study the phenomenon of terrorism does not bode well for the future of the discipline as an academic field or for the growth of a new crop of scholars. It can be expected that as we get further away from 9/11, support for the study of terrorism, barring any further devastating attacks, will continue to diminish. One need look no further than the decrease in available scholarships and fellowships by the DHS to understand the impact of time on this field. Already, funding cuts have resulted in significant losses to the terrorism studies community.

The loss of support for the development and dissemination of the MIPT Worldwide Terrorism Incident Knowledge Database on March 31, 2008, came as a significant blow to those researchers who were utilizing this data. At a recent workshop for terrorism scholars in the summer of 2008, there was serious concern regarding the loss of this valuable tool and how future research would be conducted given the remaining datasets that were available and new ones that were proving ineffective.

While the Jebesen Center was established through private funding, the research was both privately and publically funded. The research the center was involved in had far reaching implications for understanding terrorism. Some of the projects they were involved in included: Women and al Qaeda; Islam in Democratic Societies: The Struggle Between Radical and Moderate Islam and the Future of Islam in the West; and Countering Terrorism in Africa through Human Security Solutions. The center also hosted a lecture series that included Fletcher students, outside academics, and professionals in security and counterterrorism. Providing over \$900,000 of funding to over 50 graduate students in support of summer internships, directed study, and independent research in security and counterterrorism studies, the loss of the Jebesen Center should not go unnoticed by those concerned about the future of the study of terrorism.

Previously funded by The Foundation for Defense of Democracy (FDD), the Summer Workshop on Teaching about Terrorism (SWOTT) was the latest to fall victim to funding cuts. This program was provided to support college professors and graduate students in their efforts to teach about the threat of terrorism and the different methods to combat terrorism. The stated goals of SWOTT were to provide substantive knowledge from multiple sources regarding the intricacies of terrorism and the potential countermeasures that are being researched and to discuss various learning techniques known to be effective in the class room. Understanding the growth in interest in this field, SWOTT sought to encourage bonds between scholars from various fields by bringing them together to create an interconnectedness that might facilitate a multidisciplinary understanding of terrorism. Hosted by Oklahoma University, this program was open to professors and graduate students who were currently involved in research and/or teaching, or wished to teach courses in terrorism studies.<sup>13</sup>Due to the lack of funding SWOTT 2009 was cancelled.

*Prognosis of the Body of Academicians*

In a 2006 study, "Mapping the contemporary terrorist research domain," Reid and Chen list a core of 42 terrorism researches.<sup>14</sup> Of those listed roughly half are still active in academia. Of the 21 known to still be teaching, the fields of study include law, criminology, communications, psychology, and political science. The remaining 21 are journalists, senior fellows at various research institutes, a few are in the private sector, and regrettably a few are now deceased. The article provides a good inventory of past and present recognized specialists but what is now needed is an inventory of a new generation of academic researchers. Such an inventory is necessary to address and fill in present and future gaps in the field. However, the gaps will not be filled if the loss of financial support, coupled with the failure to recognize terrorism as a discrete field of study continues. Recently, there were only two tenure track positions open that specifically focused on terrorism. Unfortunately, this reflects a historical continuity. For those studying terrorism, teaching positions where the focus has been specifically on terrorism has been limited as have the opportunities to have substantive research published in major refereed journals.

*The Future of the Study of Terrorism*

If the academic study of terrorism is to remain a viable field and have any hope of attaining recognition as a separate field of study, there are fundamental changes that need to be made. The study of terrorism, for all its efforts, continues to operate in an orbital fashion that shows no signs of breaking free of its own vortex to provide methods and theories that will offer new knowledge and the potential to reach the predictive level that is highly sought after.

In 1998, Schmid and Jongman conducted a survey of academics involved in the study of terrorism. When questioned about the state of theory as it related to terrorism, the answers were wide ranging to the point that the authors offered in their conclusion that, "The reader might at this point ask: Is that all there is?"<sup>15</sup> While there was hope that scholars working on classified projects may produce some theoretical "golden egg" to explain terrorism, this has not happened. Finally, there was a call for a greater understanding of why terrorists chose terrorist tactics and strategies over more conventional methods of conflict. The authors suggest that what is needed is for researches to go beyond the study of terrorist incidents and campaigns. Further, they offer that, "Perhaps a theory of terrorism must also be a theory of the absurd, which would go some way toward explaining why we have been so unsuccessful in theory building so far."<sup>16</sup>

In winter 2001, Andrew Silke, in his article "The Devil You Know: Continuing Problems with Research on Terrorism" discusses the function and purpose of research as a progression from exploratory-to descriptive-to explanatory; and

the goal is to progress through each phase until there are a significant number of studies that offer results at the explanatory level. He goes on to state that fields of study that fail to reach this third level of understanding can appear to be very active when involved in descriptive research of real-world events. Silke indicated that the study of terrorism exists in such a state and, "that after thirty years of inquiry, the field shows evidence that it is incapable of making the leap to consistently producing research of genuine explanatory and predictive value."<sup>17</sup> He concludes that, "A limited range of methodologies in data gathering, combined with a reluctance to use more rigorous analysis, has left the field with serious deficiencies in many respects. . . . As a result the field struggles in its efforts to explain terrorism or to provide findings of genuine predictive value."<sup>18</sup>

Following the attacks of 9/11 and the realization of the global threat posed by al Qaeda and its affiliates, there has been considerable focus by the U.S. government on homeland security, and many other governments have called on their own academic communities to provide assistance in understanding the threat of terrorism and how to protect against it. As Joshua Sinai (2007) points out, "As a result, terrorism courses, research institutes, and certification programs have been proliferating at universities and other academic institutions around the world, although the quality of their instructors' expertise, curriculum and textbooks is mixed."<sup>19</sup> Sinai sees the accumulation of knowledge, concepts, and methodologies as a positive result of the modern study of terrorism. However, he feels that there is still a lack of sufficient theory development in the field. Consequently, terrorism studies have not been able to achieve the analytical equivalency of a "hard science." Interestingly, all of the previously mentioned discussions of the state of terrorism studies include a continuing concern regarding the development of a consensual definition of terrorism. Could it be possible that this definitional debate provides a security blanket for a field that is unable to break free of descriptive/historical research and provide more complex explanatory research with consistent predictive qualities? Sinai does however remain hopeful that continued research and improved software based tools, "will upgrade our capabilities to better understand and respond with the most effective countermeasures against the multitude of terrorist challenges facing us."<sup>20</sup>

### *Breaking the Old Mold*

Central to creating a breakthrough in terrorism studies is the examination of the epistemology of the field. Rather than continuing to accept the revisiting of old cases, the analysis of past attacks and methods, or the review/analysis of existing literature as new research; graduate students and scholars should seek new ways to consider what we know or what should be known about terrorism and terrorists. This requires that students and scholars stretch

beyond the known body of knowledge and create new knowledge; new ways of thinking that may be without previously placed foundations. "The quest for theories" in terrorism studies remains, in part a manifestation of the fact that even after all these years it is difficult to identify a canon on the study of terrorism.

Perhaps new methodologies of collecting, organizing, and understanding information and data on terrorism will allow for the creation of a new paradigm/understanding of terrorism studies. But such boldness is not without risk. The recent, and regrettably too public confrontation between Bruce Hoffman and Marc Sageman on the pages of *Foreign Affairs* exemplifies what is possible when new ideas are outside the mainstream conventional wisdom or come into conflict with the ideas of other "experts."<sup>21</sup> Further, when ego's become intertwined in these "debates," the value of the discussion from a scholarly perspective is greatly diminished. The real loss to the field is the opportunity for any collaborative effort between these two highly respected scholars that could potentially provide a newer understanding of the current terrorist threat and a substantive addition to the larger body of knowledge about terrorism.

As scholars and students of terrorism it is incumbent upon us to conduct research and perform analysis that is on the outer edge if not beyond the edge of previously accepted norms. We must move away from "the known" and seek the unknown. If we are to embark upon the search for a new epistemology, a new way of thinking about terrorism and terrorists, we must also be open to learning; and rather than ridicule new ideas, offer constructive criticism and advice that may provide the impetus to a collaborative effort that could bring about a breakthrough in the field.

Those responsible for the supervision and training of the next generation of terrorism studies scholars should challenge their students to go beyond accepted practices. These students are adept at utilizing the computer based analytical tools that are avoided by many terrorism scholars. We should dissuade graduate students from simply providing an analysis of historical events as the foundation of graduate theses and dissertations. Instead, we must challenge them to utilize these analytical tools in their research, and to stretch the limits of their capabilities in order to seek new knowledge in the field. Before one of my colleagues puts ink to paper and suggests that we are advocating the dismissal of previous research and literature, let me assure you this is not the case. One must understand the history of the field and the phenomenon as a foundation before moving toward new discoveries. Statistics and complex data analysis are no substitute for substantive area specialties that include language studies, cross cultural analysis, and an in-depth knowledge of the evolution of terrorism that includes current and potential threats. However, it is vital that we move beyond descriptive and historical research, and apply a variety of new methodological techniques to enhance our capacity to engage in vital predictive analysis. One can only break the mold of the past if there is a concerted effort by the substantive expert and the methodologist to work together and



better yet fuse their respective approaches. Finally, there will increasingly be the requirement for academics and practitioners to bridge the gap and work together in meeting the enduring and growing threat of terrorism.

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# Military Education: New Paradigms for a Post-9/11 World

*James J. F. Forest\**

In late October 2007, the U.S. Marine Corps Training and Education Command and the U.S. Naval Academy jointly sponsored a conference in Quantico, Virginia, titled “Pedagogy for the Long War: Teaching Irregular Warfare.” The conference focused on the conceptual, structural, intellectual, and methodological aspects of teaching and learning skills for fighting terrorism and insurgency, in both the schools and operating forces of the military, and at both the officer and enlisted level. This event, one of many in recent years, was particularly notable because it exemplifies the type of discussions and initiatives for reforming military education that would have been unthinkable before the attacks of September 11, 2001. Similar events that have recently taken place include a July 2005 Irregular Warfare II Conference, sponsored by the Marine Corps Combat Development Command; a May 2006 Culture and Language Learning Conference, sponsored by the Marine Corps Training and Education Command; a March 2006 Culture Training Summit, sponsored by the U.S. Army Training and Doctrine Command; a September 2006 Culture Summit at Air University; a June 2007 Regional and Language Competencies Summit sponsored by the Defense Language Office; and a July 2007 Cross-Cultural Competencies

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Workshop sponsored by the Air University. These and other events demonstrate an important and critical shift in the focus of military education in the United States beyond a traditional focus on state-based threats and conventional warfare.

From new soldiers deployed to Iraq to Secretary of Defense Robert Gates, there has emerged a clear understanding throughout the military that successfully confronting the global security challenges of today—particularly in the form of terrorists, insurgents and other violent non-state actors (VNSAs)—requires a greater understanding of asymmetric warfare and the nonmilitary aspects of national security.<sup>1</sup> For example, the 2007 conference at Quantico brought together over 200 participants from joint, interagency, international military, and academic backgrounds, and featured presentations on doctrine, leadership, professional military education, company-level training and education, counterinsurgency, information operations, civil-military operations, language and culture, military organizational cultures, and knowledge management. As this chapter will illustrate, the attacks of 9/11 have had a very real, significant and long-lasting impact on military education in the United States.

### **The Recent Evolution of Military Education**

Although the United States has had no peer competitor since the Cold War, senior military planners during the 1990s remained focused on the potential for a single conventional power, or a combination of nation-states, to mount a focused campaign against U.S. interests.<sup>2</sup> The focus of military education did evolve during this time period, however, to reflect a growing emphasis on what has been called “jointness”—an ability for all the military services to coordinate and integrate seamlessly, producing an effective mix of interoperable capabilities to meet the needs of any potential battlespace. Developing this ability was mandated by the Goldwater-Nichols Department of Defense Reorganization Act of 1986. Military deployments to Iraq (1991), Haiti (1994), and the Balkans (1998–1999) provided ample opportunities for senior leaders to review and calibrate the direction of the educational programs offered to soldiers, noncommissioned officers, and officers at all ranks, that prepared them for joint warfighting in these state-based conflicts.

New education initiatives—including the Joint Professional Military Education (JPME) system—were developed, guided by the concepts and strategies outlined in the Department of Defense’s *Joint Vision 2020*. Organizational changes were also made that had a broad impact on the direction of joint education and transformation. For example, United States Atlantic Command became Joint Forces Command (JFCOM), whose primary mission focus has been to “actively stimulate innovation in joint warfighting through experimentation. In other words, JFCOM is tasked to explore, demonstrate, and evaluate

advanced joint warfighting concepts and capabilities. This is where education, leader development, and experimentation are linked together to provide lead-edge ideas that can be put into practice for the Future Joint Force.”<sup>3</sup>

Until 9/11, however, non-state threats and unconventional conflicts were referred to as “operations other than war,” and responsibility for developing doctrines and educational programs in this area was delegated to a few subcomponents of the Department of Defense such as the Office of Special Operations and Low Intensity Conflict. According to Melissa Applegate, insurgencies and other asymmetric or irregular warfare threats were viewed by senior military leaders as “secondary or peripheral to conventional threats.”<sup>4</sup> Graduates of the nation’s service academies and ROTC programs had little if any exposure to the growing wealth of literature on terrorism and insurgencies. While officers at mid- and upper-career levels might find a course here or there on the topic—for example, in the 1970s the U.S. Air Force began offering a Dynamics of International Terrorism course, taught at Hurlburt Airfield (currently the home of the new Joint Special Operations University)—military education during the immediate post-Cold War era was clearly focused more on conventional threats than unconventional.

In essence, according to Stephen Sloan, “terrorism was not recognized to be of strategic importance or a threat to U.S. national security.”<sup>5</sup> Further, in a recent essay on the evolution of modern counterterrorism education, he notes how during the 1990s “the military still thought and relied on a spatial approach to countering a non-territorial, non-spatial threat and adversary.”<sup>6</sup> The attacks of 9/11 demonstrated a need for new paradigms of military education. Policymakers and senior military leaders began to emphasize the need for training that would encompass not only state-based military threats, but the potential threat of radical groups willing to die for their cause and able to convert our nation’s own critical infrastructure (in this case, commercial airlines) into lethal weapons.

Today, while there remains a healthy dose of education and training about possible confrontation with the militaries of other countries, we have seen an increasing emphasis on preparing soldiers and officers to confront the asymmetric strategies and tactics employed by VNSAs like al Qaeda and the Taliban in Afghanistan, warlords in Somalia, tribal chieftains in the frontier region of Pakistan, and insurgents and foreign fighters in Iraq. Language and culture training has become more important and more commonplace than ever before, and an understanding of political and cultural geography is being given equal importance to traditional education on physical geography. At several institutions for officer education, like the U.S. Military Academy, there has also been an increasing focus in the curriculum on appreciating and navigating “zones of competing governance”<sup>7</sup> or “ungoverned spaces” to which these West Point graduates will likely be deployed.

To be fair, some of the increasing focus on irregular warfare pre-dates the attacks of 9/11. Beginning in the 1990s, defense transformation efforts have

been increasingly focused on preparing U.S. military forces for unconventional security threats because, as General David Petraeus noted, “America’s overwhelming conventional military superiority makes it unlikely that future enemies will confront us head on.”<sup>8</sup> Thus any potential adversary must adapt creative ways to find and exploit our vulnerabilities—in essence, they must look to the tools of asymmetric warfare, described by the U.S. Joint Chiefs of Staff as attempts to circumvent or undermine U.S. strengths while exploiting U.S. weaknesses using methods that differ significantly from the United States’ expected method of operations. Asymmetric approaches generally seek a major psychological impact, such as shock or confusion that affects an opponent’s initiative, freedom of action, or will. Asymmetric methods require an appreciation of an opponent’s vulnerabilities. Asymmetric approaches often employ innovative, nontraditional tactics, weapons, or technologies, and can be applied at all levels of warfare—strategic, operational, and tactical—across the spectrum of military operations.<sup>9</sup>

In August 2001, General Henry Shelton, the Chairman of the Joint Chiefs of Staff noted that “terrorist attacks are one of the most common forms of asymmetric warfare.... The bombings in Beirut, at Khobar Towers, and against USS *Cole* are tragic reminders of this type of threat.” Additionally, he expressed grave concerns about the proliferation of advanced military technology, including weapons of mass destruction, ballistic and cruise missiles, and unmanned aerial vehicles, suggesting that “the balance of power, tipped so heavily in our favor at present, could begin to shift as other nations, and even terrorist or criminal organizations pursue their own versions of military transformation.”<sup>10</sup> Just days before the attacks of 9/11, Shelton called for a greater commitment throughout the military services to what he called the imperative of transformation. After outlining the types of emerging threats the U.S. military should be prepared to confront, he recommended that military education focus on appreciating the expanding range and types of conflict we should expect in the future, and on developing faster strategic response capabilities to these conflicts.<sup>11</sup>

According to Lieutenant General Sir John Kiszely, Director of the UK Defence Academy, the challenges posed to modern armed forces are largely conceptual, and thus

Success depends not on destruction of the enemy, but on out-maneuvering opponents, depriving them of popular support, and winning it oneself.... Time is a key—sometimes *the* key—resource, and one which our opponents are likely to hold in far greater quantity than do we. How the war is fought becomes crucially important to the quality and sustainability of the resulting peace.... The key battleground is in the mind—the minds of the indigenous population, and the minds of regional and world opinion.<sup>12</sup>

Identifying these challenges is the first necessary step to developing a military education system which prepares soldiers and officers to respond effectively to contemporary and future conflicts. The next step, one which we are currently witnessing, involves identifying desired learning outcomes and developing courses at all levels that lead to the student achievement of these outcomes.

### **New Paradigms for Military Education**

Since the attacks of 9/11, we have seen exponential growth in courses on terrorism and counterterrorism, insurgency information warfare, and other related topics—including courses on the newly created field of “homeland security.” The Naval Academy, Air Force Academy, Military Academy (West Point), and ROTC programs have all incorporated course offerings in these areas (although they are electives, not required courses), and advanced seminars on these topics are provided at the Naval War College, Army War College, Air War College, Marine Corps University, National Defense University, Joint Special Operations University and other such institutions for graduate military education. We have also seen the development of an ambitious “Counterterrorism Fellowship Program” in which senior military officers from other countries are brought to the United States for seminars and courses in these areas, fostering not only cross-cultural sharing of counterterrorism ideas and tactics, but also promoting an understanding of U.S. policies and strategies among these foreign officers.

The Naval Postgraduate School, in Monterey, California, has perhaps the most extensive military education curriculum in counterterrorism, counterinsurgency, and the myriad threats posed by weapons of mass destruction, leading to graduate degrees in security studies and homeland defense. At the undergraduate level, the Combating Terrorism Center (CTC) at West Point develops and leads courses in these areas for future Army officers (there is to date no equivalent CTC at the other service academies). Founded in 2003, the CTC now enrolls over 200 cadets each year in a range of courses on terrorism and counterterrorism, information warfare, homeland security, intelligence and counterintelligence, and weapons of mass destruction. Through a combination of these and other courses, cadets at West Point can also earn a minor in Terrorism Studies, regardless of their major program of study.

But what is being taught—or needs to be taught—in all these undergraduate and graduate courses that will help soldiers and officers respond to the kinds of asymmetric warfare challenges identified above? Of the many areas of study represented by the various types of courses and disciplines involved in teaching about asymmetric warfare, there are at least three general learning outcomes that have been—or at the very least should be—incorporated.

First, military education must foster an understanding of the kinds of sociopolitical contexts that enable insurgents and terrorists to operate effectively. Second, soldiers and officers must learn about the most prominent and effective insurgent and terrorist groups operating today—not just al Qaeda and its affiliates—and draw lessons about the common vulnerabilities of these groups that can be exploited. And third, there must be a recognition and appreciation for the increasingly vital role the Internet plays in contemporary global security threats.

### *Understanding Contexts That Enable Insurgency and Terrorism*

At its most basic level, terrorism and insurgency is the product of capabilities and intentions. In the realm of capabilities, a good deal of intelligence and academic expertise has focused on what specific groups could or could not do, while a newer but rapidly expanding field of study is focused on the sociopolitical environments which enable these groups to operate. Within any given political environment, members of a society have expectations, demands, aspirations, and grievances. The degree to which there are opportunities and power to address these without the use of violence is a major determinant of terrorist group formation. Local chaos (for example, in a weak or failing state) can also create an opportunity for an ideology of terrorist violence to resonate. Unemployment, significant ethnic fissures and animosities, socio-demographic pressures (for example, the rising youth bulge in the Arab world), and political regimes that are viewed as overly repressive, authoritarian, corrupt, and incompetent all contribute to an environment in which a violent ideology can appeal to a broad audience.

For example, there is a growing sense of crisis and resentment among Arab Muslims toward their state leaders and Western allies, combined with a sense of powerlessness and humiliation that stems from the relative sociopolitical standing of the Muslim world versus the Western, Judeo-Christian world; the Israeli-Palestinian conflict (and current U.S. policy toward it), along with Israel's repeated defeat of Arab armies; and a fear that a creeping globalization or westernization of cultural values is having a detrimental impact on long-held traditions and belief structures in the Muslim world. In Southeast Asia, a host of social and economic inequalities have contributed to the rise of Muslim-led secessionist movements since the 1970s, particularly among the Muslim minorities of the southern Philippines and southern Thailand. In Europe, Muslim communities are filled with comparatively poor, disenfranchised permanent residents, with little or no hope of naturalization for themselves or their children (as opposed to, say, the more integrated Muslim experience in the United States). In major cities like Copenhagen, London, and Paris, large numbers of Muslims live in so-called "ethnic enclaves," neighborhoods with impoverished schools, limited transportation, and few employment opportunities. These and other environmental factors create opportunities for terrorists and insurgents



to “sell” their vision of a better future, a vision which they believe necessitates violence. Understanding these factors has become an essential part of military education.

From this understanding, we learn that countering terrorism and insurgency is less dependent on military force and more a strategic communications struggle between nation-states and VNSAs to convince target populations that their vision of the future is more legitimate and possible than their adversaries. Indeed, according to David Kilcullen, Until recently a senior advisor to the U.S. Department of State’s Ambassador for Counterterrorism, “Counterinsurgency is fundamentally a competition between many groups, each seeking to mobilize the population in support of their agenda.”<sup>13</sup> In this competition for what some have called “strategic influence,” how a military acts can be even more important than what it does. “Counterinsurgency is armed social work,” he argues, “an attempt to redress basic social and political problems while being shot at. This makes civil affairs a central counterinsurgency activity, not an afterthought. It is how you restructure the environment to displace the enemy from it.”<sup>14</sup>

In his observations of the past few years’ developments in Iraq, General Petraeus recently noted that “more important than our winning Iraqi hearts and minds was doing all that we could to ensure that as many Iraqis as possible felt a stake in the success of the new Iraq.”<sup>15</sup> As these and other insights emerge from veterans of recent conflicts in Afghanistan and Iraq, military education has evolved to include a greater focus on the non-kinetic aspects of modern asymmetric warfare conflicts. New literature has been incorporated into military education programs that addresses issues of failed states, radicalization, ungoverned spaces, and social networks. Soldiers and officers are also learning more about strategic communication and civil affairs, as well as the role of the State Department, USAID, and other agencies in achieving our national security objectives.

Kilcullen recently authored a very insightful essay in which he articulates 28 “Fundamentals of Company-level Counterinsurgency,”<sup>16</sup> many of which have implications for new post-9/11 thinking in military education. For example, he argues that soldiers must “Know the people, the topography, economy, history, religion and culture. Know every village, road, field, population group, tribal leader and ancient grievance... [and know] what motivates the people and how to mobilize them. You need to know why and how the insurgents are getting followers.”<sup>17</sup> Beyond an extensive list of what soldiers and officers must know about the sociopolitical contexts that sustain the terrorists or insurgents, he also provides a list of actions that deployed units must learn to conduct effectively, such as building trusted networks, building interagency relationships (to including arranging for briefings from the State Department, aid agencies and the local Police or Fire Brigade), learning “what normality looks like,” and persuading locals that “their best interests are served by your success, and that you can protect them.”<sup>18</sup> In sum, an emerging body of prominently cited articles and reports have helped significantly expand the

academic literature and military doctrine in ways that emphasize shaping the environment in which terrorists and insurgents seek to operate,<sup>19</sup> and this is clearly a significant departure from the pre-9/11 standard approaches to military education.

### *Understanding How Insurgent and Terrorist Groups Operate*

Another area of study in which military education has been recently expanding involves developing a better understanding of the contemporary groups, which have embraced the strategies and tactics of asymmetric warfare. In helping to expand the available literature in this area, the faculty of the CTC have produced a series of textbooks and reference volumes, which are now being used as assigned materials at West Point as well as in courses at civilian colleges and universities throughout the United States and in other countries.<sup>20</sup> Perhaps more importantly—and guided by the famous dictum by Sun Tzu that military leaders must “know the enemy”—the CTC has recently produced a series of reports on al Qaeda, which draw on the organization’s own internal documents, captured in safe houses throughout Afghanistan, Pakistan, Iraq, and elsewhere.<sup>21</sup> These documents reveal strategic and ideological differences among key leaders of al Qaeda, and highlight vulnerabilities common to all terrorists, insurgents and other VNSAs. For example, all organizations involved in clandestine activities require a level of operational security that facilitates meaningful transactions of information and finance, and must maintain situational awareness, control the use of violence to achieve specified political ends, and of course, prevent the authorities from degrading the group’s capabilities. Indeed, members of such organizations are constantly worried about the possibility of spies among them, and they spend a great deal of energy trying to out-think and out-wit intelligence agencies and law enforcement personnel.

Criminal and terrorist networks also face problems common to other types of organizations, including private firms, political parties, social movements, and traditional insurgencies.<sup>22</sup> For example, political and ideological leaders—the principals—must delegate certain duties to middlemen or low-level operatives, their agents. However, a network’s members have different preferences (based on personal experiences, perceptions, prejudices, etc.), which impact how they behave in certain situations. Because of these differences in personal preferences, as well as the need to maintain operational secrecy, terrorist group leaders cannot perfectly monitor what their agents are doing. Thus, by impacting the level of trust (or expectations of shared effort among a network’s members toward a common goal), preference divergence creates operational challenges which can be exploited to degrade a terrorist group’s capabilities. In essence, clandestine organizations struggle with problems of trust, control, and other group dynamics that can

lead to counterproductive violence, inefficiencies in resource allocations, and suspicion of corruption. Strategies to mitigate these problems through greater control entail security costs for groups, because when leaders are forced to intervene more directly in the affairs of their subordinates, they expose themselves to intelligence gathering. Today's military education programs must develop an ability to understand and exploit the vulnerabilities of these organizations.

In addition to organizational vulnerabilities and the struggle for strategic influence, military education programs in counterterrorism and insurgency have focused on understanding the tactical and operational capabilities of these groups and how they developed or acquired these abilities. Throughout the past half century, in training camps throughout the world, terrorist groups have nurtured the radicalization and mobilization of new recruits, and provided them with training in military combat, espionage, weapons, explosives, counterintelligence, and so forth.<sup>23</sup> Groups not only train their own new recruits, but participate in a broader, loosely connected global knowledge network through which VNSAs learn from each other regardless of any particular ideological alignment. For example, the Liberation Tigers of Talim Eelam (a.k.a. Tamil Tigers) in Sri Lanka pioneered the use of suicide boat attacks against large commercial vessels many years before al Qaeda used this tactic in their attacks against the USS *Cole* and the French oil tanker *MV Limburg*.

Heightened intelligence and military activity since 9/11 has created an environment in which it is more difficult to operate these training camps. But as many scholars and policymakers have recently observed, the Internet now plays an increasingly vital role in supporting radicalization, recruitment, and operations (including surveillance, financial transactions, and covert communications)—in essence, becoming a conduit for the teaching of asymmetric warfare tactics commonly used by terrorist and insurgents. This requires new thinking and strategies to confront effectively, an issue that military education programs have only begun to appreciate.<sup>24</sup>

### *The Cyberspace Dimension*

As retired General Robert Scales noted in 2001, “potential adversaries are reportedly placing increased emphasis on information warfare and information operations to counter the United States.”<sup>25</sup> According to Thomas Hammes, “insurgent campaigns have shifted from military campaigns supported by information operations to strategic communications campaigns supported by guerilla and terrorist operations.”<sup>26</sup> Indeed, Abu Yahya al-Libi, a key leader of al Qaeda in Afghanistan, recently praised the “mujahideen on the information frontline”—the website designers, bloggers, video editors and others who support the vast online presence of al Qaeda—saying, “May Allah bless you lions of the front, for by Allah, the fruits of your combined

efforts—sound, video, and text—are more severe for the infidels and their lackeys than the falling of rockets and missiles on their heads.”<sup>27</sup>

Clearly, the Internet has come to play a particularly important role for VNSAs in the realm of strategic communications.<sup>28</sup> Terrorism expert Bruce Hoffman notes that “virtually every terrorist group in the world today has its own Internet website and, in many instances, multiple sites in different languages with different messages tailored to specific audiences.”<sup>29</sup> Further, according to a study by Gabriel Weimann, websites are only one of the Internet’s services used by modern terrorism: there are other facilities on the net—e-mail, chat rooms, e-groups, forums, virtual message boards—that are increasingly used by terrorists as virtual training camps, providing an online forum for indoctrination as well as the distribution of terrorist manuals, instructions and data. He also notes how terrorist organizations capture information about the users who browse their websites, information which can be useful for early stages of recruitment.<sup>30</sup>

Managing perceptions is seen by these groups as a vital effort—as al Qaeda strategist Ayman al-Zawahiri explained in a July 2005 letter to Abu Musab al-Zarqawi, “We are in a battle, and more than half of this battle is taking place in the battlefield of the media. We are in a race for hearts and minds of our umma.”<sup>31</sup> According to Dell Dailey, the State Department’s counterterrorism chief, “al Qaeda and other terrorists’ center of gravity lies in the information domain, and it is there that we must engage it.”<sup>32</sup> Sir John Kiszely agrees, noting that much of the contemporary “ideological struggle is carried out in the domain of cyberspace.”<sup>33</sup> In fact, according to Evan Kohlmann, radical websites “have evolved into a disturbing MySpace-like social-networking hub for [extremists] intent on becoming the next generation of terrorists, hijackers and even suicide bombers.”<sup>34</sup>

While these observations reflect a recognition about the importance of the information domain, an examination of military education since 9/11 indicates that more must be done to ensure an appreciation among officers and their soldiers for how terrorists, insurgents and other VNSAs use the Internet to achieve their objectives.<sup>35</sup> Granted, there are ample opportunities within the military education system to learn about information assurance—that is, protecting the integrity of computer networks and information systems—but there are limited offerings through which officers and their soldiers can learn about the online ideological dimensions of asymmetric warfare. Further, there has to date been little encouragement in the military to study how VNSAs use the Internet to try and gain strategic influence.

At West Point, for example, only a dozen cadets (in a graduating class of nearly 1,000) enroll each year in the Academy’s only course on Information Warfare. The introductory course on terrorism, which enrolls nearly 150 each year, does include a few lessons on how terrorists use the Internet, but overall only a small minority of West Point graduates join the Army with a solid education in these important subjects. The situation is mirrored at the other

service academies as well as in the educational experience of students in the nation's ROTC programs (the other major source of commissioned officers for all services). Overall, very few soldiers and officers have had as part of their military education any significant exposure to the literature on information warfare, ideologies of violence and terrorism, or the role of the Internet in contemporary conflicts, and this shortcoming must be addressed in the immediate future.

### Conclusion

According to Thomas Williams, today's military education should seek to develop critical attributes such as *situational awareness* (an ability to recognize what is happening and to maintain vigilance for threats, change, and opportunity, while avoiding over-dependence on the tools of information technology, which could themselves become lucrative targets for asymmetric threats); *intelligent risk-taking* (a combination of initiative, creativity and leadership that reflects thinking beyond fire and maneuver); and *self-reliance* (the ability to withstand attempts of an asymmetric opponent to create confusion and doubt about a planned operation or ability).<sup>36</sup> These and other attributes of strategic military leaders have been hallmarks of military education for centuries, but in a post-9/11 security environment we must also develop attributes that address other non-kinetic aspects of asymmetric threats, including sociopolitical contexts of insurgency and terrorism, and the role of the Internet in facilitating the spread of ideologically-motivated violence. Further, the learning outcomes described in this chapter should be mirrored in the professional development of non-military agency personnel (including policymakers, foreign service officers and intelligence analysts). Thus, we will surely see many more events in the future that mirror the focus of the fall 2007 gathering in Quantico, where attendees from a broad array of government agencies and the private sector learn and share ideas about inter-agency coordination, policy integration, and creative collaboration.

Overall, much has changed in military education since the attacks of 9/11. We have seen an expansion from a nearly exclusive focus on potential state-based threats to include asymmetric challenges posed by VNSAs. Military education in the United States has also moved toward a "whole of government" approach to comprehensively address pre- and post-conflict aspects of security. This in turn necessitates emphasizing the soft power dimensions of national security over the hard power instruments (i.e., the military, which are now seen as one of several critical elements of national security). Homeland defense and homeland security have become another new area of study in which soldiers and officers are learning about police work, border controls and critical infrastructure protection. However, beyond these changes further revision and expansion of military education is needed, particularly with regard to

the recognizing the increasing importance of the information domain. In time, the continuing evolution of education—both within and beyond the military services—will enable us to confront future asymmetric threats with increasing sophistication and success.

### Notes

1. According to Joseph Nye of Harvard University's Kennedy School of Government, the term soft power encompasses the realm of economics and the nuanced world of negotiated relationships among nations and transnational actors (like multinational corporations, non-governmental organizations, and multinational regimes like NATO, the European Union, and OPEC). In confronting the threat of terrorism, the U.S. draws on its soft power to convince nation-states and other entities to help counter the threat posed by globally networked terror groups. While economic and financial incentives (or in some cases, sanctions) are important, the most common forms of soft power employed on a daily basis include basic diplomacy, information efforts (including public diplomacy), and intelligence. See Joseph Nye, *The Paradox of American Power: Why the World's Superpower Can't Go it Alone* (Oxford University Press, 2002).
2. For a brief history of the evolution of military education in the U.S., please see Henry H. Shelton, "Professional Education: The Key to Transformation," *Parameters* 31 (Autumn, 2001): 4–16.
3. Shelton, "Professional Education."
4. Melissa Applegate, *Preparing for Asymmetry: As Seen Through the Lens of Joint Vision 2020* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, September 2001), 2.
5. Stephen Sloan, "Educating the Next Generation of Counterterrorism Professionals," in *Countering Terrorism and Insurgency in the 21st Century: International Perspectives (Volume 3: Lessons from the Fight Against Terrorism)*, ed. James J. F. Forest (Westport, CT: Praeger Security International, 2007), 15.
6. Ibid.
7. For more on the concept of "zones of competing governance," please see James J. F. Forest and Matthew V. Sousa, *Oil and Terrorism in the New Gulf: A Framework for U.S. Policy in West Africa* (Lanham, MD: Lexington Press, 2006).
8. David H. Petraeus, "Learning Counterinsurgency: Observations from Soldiering in Iraq," *Military Review* 86 (January–February 2006): 2–12.
9. Joint Chiefs of Staff, *Joint Strategy Review 1999* (Washington: Joint Staff, 1999), 2.
10. Shelton, "Professional Education."
11. Ibid.; See also Nigel Alwyn-Foster, "Changing the Army for Counterinsurgency Operations," *Military Review* 85 (November–December 2005): 2–15.

12. Lieutenant General Sir John Kiszely, "Keynote Speech," October 30, 2007, *Pedagogy for the Long War: Conference Proceedings* (Quantico, VA: U.S. Marine Corp Training and Education Command, 2007), 14.
13. David J. Kilcullen, "Twenty-Eight Articles: Fundamentals of Company Level Counterinsurgency," *Military Review* 86 (May–June 2006): 103–108.
14. Ibid.
15. Petraeus, "Learning Counterinsurgency."
16. Kilcullen, "Twenty-Eight Articles."
17. Ibid.
18. Ibid.
19. Other prominently-cited articles in this vein include John A. Nagl, *Institutionalizing Adaptation: It's Time for a Permanent Army Advisor Corps* (Washington, DC: Center for a New American Security, June 2007); Charles Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marine Corps Gazette* 83, no. 1 (January 1999): 18–22; John Mackinlay, "Defeating Complex Insurgency: Beyond Iraq and Afghanistan," *Royal United Services Institute Whitehall Paper*, No. 64 (2005); Christopher Hickey, "Principles and Priorities in Training for Iraq," *Military Review* 87 (March–April 2007): 22–32; Peter W. Chiarelli and Patrick R. Michaelis, "Winning the Peace: The Requirement for Full Spectrum Operations," *Military Review* 85 (July–August 2005): 4–17; Alwyn-Foster, "Changing the Army for Counterinsurgency Operations."
20. These include a series of four textbooks published by McGraw-Hill, in which Brigadier General (retired) Russell Howard is lead editor; a collection of nine reference volumes published by Praeger, edited by James Forest; and the internationally-acclaimed book *Inside Terrorism*, authored by Bruce Hoffman (CTC Senior Fellow) and published by Columbia University Press.
21. Most notable among these reports are Combating Terrorism Center, *Harmony and Disharmony: Exploiting Al Qaeda's Organizational Vulnerabilities* (West Point, NY: U.S. Military Academy, Combating Terrorism Center, 2006); Combating Terrorism Center, *Cracks in the Foundation: Leadership Schisms in Al Qaeda 1989-2006* (West Point, NY: U.S. Military Academy, Combating Terrorism Center, 2007).
22. I am indebted here to Jacob Shapiro and my colleagues at the Combating Terrorism Center, whose earlier work on preference divergence and agency theory has been instrumental in many ways. For more on this, please see our report, *Harmony and Disharmony: Exploiting Al Qaeda's Organizational Vulnerabilities*, especially 11–24.
23. James J. F. Forest, "Training Camps and Other Centers of Learning," in *Teaching Terror: Strategic and Tactical Learning in the Terrorist World*, ed. James J. F. Forest (Lanham, MD: Rowman & Littlefield, 2006), 69–109.
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- The Future of Terrorism, Crime and Militancy* (Santa Monica, California: Rand Corporation, 2001).
25. Robert H. Scales, Jr., *Future Warfare Anthology*, revised edition (Carlisle, PA: US Army War College, Strategic Studies Institute, 2001), 56–60.
  26. Thomas X. Hammes, “Fourth Generation Continues to Evolve; Fifth Emerges,” *Military Review* 87 (May–June 2007): 2.
  27. Abu Yahya al Libi, “To the Army of Difficulty in Somalia,” *al Sahab Media*, <http://192.31.19.143/sites/uscentcom2/Misc/GMP20070328031003001.pdf> (accessed August 1, 2008).
  28. Ibid.
  29. Bruce Hoffman, “The Use of the Internet by Islamic Extremists,” Testimony presented to the House Permanent Select Committee on Intelligence (May 4, 2006), 18. Available at: <http://rand.org/pubs/testimonies/CT262-1> (accessed June 17, 2009).
  30. Gabriel Weimann, “Terrorist Dot Com: Using the Internet for Terrorist Recruitment and Mobilization,” in *The Making of a Terrorist, Vol. 1: Recruitment*, ed. James J. F. Forest (Westport, CT: Praeger Security International, 2005), 53–65.
  31. John Hughes, “Winning the War of Words in the Campaign against Terrorism,” *The Christian Science Monitor* (May 17, 2006). Available at <http://www.csmonitor.com/2006/0517/p09s01-cojh.html> (accessed June 17, 2009); See also Norman E. Emery, “Information Operations in Iraq,” *Military Review* 84 (May–June 2004): 11–15.
  32. “U.S. Adapts Cold War Idea to Fight Terrorists,” by Eric Schmitt and Thom Shanker, *New York Times* (March 18, 2008).
  33. Kiszely, “Keynote Speech,” 14.
  34. Evan F. Kohlmann, “Al Qaeda’s ‘MySpace’: Terrorist Recruitment on the Internet,” *The Sentinel* 1:1 (January 2008):8. Available at <http://ctc.usma.edu/sentinel> (accessed June 17, 2009).
  35. James J. F. Forest and Frank Honkus, III, “Introduction,” in *Influence Warfare: How Terrorist and Governments Fight to Shape Perceptions in a War of Ideas*, ed. James J. F. Forest (Westport, CT: Praeger Security International, 2008): 1–24.
  36. Thomas J. Williams, “Strategic Leader Readiness and Competencies for Asymmetric Warfare,” *Parameters* (Summer 2003): 19–35.



# College Student Reactions to 9/11: Civilian, ROTC, and Military Academy Undergraduates

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Many scholars in the 1990s forecasted that the military and the larger society had headed into divergent directions in terms of social attitudes between the military and the larger society. Subsequent empirical research concluded the differences less than acute as originally speculated. Indeed, the modest gap that had existed may have since narrowed even more. The aftermath of the so-called Global War on Terrorism following the September 11, 2001, terrorist attacks in the United States, other terrorist attacks around the world, and new quasi-military groups under the umbrella of homeland security, have ushered a new understanding of the intersection of the armed forces and society.

In this chapter we present findings on attitudes about 9/11 among college students with varying relationships with the military. The people we surveyed

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attend either military academies, Reserve Officers Training Corps (ROTC) programs at civilian colleges or universities, or civilian colleges or universities with no explicit connection to the armed services. Are reactions to 9/11 different for civilians compared to students connected to the military in some way? There is evidence suggesting a new stage of civil-military relations following 9/11 whereby civilians and military-affiliates share more in common related to 9/11 than apart—perhaps even a fusion of attitudes. Our chapter will explore and assess this thesis.

### **Background**

We have described elsewhere that the post-9/11 era has ushered in a fourth era of civil-military relations—a type of civil-military fusion.<sup>1</sup> This fusion is prevalent in attitudes. Yet in some areas there is contradictory evidence that civilians and military people are coming together. Our research on the topic of homosexuals in the military suggests that at least among college underclassmen, there remains a split on attitudes toward gays and lesbians.<sup>2</sup> Research in the larger society suggests an emergence of attitudes.<sup>3</sup> Other research focuses on attitudes toward social problems among college undergraduates.<sup>4</sup>

If the bombings of the World Trade Center twin towers, the Pentagon, and the downing of a flight over Pennsylvania are constructed as a military threat to the United States, then we might expect different reactions to and attitudes associated with the 9/11 attacks between those who are associated with the military and those who are not. Alternatively, 9/11 may have moved everyone, military and civilian alike, toward a common set of beliefs about the world, at least regarding the event itself.

### **Attitudes and Reactions to 9/11**

There are many ways to assess youth attitudes toward 9/11, however; few polls have specifically addressed this topic among youth.<sup>5</sup> Reactions to 9/11 among the general public suggest that the majority of Americans recognize 9/11 in some way, albeit informally.<sup>6</sup> About half currently believe that Americans have changed the way they live as a result of the event. However, less than half of Americans indicate that they have changed their own lives as a result of the event.

Some research has found variations in reaction to 9/11 comparing men to women and their responses to the terrorist attacks. Research has found that men more than women responded with patriotism and a military response to the 9/11 terrorist attacks,<sup>7</sup> women are more likely to suffer psychologically and physically.<sup>8</sup> Other reactions showed gender and age differences.<sup>9</sup>

Similar to women, the 9/11 terrorist attacks had a more profound impact on racial and ethnic minorities with Hispanics suffering from PTSD more than other groups.<sup>10</sup> Another study noted that class privileges ameliorated dread associated with the terrorist attacks of 9/11 but race/ethnicity and sex/gender did not.<sup>11</sup>

### **Youth Attitudes toward Defense Issues**

If 9/11 is constructed as a defense issue, a plethora of studies have been conducted over the last decade to assess similarities and differences in the ways civilians and military-related people think about them. First, it is important to remember that military service is voluntary in the United States. Hence, if the military represents a relatively conservative, male workplace, only those people most open to these ideological perspectives are likely to self-select and become members of the armed forces. Alternatively, they may get socialized during training and as product of traditional military culture come to except war as a means to settle sociopolitical conflict. However produced, these distinctions form the argument that there may be a military-civilian culture “gap” in which military personnel either come from different backgrounds or they are socialized into being more masculine and conservative than their civilian peers after joining the armed forces.<sup>12</sup>

A comprehensive review of the empirical attitudinal literature during the Vietnam War showed that youth attitudes move to the left the further one was from the military.<sup>13</sup> ROTC cadets were noted to be less militaristic than cadets at service academies, but more so than their non-ROTC undergraduate peers. Further, and more recently, service academy cadets were noted to share very specific orientations including an interest in the military, a desire for adventure, and a wish to serve one’s country.<sup>14</sup> Further, endo-recruitment exists among service academy cadets—cadets are from military families—suggesting there may be a perpetuation of a separate military attitude in the military.

Bachman and his colleagues show that a military affiliation can affect attitudes, at least those related to defense matters, and they result from a mix of self-selection and socialization.<sup>15</sup> The authors use survey data from the Monitoring the Future project, comparing male responses to surveys just prior to high school graduation and again one or two years later. As a result, differences between time one and two can be attributed to socialization. While all students showed strong support for the military, students entering the military were somewhat more supportive of greater military spending and greater military influence in the United States, among other topics. These differences largely reflected selection effects. Socialization effects were also found but most of them simply enhanced the selection effects. Hence, there seems to be a

difference in attitudes among military affiliates, especially on topics most relevant to the services, such as war.

Using data from a comparative sample of college undergraduates—specifically United States Military Academy at West Point cadets and American Reserved Officer Training Corp (ROTC) cadets and civilian college students, Rohall and his colleagues show much more support for the war efforts in Afghanistan and Iraq among military-affiliated students than civilians.<sup>16</sup> However, much like trends found among civilian samples, within group men and ideological conservatives show greater support for the war than women and liberals. More importantly, almost all of the effects of military affiliation disappear when gender and ideology are controlled in the model. That is, gender and ideological differences explain almost all of the effects of military affiliation on support for these war efforts and not military affiliation.

In another study, comparing the groups from the above sample populations, Ender and his colleagues found all three groups to have a predilection to report war, terrorism, and national security issues as the salient national and world social problems for them.<sup>17</sup> Notably, civilian undergraduates more than West Point cadets more than ROTC cadets. Thus, we might expect military affiliation to orient undergraduates toward politico-military affairs that they may become involved with after their officer commission; however, it is notable that civilians are more likely to perceive war, terrorism, and national security as both national and world problems.

Other forms of military affiliation appear to be related to attitudes toward the war in Iraq and Afghanistan. A 2004 poll, for instance, found relatively strong support for the war among military families.<sup>18</sup> Hence, military affiliation extends beyond being in service, to include people associated with military members (i.e., friends and family).

These studies show that there is some divide among military and civilian populations, at least for defense issues. However, most of these studies were conducted after 9/11, before such events may draw people together, to decrease any existing divide, as we suspect. In addition, these studies do not focus on reactions to 9/11 specifically among these populations. Perhaps 9/11 is constructed as a defense issue. If so, we should see a great divide in reactions to the event. If, as we posit, 9/11 has started a fusion in such attitudes, we suspect there to be little differences between the groups.

## Methods

The purpose of this research is an on-going examination of attitudes and leadership changes in a specific segment of the U.S. population—college students, ROTC cadets, and cadets at military academies in the United States. To date, we have deployed a biannual survey since early 2003. Over 3,000 cadets and students from 31 different colleges and universities have completed the

instrument. In the survey, we first question attitudes toward a number of domains associated with military life such as military professionalism, civil-military relations, the role of the military, and the role of women in the military. Second, we survey all three groups regarding the most prevalent social problems and leadership issues in both their community and facing the nation. Finally, we ask students to tell us about some of their reactions to 9/11, emotionally and in terms of their relationship to anyone who suffered as a result of the event.

### *Sample*

The subjects ( $N = 3,057$ ) in this study were surveyed each semester beginning in the spring semester of 2003 through the spring of 2007. Students represent 31 different institutions including 1,192 civilians, 664 ROTC cadets, and 1,201 cadets from military academies around the United States notably cadets at military academies represent all U.S. states and territories to include a handful of foreign cadets. Certainly some of the civilian students and undergraduate institutions may not be American citizens. The 31 schools are located across the United States including California, Colorado, Florida, Indiana, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, Minnesota, New York, North Carolina, North Dakota, Pennsylvania, South Carolina, Virginia, and Washington.

The data show great variation in the demographic composition of the three groups. Overall, males (64.9 percent) outnumber females with a three to one ratio among all groups. White representation is somewhat higher than the larger U.S. population (77 percent) with African Americans and Hispanics are underrepresented (4.7 and 5.2 percent respectively). Other groups including Native Americans and Bi-Ethnic groups are represented. Ages ranged from 16 to 46 with a mean age of 19. Almost two-thirds are 19 and under; 94.1 percent of the students reported to be 22 years of age on their last birthday, or younger. All groups are disproportionately Christian with other religious affiliations noted including "None or Agnostic" (11.5 percent) and those reporting "Other" (6.4 percent).

Essentially, most participants are in the Frosh year (57.9 percent) with a mean of three semesters of completed college including the semester they completed the survey. Just over 60 percent (61.2 percent) reported that neither of their parents had graduated from college. Just over 80 percent (81.1 percent) reported neither parents as career military; it is notable that almost 20 percent (18.9 percent) report being from a military family. Notably 25–30 percent of all three groups report at least one parent as career military. Finally, we asked respondents whether they had any military experience. Almost 20 percent (18.3 percent) reported having some prior military service such as reserve or active duty experience.

These three groups differ substantially in two areas—class status and gender composition. Notably, there are many more females in the civilian group (59.2 percent) than the more military affiliated groups (23.7 percent for ROTC and 17.5 percent at the military academies). The military academy cadet sample is primarily comprised of freshman-level students. Specifically, 92.4 percent of the military academy cadets are freshman or sophomore, compared to 43.2 percent of ROTC cadets and 59.2 percent of civilian students. Military academy cadets are more likely come from families where parents completed college. Further, ROTC cadets are far more likely to have prior military service experience (50.3 percent) than their civilian (1.8 percent) and military academy peers (16.7 percent).

### *Measures*

Our dependent variables in this study include students' reaction to the 9/11 event. First, students were asked if they or someone they knew was hurt or killed in the attacks and been called to military or national guard service as a result of the attacks. Overall, 10 percent of the respondents indicated that they knew someone hurt or killed in the attacks and 59 percent know someone called to active duty after the attacks.

Students were also asked, "How often would you say you feel the following emotions as a result of the [9/11] terrorist attacks?" Categories included: "feel sad," "feel depressed," "have difficulty sleeping," and "feel angry." Responses ranged from 1 "Often" to 4 "Never." These items were reversed coded so that higher scores represent greater emotional reactions to the event. A combined item index was also created yielding a Cronbach's Alpha of 0.74 and mean score of 1.98.

We also asked students to tell how well they believed U.S. leadership responded to the event with the question, "How well would you say the following individuals and groups have responded to the 9/11 attacks?" Categories included: "The president," "The U.S. Congress," "The U.S. military," "Your state government," "Your local government." Response ranged from 1 "Excellent" to 4 "Poor." These items were recoded so that higher scores represent higher evaluations of these groups. A single-item index was created from all of these items yielding a Cronbach's Alpha of 0.85 and mean of 2.87.

Finally, we asked students if the 9/11 attacks have impacted them personally with the question, "How have the following areas of your life changed since the 9/11 attacks?" Categories included: "Keeping track of the news," "Considering cancelling an airplane trip," "Considered cancelling a trip to a major city," "Praying, attending religious services," and "Spending time with friends and family." Responses included 1 "Increased" 2 "Decreased" and 3 "Stayed the same." These responses were recoded so that higher scores reflect more change. A single item scale was created yielding a Cronbach's alpha of 0.64 and a mean of 2.23.

The primary independent variable in this study is military affiliation, coded into a series of three dummy variables (where applicable) with 1 representing affiliation and 0 representing everyone else (0 = 1,192 civilians) (1 = 664 ROTC cadets) (1 = 1,201 military academy cadets).

## Results

One reason we may find stronger reactions to 9/11 among military-affiliated students is that 9/11 is a defense-related issue. However, 9/11 may affect these groups more also because they know more people associated with the event. Table 17.1 shows that only a small percentage of either civilians or military-affiliates knew anyone hurt or killed in the 9/11 attacks. Nine percent of civilian students but 12 percent of ROTC and 11 percent of academy cadets reported knowing someone associated with the events of 9/11 (Pearson Chi-Square = 5.589,  $p < 0.06$ ). However, cadets are significantly more likely to know someone who was called to service as a result of the event (table 17.2).

Our findings show very little variation in emotional reaction to 9/11 among our subgroups (table 17.3). On a scale of 1 to 4 with 4 reflecting “often” feeling sad, depressed, having difficulty sleeping, and angry as a result of 9/11, our average score ranged from 1.95 among academy cadets and 2.00 among ROTC cadets—all around the “sometimes” category. However, there are no significant differences among our subgroups.

Reactions about U.S. leadership response to 9/11 show some major differences in attitudes among the three groups. Military affiliates were much more likely to report that they believe that government and military leaders handling of 9/11 was “good” (mean = 3.01–3.06) than civilians, who reported an average of 2.06 or “fair” (see table 17.3).

Finally, most students in our sample reported very little personal change in response to 9/11 with an average score of 2 “Stayed the same” when asked if different areas of their life changed since the attacks. This score was similar for both civilians and military affiliates (see table 17.3).

## Discussion

Our analyses suggest that students did not have a very strong reaction to 9/11 and those reactions have little to do with military affiliation—commensurate with the civil-military fusion hypothesis. However, military affiliates were much more positive about government and military leadership post-9/11. We also found that military affiliates have a somewhat stronger connection to 9/11 as a result of their military status—they are more likely to know someone called to service as a result of the events.

Our findings also show very little reaction to 9/11 at all among our sample—most people reacted very little at all emotionally and did little to change their

**Table 17.1** Percent of respondents who knew someone hurt or killed in 9/11 attacks by military affiliation

	<i>Civilian Undergraduates</i>	<i>ROTC Cadets</i>	<i>Cadets @ Military Academies</i>	<i>Total</i>
No	1080	578	1065	2723
	39.7%	21.2%	39.1%	100.0%
	91.1%	87.8%	89.0%	89.6%
	35.5%	19.0%	35.0%	89.6%
Yes	105	80	131	316
	33.2%	25.3%	41.5%	100.0%
	8.9%	12.2%	11.0%	10.4%
	3.5%	2.6%	4.3%	10.4%
Total	1185	658	1196	3039
	39.0%	21.7%	39.4%	100.0%
	100.0%	100.0%	100.0%	100.0%
	39.0%	21.7%	39.4%	100.0%

Pearson Chi-Square = 5.589, p < .06

**Table 17.2** Percent of respondents who knew someone called to military service after 9/11 attacks by military affiliation.

	<i>Civilian Undergraduates</i>	<i>ROTC Cadets</i>	<i>Cadets @ Military Academies</i>	<i>Total</i>
No	529	200	522	1251
	42.3%	16.0%	41.7%	100.0%
	44.6%	30.4%	43.6%	41.2%
	17.4%	6.6%	17.2%	41.2%
Yes	656	457	674	1787
	36.7%	25.6%	37.7%	100.0%
	55.4%	69.6%	56.4%	58.8%
	21.6%	15.0%	22.2%	58.8%
Total	1185	657	1196	3038
	39.0%	21.6%	39.4%	100.0%
	100.0%	100.0%	100.0%	100.0%
	39.0%	21.6%	39.4%	100.0%

Pearson Chi-Square = 40.142, p < .001



**Table 17.3** Mean Scores of Subscales by Military Affiliation

	<i>Civilian Undergraduates</i>	<i>ROTC Cadets</i>	<i>Cadets @ Military Academies</i>
Emotional Reactions	1.99	2.00	1.95
Attitudes toward U.S. Leadership	2.06	3.06	3.01*
Change in Life	2.24	2.23	2.23

\*Oneway ANOVA,  $p < .001$

lives as a result of the event, similar to what was found in general population studies.<sup>19</sup> However, additional analysis (not shown) shows that people who had a connection with 9/11—they either knew someone who was hurt or died in the attacks or knew someone who was mobilized to military service—reacted more strongly to the event than those with no connection to the event. This finding is important because military affiliates, ROTC cadets specifically, were significantly more likely to report knowing someone mobilized after 9/11.

It is also important to know that these data were collected over several years. Additional analysis (not shown) reveals that student responses to 9/11 went down over time—initial surveys showed a greater response to the event compared to more recent ones. We see a greater emotional reaction, a more positive attitude toward leadership of the event, and more change among students surveyed closer to the event itself. However that initial reaction to time has since subsided.

Our research resonates with the works of Moskos and Bachman and colleagues which show that military affiliates are most desperate in their attitudes toward defense issues.<sup>20</sup> With regard to 9/11 attitudes and behaviors, the greatest difference we found among civilian and military-affiliated students is related to government handling of the event and knowing someone mobilized into service.

Altogether, our findings suggest that military affiliates reacted to 9/11 in a very similar manner as their civilian counterparts. They may have more positive attitudes toward the leadership associated with the event but it only had a small, negative impact on their personal lives, much like civilians. We also show a very small link between being affiliated with the military and reactions to 9/11, mediated by the fact that military affiliates are more likely to know someone associated with the event, which positively relates to reactions to the event.

We suggest that future research explore this relationship, better measuring how people are connected to similar large-scale events. We believe that such efforts will better establish the differential ways that 9/11 and other related events impact people affiliated with the military. Alternatively, as we have suggested in this chapter, the events of 9/11 may be creating a fusion

among military and civilian sectors of society and while collective reaction to the event wanes with time, within group similarities remain stable. As such, anyone connected to such a terrible day will be more negatively affected by it, regardless of military affiliation.

### Notes

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# “City of the world!”: A New Generation’s American Exceptionalism

*Patricia Peknik\**

City of the world! (for all races are here,  
All the lands of the earth make contributions here)

—Walt Whitman, “City of Ships”

The narrative of American exceptionalism, which seemed to have come to its postmodern, post-Cold War end in the globalizing, multicultural climate of the 1980s and 1990s, is being reclaimed by a generation of students who came of age in the aftermath of September 11. The premise of exceptionalism—the idea that America has a special place in world history because of its unique historical circumstances, institutions, and ideals—had looked, from the vantage point of the year 2000, like a parochial and anachronistic relic at a time when the world had become more technologically and economically integrated, and at a time when multiculturalists had persuaded many Americans that in any case, we are not one people, and our history is one of division, not unity, of conflict, not consensus. The hipsters of the new millennium took a dim, conspiratorial view of America’s self-image and its arrogant assumption of a special role in the world. College students at the large urban university where I taught would glibly argue that America did not even *have* a culture, much less an exemplary one, and that any notion of American uniqueness and leadership was an increasingly irrelevant

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and dangerous political fantasy. They concluded that the nation was exceptional only in its unrivaled consumerism and the vacuousness of its popular entertainment, and they disdained the hubris of the exceptionalist narrative, joining their 1960s and 1970s predecessors in labeling exceptionalism an imperialist ideology that was responsible for American military involvement in Vietnam and American intervention in Latin America. And so this generation's post-9/11 return to the exceptionalist narrative is all the more fascinating and complicated.

Teaching courses in American history and literature in the years before 9/11, I would hear students dismiss Swedish economist Gunnar Myrdal's claims, in the 1944 classic *An American Dilemma*, that there had ever been, or still was, anything like "an American creed," a social and political ethos based on the values of "humanistic liberalism," and a shared belief in "the essential dignity of the individual, the fundamental equality of all men, and certain inalienable rights to freedom and justice."<sup>1</sup>

I would show the class books that were written to help foreign business executives and exchange students understand the ideals and rituals of American culture, such as Gary Althen's *American Ways, a Guide for Foreigners in the United States*. Althen's book depicts Americans as essentially different from the people of other nations in their intense valuation of individualism, competitiveness, love of privacy, and belief in progress and equality. American students would scoff at Althen's thesis. There is no common set of ideas or traditions in the United States, they would say. There is no such thing as "an American culture." These students had been raised to believe that while each one of them was talented and valuable in many ways, they, collectively, did not add up to a body politic of talents and values. They reserved their assent for social critic Randolph Bourne, who, in his 1916 essay "Trans-National America," decried "the American culture of the cheap newspaper, the 'movies,' the popular song, and the ubiquitous automobile," and they applauded postmodernists like Jean Baudrillard, who characterized the nation as a land of cheap, alienating illusions and the aggressive commercialization of human experience.

In fact, the only students I encountered then who were willing to entertain the notion of America's "distinctness" or talk seriously about the nation's principles and historic role were international students. Latin American, Asian, Middle Eastern, African, and European students all recognized the longstanding American conceit that the nation has a special role and purpose in the world. These students could evaluate and critique that conceit, but most all of them spoke approvingly of American values and of many aspects of American life, though disapprovingly of the kind of intellectual apathy that left many Americans uncurious about the values and institutions of other nations. American students were not interested in theories of American exceptionalism or uniqueness, solely in the fact of American power, about which many of them felt a messy, abstract sense of embarrassment. They were used to hearing that American power in the world was all about multinational corporations

and the arms industry, and they dismissed as sentimental and reactionary any suggestion that American influence in the world had ever had anything to do with the power of liberal ideas, with our constitutional democracy or the rule of law.

9/11 was that generation's coming of age into American history. I was astonished that, on that September evening, in a college classroom in Boston a few miles from where two of the planes had taken off that morning, every student showed up for class. Because, they said, "We want to know *why*." While they may not have grown up with the image of the nation as international archetype and symbol, to "a thousand of our enemies," as well as to our allies, the nation was apparently that: a symbol. But of what?

I had grown up in small-town upstate New York with a history teacher for a father, one who believed in the narrative of American exceptionalism and the notion that America was a nation built on ideas—that it was a particular and symbolic good, a nation of progressive liberal idealism that had conserved its best traditions of openness and self-evaluation even as it struggled through its most painful historical moments. But it was only because I knew this argument about America as a particular good that I was prepared to hear, and could try to process, the counterargument of Islamic fundamentalism: America as a particular evil. But for many young people, the counterargument was the whole thing, entirely. They had no experience arguing on behalf of the nation's history or appeal. The shock of 9/11 went into minds that had been brought up on postmodern characterizations of America as a culturally imperialistic, superficial, and disingenuous culture, and so, for some of them, the reaction was a smug "that's what we get" fatalism. A number of others retreated into the kind of bombastic patriotism and us-against-them rhetoric that was also a common cultural response.

But most did neither. Instead, the majority became curious, critical, and rigorous in examining both narratives—the one about America's exceptional goodness and the one about America's exceptional evil—and they subscribed to a narrative of American exceptionalism in which the nation, because of its successful tradition of idealism, can afford to examine and condemn its own failures. In their political activism, especially on environmental issues, today's students can talk enthusiastically about American ideals and traditions, can speak critically about American blindneses and failures, *and* contextualize American approaches within a larger global culture. In that, there is much to be admired and appreciated.

This generation wants an account of American history that neither cynically dismisses as fallacy the Founders' belief in an exceptional nation, nor uncritically promotes the logic and conclusions of a deconstructed national identity, in which "there is no *there* there." The Founders, those dead white straw men of the postmodern critique, are back in vogue with students from a wide range of backgrounds and political inclinations. Having taught courses in American history and literature at a large urban university, at a suburban business school,

and at a music college that attracts students from every state, I am astonished by the intensity of students' avid questioning about constitutional rights and the complex issue of federalism. 9/11 and the war and counterterrorism efforts that followed created an immediate historical consciousness in a generation that values the study of U.S. history as vital to civic engagement and an understanding of global politics.

In a recent lecture on the Bill of Rights, I used Vietnam-era free speech cases to discuss First Amendment rights, and *Miranda* to illustrate Fourth Amendment protections against warrantless searches; it was students who shifted the discussion to the USA Patriot Act, constantly asking, "Can they do that?" It has never been easier to get students interested in federalism and in the relationship between the executive branch, Congress and the courts. It was students who wanted to talk about Iraq during a lecture on Woodrow Wilson's 1902 essay, "The Ideals of America," in which Wilson reflects on the U.S. occupation of the Philippines: "It is a point of conscience with us that (they) shall have (self-government), too, when our work there is done and they are ready. But when will our work there be done and how shall we know when they are ready?"

In fact there are few historical topics that contemporary students do not "read backwards," searching for clues. Teaching U.S. history in the relaxed atmosphere of Clintonian prosperity, it was easy to hurry past the John Adams-Thomas Jefferson conflict over the 1798 Alien and Sedition Acts, under which the executive branch had the authority to arrest and deport enemy aliens in wartime. But that old political quarrel about the potentially subversive and incendiary rhetoric of foreign nationals within our borders, and the federal government's authority to detain and deport non-citizens, had new resonance for students in the aftermath of 9/11. What kind of nation had Adams and Jefferson envisioned, and were we still that nation? What are the limits of executive power in a wartime climate of anxiety over national security?

In response to this new historical consciousness on campus, in 2003 I began to teach a course called "The History of America's Image in the World," in which students look at America through the eyes of both American intellectuals and foreign observers, comparing Americans' sense of the nation with the analysis and critiques of European, Asian, and Middle Eastern scholars who've written about American life. The course is consistently overenrolled, and characterized by heated discussions. This generation of students knows there is much at stake in how we define ourselves in the world and how we are understood or admired, hated, or scorned.

I've heard many confess that when they study or travel abroad, they routinely say they are Canadian, not American, eager to avoid confrontation and feeling too ill-informed about American global politics to engage in detailed debate. They know that the United States is not a special creation, the only planet in a universe of distant constellations. But they have not concluded that

it is simply one nation among many. Detached from both the American triumphalism of their grandparents' generation and the angry, guilt-ridden stance of postmodernism, they are prepared to take a more measured approach, synthesizing an analysis of the nation's failures with an appreciation of the uniqueness and complexity of the American historical experience. Frustrated with the postmodern rhetoric of randomness and "competing narratives" in which we must seek the "meaning" of 9/11 in the political and social histories of other nations, this generation is looking for meaning closer to home, in the political narratives and ideologies of this nation, including in the claims of American exceptionalism.

Although exceptionalism was never a theme of the social histories that were popular from the 1960s to the 1990s, the exceptionalist narrative had great longevity as a theme in American intellectual culture. John Winthrop had admonished his fellow English passengers on the ship *Arabella*, bound for the New World in 1630, to make their New England settlement a prototype and beacon, a "City upon a Hill" for all the world to admire and emulate. He urged these first immigrants to consider their society's image in the world, cherishing the ambition "that men shall say of succeeding plantations: the lord make it like that of New England." This Puritan dream of a special history never vanished, but was transformed into the Founders' dream of a model democracy.

Alexander Hamilton declared in the opening paragraph of *The Federalist* that Americans had been chosen to demonstrate, "by their conduct and example," whether men could establish "good government from reflection and choice" rather than being subject to "accident and force." French political observer Alexis de Tocqueville, on his 1831 tour of the new republic, found the demonstration persuasive, predicting that the American example would remain compelling and instructive. Democratic, progressive, bent on securing the rights of its citizens, this new voluntary society was a blueprint for modernity to which it was difficult not to assent, Tocqueville said.

The historical debate had not been whether or not America was exceptional, but which foreign policy should flow from that exceptional stature, given the nation's wealth and geographical isolation from other powerful nations. In his 1796 Farewell Address, Washington had promoted an "exceptional nation" isolationist doctrine, a secular, commercial version of the Puritan theological tenet to "be in the world, but not of it," and advised the new nation to adopt a rule of international conduct that emphasized commercial, not political, activity. "Our detached and distant situation invites and enables us to pursue a different course," Washington said. Washington's hope was that the new nation could be exempt from the political-religious crises and economic failures other nations of the world had been subject to, and, in his 1789 "Letter to the Legislature of Pennsylvania," Washington stated his belief in the global influence of American democracy: "It should be the highest ambition of every American to extend his views beyond himself, and to bear in mind that his



conduct will affect not only himself, his country, and his immediate posterity; but that its influence may be coextensive with the world, and stamp political happiness or misery on ages yet unborn.”

Two hundred years after Washington's Inaugural Address, Ronald Reagan bid farewell to a country that was “a shining city on a hill,” “still a beacon, still a magnet.” Americans, Reagan believed, had a moral duty to call the world's attention to the nation's democratic character and its model economic institutions, and he aspired to seeing a modern economic and political world that more and more resembled the American “exemplar.” By then, in the cultural malaise of the late 1980s, for many young people, Reagan's rhetoric about America seemed sentimental and obsolete, too narrow to accommodate the relativist sensibility of postmodernism and the critical stance of liberalism.

Students of American history deserve to be trained to critically and fairly evaluate such rhetoric, and to understand the dark side of this classic American story, in which America as an exceptional nation will have exceptional enemies. The exceptionalist narrative has always featured an antagonist: for the devout Puritan townsmen in colonial New England, there were bedeviled enemies in the wilderness; for the utopian Founders striving towards a politics of virtue, there was a remote and corrupt Parliament plotting to take the colonists' liberty; during the Cold War, insidious communism quietly undid the work of democracy. So the story has always gone. For the George W. Bush administration, terrorists were the enemies in the wilderness, and we cannot contextualize Bush's claims about ridding the world of “evil-doers” unless we recognize the ubiquity of such good-and-evil portraits in American political rhetoric.

Students also deserve to be trained to critically evaluate the methods and conclusions of a postmodern ideology that substitutes, for the narrative of exceptionalism, an ideology of blithe American imperialism and a foreign policy—in fact, an American culture—which is sheerly materialistic, all sound and fury without meaning or principle. Many college students haven't studied enough world history to know much about the militarized autocracies, theocracies, and economic cabals that sometimes characterized the governments of various nations throughout the history of the world, or to understand why the Founders had tried to carve an exceptional path. But we cannot train students to be responsible participants in our political and legal systems and in civil society if we offer them only the narratives of an America whose history consisted of class warfare, racial strife, and the disenfranchisement of women. Even our proclaimed enemies believe there is more to the story than that.

We may disagree on the nation's status as a city on a hill: exemplary for its democratic, progressive institutions, and its ideals? Especially blameworthy for its failures to realize the full potentials of its historic promise to be a meritocracy of equals? Postmodern critics of American history and culture may declare there is no such city on a hill, and never was. But in that Boston classroom on the evening of 9/11, beneath an eerily silent sky, no remembered

words sounded more elegiac and defiant than the words of Puritan governor John Winthrop: "We shall be as a City upon a Hill, the eyes of all people are upon us." Upon us when we succeed or fail, Winthrop had said. Observing our hypocrisies and our sorrows. In the labor and piety of building a New England town. In the pain and violence of the civil rights struggle, in the tragedy and confusion of war. In our constitutional freedoms and our belief in the cultivation of individual talents and genius. In our poverty and wealth. In the shattering firestorm moments after the towers were struck.

Asked to write about America in an age of globalization, the students in "The History of America's Image in the World" have wondered whether and how the presidency of Barack Obama will change international perceptions and, importantly, our own image of the nation. In contemplating the exceptionalist narrative, they have overwhelmingly quoted Winthrop, with his tough, anxious dream of a model society, and his fear that if it failed, that society's pride and sins would be "made a story and a by-word throughout the world." But the new generation also takes a page from Walt Whitman: loafing and lounging on the streets of nineteenth-century Manhattan, watching the "democratic" masses bustling down the crowded streets to the background clamor of machines and the shouts of commerce, Whitman lauded New York as "City of the world!"—a city of immigrants whose place was in the world's fixed gaze. Manhattan was sign and symbol of the American nation as "space, increase, freedom, futurity," and Whitman had both a powerful critical response and a striving optimism about the nation's character and potential, about the challenges it faced to find peace after war. New York was a product of the history of the world, and a maker of that history, Whitman said, and so, too, was America. The nation had grown up in unique historical circumstances, with historically distinct public institutions and revolutionary ideals, and with that came an exceptional obligation for that nation to call the world's attention to its greatnesses and failures, to "make a trial of ourselves, and invite men and women to hear." There is every indication that the new generation wants that kind of America.

### Note

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