

## 4 The More Who Die, the Less We Care

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A defining element of catastrophes is the magnitude of their harmful consequences. To help society prevent or mitigate damage from catastrophes, immense effort and technological sophistication are often employed to assess and communicate the size and scope of potential or actual losses.<sup>1</sup> This effort assumes that people can understand the resulting numbers and act on them appropriately.

However, recent behavioral research casts doubt on this fundamental assumption. Many people do *not* understand large numbers. Indeed, large numbers have been found to lack meaning and to be underweighted in decisions unless they convey *affect* (feeling). As a result, there is a paradox that rational models of decision making fail to represent. On the one hand, we respond strongly to aid a single individual in need. On the other hand, we often fail to prevent mass tragedies such as genocide or take appropriate measures to reduce potential losses from natural disasters. I think this occurs, in part, because as numbers get larger and larger, we become insensitive; numbers fail to trigger the emotion or feeling necessary to motivate action.

I shall address this problem of insensitivity to mass tragedy by identifying certain circumstances in which it compromises the rationality of our actions and by pointing briefly to strategies that might lessen or overcome this problem.

### BACKGROUND AND THEORY: THE IMPORTANCE OF AFFECT

Risk management in the modern world relies upon two forms of thinking. *Risk as feelings* refers to our instinctive and intuitive reactions to danger. *Risk*

*as analysis* brings logic, reason, quantification, and deliberation to bear on hazard management. Compared to analysis, reliance on feelings tends to be a quicker, easier, and more efficient way to navigate in a complex, uncertain, and dangerous world. Hence, it is essential to rational behavior. Yet it sometimes misleads us. In such circumstances we need to ensure that reason and analysis also are employed.

Although the visceral emotion of fear certainly plays a role in risk as feelings, I shall focus here on the “faint whisper of emotion” called *affect*. As used here, *affect* refers to specific feelings of “goodness” or “badness” experienced with or without conscious awareness. Positive and negative feelings occur rapidly and automatically; note how quickly you sense the feelings associated with the word *joy* or the word *hate*. A large research literature in psychology documents the importance of affect in conveying meaning upon information and motivating behavior. Without affect, information lacks meaning and will not be used in judgment and decision making.

### FACING CATASTROPHIC LOSS OF LIFE

Risk as feelings is clearly rational, employing imagery and affect in remarkably accurate and efficient ways; but this way of responding to risk has a darker, nonrational side. Affect may misguide us in important ways. Particularly problematic is the difficulty of comprehending the meaning of catastrophic losses of life when relying on feelings. Research reviewed below shows that disaster statistics, no matter how large the numbers, lack emotion or feeling. As a result, they fail to convey the true meaning of such calamities and they fail to motivate proper action to prevent them.

The psychological factors underlying insensitivity to large-scale losses of human lives apply to catastrophic harm resulting from human malevolence, natural disasters, and technological accidents. In particular, the psychological account described here can explain, in part, our failure to respond to the diffuse and seemingly distant threat posed by global warming as well as the threat posed by the presence of nuclear weaponry. Similar insensitivity may also underlie our failure to respond adequately to problems of famine, poverty, and disease afflicting large numbers of people around the world and even in our own backyard.

## THE DARFUR GENOCIDE

Since February 2003, hundreds of thousands of people in the Darfur region of western Sudan, Africa, have been murdered by government-supported militias, and millions have been forced to flee their burned-out villages for the dubious safety of refugee camps. This has been well documented. And yet the world looks away. The events in Darfur are the latest in a long list of mass murders since World War II to which powerful nations and their citizens have responded with indifference. In her Pulitzer Prize-winning book *A Problem from Hell: America and the Age of Genocide*, Samantha Power documents in meticulous detail many of the numerous genocides that occurred during the past century. In every instance, American response was inadequate. She concludes: “No U.S. president has ever made genocide prevention a priority, and no U.S. president has ever suffered politically for his indifference to its occurrence. It is thus no coincidence that genocide rages on” (Power, 2003, p. xxi).

The UN general assembly adopted the Convention on the Prevention and Punishment of the Crime of Genocide in 1948 in the hope that “never again” would there be such odious crimes against humanity as occurred during the Holocaust of World War II. Eventually some 140 states would ratify the Genocide Convention, yet it has never been invoked to prevent a potential attack or halt an ongoing massacre. Darfur has shone a particularly harsh light on the failures to intervene in genocide. As Richard Just (2008) has observed, “we are awash in information about Darfur. . . . [N]o genocide has ever been so thoroughly documented while it was taking place . . . but the genocide continues. We document what we do not stop. The truth does not set anybody free. (p. 36) . . . [H]ow could we have known so much and done so little?” (p. 38).

## AFFECT, ANALYSIS, AND THE VALUE OF HUMAN LIVES

This brings us to a crucial question: How *should* we value the saving of human lives? An analytic answer would look to basic principles or fundamental values for guidance. For example, Article 1 of the UN Universal Declaration of Human Rights asserts that “[a]ll human beings are born free and equal in dignity and rights.” We might infer from this the conclusion that every

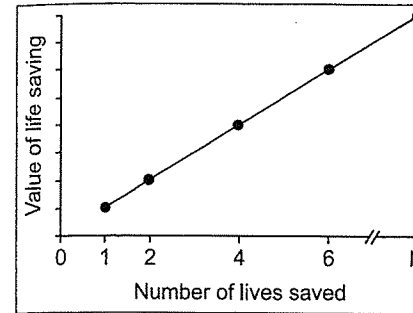


FIGURE 4.1  
A Normative Model for Valuing  
the Saving of Human Lives (Every  
Human Life Is of Equal Value)

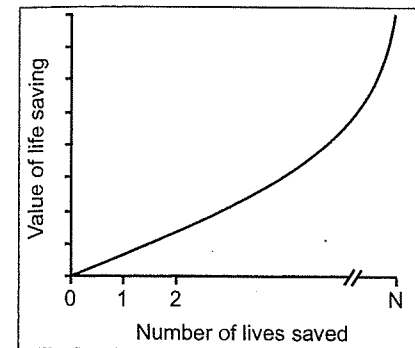


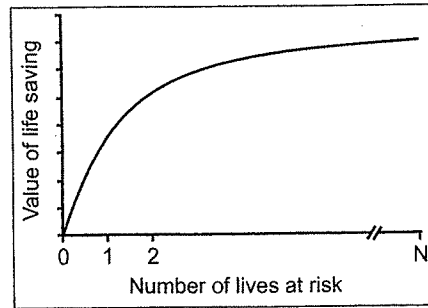
FIGURE 4.2  
Another Normative Model  
(Large Losses Threaten the  
Viability of the Group or Society)

human life is of equal value. If so, then—applying a rational calculation—the value of saving  $N$  lives is  $N$  times the value of saving one life, as represented by the linear function in Figure 4.1.

An argument can also be made for judging large losses of life to be disproportionately more serious because they threaten the social fabric and viability of a group or community (see Figure 4.2). Debate can be had at the margins over whether one should assign greater value to younger people versus the elderly, or whether governments have a duty to give more weight to the lives of their own people, and so on, but a perspective approximating the equality of human lives is rather uncontroversial.

How *do* we actually value human lives? Research provides evidence in support of two descriptive models linked to affect and intuitive thinking that reflect values for lifesaving profoundly different from those depicted in the normative (rational) models shown in Figures 4.1 and 4.2. Both of these descriptive models demonstrate responses that are insensitive to large losses of human life, consistent with apathy toward genocide.

FIGURE 4.3  
A Psychophysical Model  
Describing How the Saving  
of Human Lives May  
Actually Be Valued



### THE PSYCHOPHYSICAL MODEL

There is considerable evidence that our affective responses and the resulting value we place on saving human lives follow the same sort of “psychophysical function” that characterizes our diminished sensitivity to changes in a wide range of perceptual and cognitive entities—brightness, loudness, heaviness, and wealth—as their underlying magnitudes increase.

As psychophysical research indicates, constant increases in the magnitude of a stimulus typically evoke smaller and smaller changes in response. Applying this principle to the valuing of human life suggests that a form of *psychophysical numbing* may result from our inability to appreciate losses of life as they become larger. The function in Figure 4.3 represents a value structure in which the importance of saving one life is great when it is the first, or only, life saved but diminishes as the total number of lives at risk increases. Thus, psychologically, the importance of saving one life pales against the background of a larger threat: We may not “feel” much difference, nor value the difference, between saving 87 lives and saving 88.

My colleagues David Fetherstonhaugh, Steven Johnson, James Friedrich, and I demonstrated this potential for psychophysical numbing in the context of evaluating people’s willingness to fund various lifesaving interventions. In a study involving a hypothetical grant-funding agency, respondents were asked to indicate the number of lives a medical research institute would have to save to merit receipt of a \$10 million grant. Nearly two-thirds of the respondents raised their minimum benefit requirements to warrant funding when there was a larger at-risk population, with a median value of 9,000 lives needing to be saved when 15,000 were at risk (implicitly valuing each life saved at \$1,111),

compared to a median of 100,000 lives needing to be saved out of 290,000 at risk (implicitly valuing each life saved at \$100). Thus respondents saw saving 9,000 lives in the smaller population as more valuable than saving more than ten times as many lives in the larger population. The same study also found that people were less willing to send aid that would save 4,500 lives in Rwandan refugee camps as the size of the camps’ at-risk population increased.

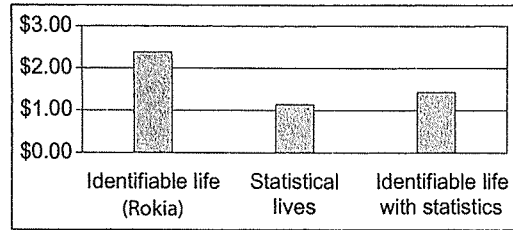
In recent years, vivid images of natural disasters in South Asia and the American Gulf Coast, and stories of individual victims there, brought to us through relentless, courageous, and intimate news coverage, unleashed an outpouring of compassion and humanitarian aid from all over the world. Perhaps there is hope here that vivid, personalized media coverage featuring victims could also motivate intervention to prevent mass murder and genocide.

Perhaps. Research demonstrates that people are much more willing to aid identified individuals than unidentified or statistical victims. But a cautionary note comes from a study in which my colleagues and I gave people who had just participated in a paid psychological experiment the opportunity to contribute up to \$5 of their earnings to the charity Save the Children. In one condition, respondents were asked to donate money to feed an identified victim, a 7-year-old African girl named Rokia, of whom they were shown a picture. They contributed more than twice the amount given by a second group who were asked to donate to the same organization working to save millions of Africans (statistical lives) from hunger. Respondents in a third group were asked to donate to Rokia, but were also shown the larger statistical problem (millions in need) shown to the second group. Unfortunately, coupling the large-scale statistical realities with Rokia’s story significantly *reduced* contributions to Rokia (see Figure 4:4).

Why did this occur? Perhaps the presence of statistics reduced the attention to Rokia essential for establishing the emotional connection necessary to motivate donations. Alternatively, recognition of the millions who would not be helped by one’s small donation may have produced negative feelings that inhibited donations. Note the similarity here at the individual level to the failure to help 4,500 people in the larger refugee camp. The rationality of these responses can be questioned. We should not be deterred from helping 1 person, or 4,500, just because there are many others we cannot save!

In sum, research on psychophysical numbing is important because it demonstrates that feelings necessary for motivating lifesaving actions are not

FIGURE 4.4  
Mean Donations  
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congruent with the normative/rational models in Figures 4.1 and 4.2. The nonlinearity displayed in Figure 4.3 is consistent with the devaluing of incremental loss of life against the background of a large tragedy. It can thus explain why we don't feel any different upon learning that the death toll in Darfur is closer to 400,000 than to 200,000. What it does not fully explain, however, is apathy toward genocide, inasmuch as it implies that the response to initial loss of life will be strong and maintained, albeit with diminished sensitivity, as the losses increase. Evidence for a second descriptive model, better suited to explain apathy toward large losses of lives, follows.

### THE COLLAPSE OF COMPASSION

American writer Annie Dillard reads in her newspaper the headline "Head Spinning Numbers Cause Mind to Go Slack." She writes of "compassion fatigue" and asks, "At what number do other individuals blur for me?"<sup>2</sup>

An answer to Dillard's question is beginning to emerge from behavioral research. Studies by social psychologists find that a single individual, unlike a group, is viewed as a psychologically coherent unit. This leads to more extensive processing of information and stronger impressions about individuals than about groups. Consistent with this, a study in Israel found that people tend to feel more distress and compassion and to provide more aid when considering a single victim than when considering a group of eight victims.<sup>3</sup> A follow-up study in Sweden found that people felt less compassion and donated less aid toward a pair of victims than to either individual alone.<sup>4</sup> Perhaps the blurring that Annie Dillard asked about begins for groups as small as two people.

The insensitivity to lifesaving portrayed by the psychophysical-numbing model is unsettling. But the studies just described suggest an even more disturbing psychological tendency. Our capacity to feel is limited. To the extent

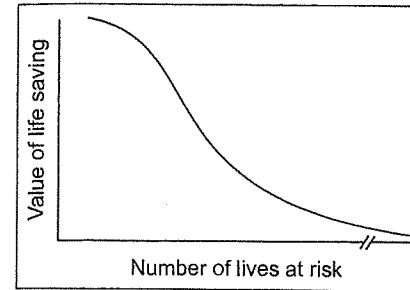


FIGURE 4.5  
A Model Depicting  
Psychic Numbing:  
The Collapse of  
Compassion—When  
Valuing the Saving of Lives

that valuation of lifesaving depends on feelings driven by attention or imagery, it might follow the function shown in Figure 4.5, where the emotion or affective feeling is greatest at  $N = 1$  but begins to decline at  $N = 2$  and collapses at some higher value of  $N$  that becomes simply "a statistic." Whereas Robert J. Lifton coined the term *psychic numbing* to describe the "turning off" of feeling that enabled rescue workers to function during the horrific aftermath of the Hiroshima bombing,<sup>5</sup> Figure 4.5 depicts a form of psychic numbing that is not beneficial. Rather, it leads to apathy and inaction, consistent with what is seen repeatedly in response to mass murder and genocide.

### THE FAILURE OF MORAL INTUITION

Thoughtful deliberation takes effort. Fortunately evolution has equipped us with sophisticated cognitive and perceptual mechanisms that can guide us through our daily lives efficiently, with minimal need for "deep thinking."

Consider how we typically deal with risk. Long before we had invented probability theory, risk assessment, and decision analysis, there were such faculties as intuition, instinct, and gut feeling, honed by experience, to tell us whether an animal was safe to approach or water was safe to drink. As life became more complex and humans gained more control over their environment, analytic ways of thinking evolved to boost the rationality of our experiential reactions. Beyond the question of how water looks and tastes, we now can look to toxicology and analytic chemistry to tell us whether it is safe to drink. But we can still use our feelings as well, an easier path.

As with risk, the natural and easy way to deal with moral issues is to rely on our intuitions: "How bad is it?" Well, how bad does it feel? We can also apply

reason and logical analysis to determine right and wrong, as our legal system attempts to do. But, as Jonathan Haidt, a psychologist at the University of Virginia, has demonstrated, moral *intuition* comes first and usually dominates moral *judgment* unless we make an effort to critique and, if necessary, override our intuitive feelings.<sup>6</sup>

Unfortunately, moral intuition fails us in the face of genocide and other disasters that threaten human lives and the environment on a large scale. We cannot trust it. It depends upon attention and feelings that may be hard to arouse and sustain over time for large numbers of victims, not to mention numbers as small as two. Left to its own devices, moral intuition will likely favor individual victims and sensational stories that are close to home and easy to imagine. Our sizable capacity to care for others may be demotivated by negative feelings resulting from thinking about those we cannot help. Or it may be overridden by pressing personal and local interests. Compassion for others has been characterized by social psychologist Daniel Batson as “a fragile flower, easily crushed by self-concern.”<sup>7</sup> Faced with genocide and other mass tragedies, we cannot rely on our intuitions alone to guide us to act properly.

## WHAT TO DO?

Behavioral research, supported by common observation and the record of repeated failures to arouse citizens and leaders to halt the scourge of genocide and to prevent thousands from perishing in natural disasters, sends a strong and important message. Our moral intuitions often fail us. They seduce us into calmly turning away from massive losses of human lives, when we should be driven by outrage to act. This is no small weakness in our moral compass.

Fortunately, we have evolved a second mechanism, moral judgment, to address such problems, based on reason and argument. In the case of genocides and other mass crimes against humanity, we must focus now on engaging this mechanism by strengthening international legal and political structures that pre-commit states to respond to these tragedies rather than being silent witnesses. The United Nations is the institution that was created in part to deal with such issues, but structural problems built into its very charter have made

it ineffective. Appreciation of the failures of moral intuition makes development of new institutional arrangements even more urgent and critical. For it may only be laws and institutions that can keep us on course, forcing us to doggedly pursue the hard measures needed to combat genocide when our attention strays and our feelings lull us into complacency.

Elsewhere, David Zions and I have proposed that international and domestic law should require officials to publicly deliberate and proffer reasons to justify action or inaction in response to genocide;<sup>8</sup> that is an aspect of the notion of legitimation discussed in this book by Paul Kleindorfer. If enforced, a requirement for public justification would likely heighten pressure to act to save lives rather than allowing people to die.

The stakes are high. Failure to understand how our minds become insensitive to catastrophic losses of human life and failure to act on this knowledge may condemn us to passively witness yet another century of genocide and mass abuses of innocent people. It may also increase the likelihood that we will fail to take appropriate action to reduce the damages from other catastrophic events.

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