

15 How Our Dreams of Death  
Transcendence Breed  
Prejudice, Stereotyping,  
and Conflict  
*Terror Management Theory*

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Life is tragic simply because the earth turns and the sun inexorably rises and sets, and one day, for each of us, the sun will go down for the last, last time. Perhaps the whole root of our trouble, the human trouble, is that we will sacrifice all the beauty of our lives, will imprison ourselves in totems, taboos, crosses, blood sacrifices, steeples, mosques, races, armies, flags, nations, in order to deny the fact of death, which is the only fact we have.

— James Baldwin (1963)

Seemingly intractable and escalating violent conflicts resulting from long-standing racial, religious, ethnic, and nationalistic prejudices—although by no means of recent origin in human history—are especially problematic at the outset of the 21st century. Lethal weapons of mass destruction (real and imagined), religious and political leaders (of nation-states or of their own lunatic fringes) with apocalyptic visions of eradicating evil (real and imagined), and media technology (Internet and satellite television) fostering rapid dissemination of information to incite hatred and provide explicit instructions for terrifying violence a toxic brew that appears to be close to boiling over. In light of these forces, humans becoming the first life form to extinguish itself seems more like a sober actuarial prediction than a science fiction prophecy. Surely then, understanding the psychological underpinnings of prejudice in hopes of fostering constructive efforts toward amelioration should be a high priority for social scientists of all stripes.

Allport (1954) made it abundantly clear in his classic *The Nature of Prejudice* that prejudice is a multifaceted phenomenon, and this *Handbook* undoubtedly provides excellent coverage of many of its causes and consequences. Terror management theory (TMT; Greenberg et al., 1986; Solomon, Greenberg, & Pyszczynski, 1991) and research offer a unique perspective by focusing specifically on the role of existential threat in prejudice, stereotyping, and intergroup aggression. In this chapter, we summarize the theory's core insights into the causes and consequences of prejudice and review substantial lines of research supporting these insights. We then consider how TMT complements other theoretical accounts of prejudice and offer some suggestions for further research and

theoretical refinement. Finally, we briefly discuss the implications of this work for mitigating this grievous human predisposition.

## TERROR MANAGEMENT: THEORY AND EVIDENCE

### THEORY

Extensive presentations of TMT and the research supporting it, now consisting of more than 300 studies, can be found in Solomon et al. (1991), Pyszczynski, Solomon, and Greenberg (2003), and Greenberg, Solomon, and Arndt (2008). For current purposes, we present the theory and evidentiary base very concisely, and then focus on the theory's implications and research findings specifically pertinent to understanding prejudice, stereotyping, and intergroup conflict.

TMT is based on the writings of Becker (1971, 1973, 1975) and begins with the evolutionary assumption that humans, like other animals, have a wide range of biological systems oriented toward continuing our existence: "the obvious first priorities of a survival machine, and of the brain that makes the decisions for it, are individual survival and reproduction" (Dawkins, 1976/1989, p. 62). At the same time, unlike other animals, we humans have a cerebral cortex that make us smart enough to realize that we are vulnerable to all sorts of potentially lethal threats, and that inevitably, our efforts to continue existing will fail. Becker, as well as many before and since him, argued that because these realizations conflict with our many motivational systems geared toward survival, we cannot handle this existential truth; it has the potential to leave us paralyzed with anxiety: "Man . . . has an awareness of his own splendid uniqueness . . . and yet he goes back into the ground a few feet in order to blindly and dumbly rot and disappear forever. It is a terrifying dilemma to be in" (Becker, 1973, p. 26).

To manage the potential terror engendered by this awareness of one's own vulnerability and mortality, people rely on their cultures for psychological security. Cultures accomplish this by providing their members with meaningful views of reality and opportunities to feel enduringly significant. These internalized cultural worldviews provide psychological equanimity by allowing people to live out their lives in a world of meaning, values, purposes, and roles, fortifying a sense that they are more than mere animals fated only to obliteration upon death. This belief is buttressed by literal and symbolic forms of death transcendence provided by cultures. Literal immortality is provided by concepts such as an everlasting soul or spirit, heaven, and reincarnation. Symbolic immortality is obtainable by identification with larger groups and causes, offspring, and valued achievements in the arts and sciences. Based on the works of Otto Rank, Norman Brown and others, Becker (1975) summarizes the evolution of these immortality beliefs in this way:

History . . . is the career of a frightened animal who must lie in order to live . . . societies are standardized systems of death denial; they give structure to the formulas for heroic transcendence. History can then be looked at as a succession of immortality ideologies, or as a mixture at any time of several of these ideologies. . . . For primitive man, who practiced the ritual renewal of nature, each person could be a cosmic hero of a quite definite kind: he could contribute with his powers and observances to the replenishment of cosmic life. Gradually . . . cosmic heroism became the property of special classes like divine kings and the military . . . And so the situation developed where men could be heroic only by following orders. . . . With the rise of money coinage one could be a money hero and privately protect himself and his offspring by the accumulation of visible gold-power. With Christianity something new came into the world: the heroism of renunciation of this world and the satisfactions of this life . . . It was a sort of anti-heroism by an animal who denied life in order to deny evil. . . . In modern times . . . a new type of productive and scientific hero came into prominence, and we are still living this today. And with the French Revolution . . . the revolutionary hero who will bring an end to injustice and evil once and for all, by bringing into being a new utopian society perfect in its purity. (pp. 153–155)

To boil these big ideas down to a simple theoretical formulation from which we could derive testable hypotheses, we developed TMT, which posits that to manage the potential terror engendered by the awareness of mortality, people must sustain faith in (a) an internalized cultural worldview that imbues subjective reality with order meaning and permanence, and bases of death transcendence to those who meet the culture's prescribed standards of value; and (b) the belief that they are meeting those prescribed standards of value (i.e., the feeling of self-esteem).

## EVIDENCE

Research supporting TMT has shown that these two psychological constructs, cultural worldviews and self-esteem, protect people from anxiety and from death-related thought. These studies have used a variety of measures of anxiety and death thought accessibility. Research has also shown that reminders of death (mortality salience [MS]) instigate bolstering and defense of both faith in one's worldview and one's self-esteem (for recent reviews, see Greenberg Solomon, and Arndt, 2008; Solomon, Greenberg, & Pyszczynski, 2004).

In support of other hypotheses derived from the theory, MS has also been shown to increase: (a) distancing from reminders of one's animality (e.g., Goldenberg, Pyszczynski, Greenberg, & Solomon, 2000); (b) guilt after creative action (e.g., Arndt, Greenberg, Solomon, Pyszczynski, & Schimel, 1999); (c) desire for closeness to romantic partners (e.g., Mikulincer, Florian, & Hirschberger, 2003); and (d) preference for people, stimuli, and events that reinforce rather than challenge basic ways in which we view life as meaningful (e.g., Landau, Greenberg, et al., 2006). Finally, a great deal has been learned about the precise cognitive processes by which thoughts of death generate these effects, summarized by the dual defense model of conscious and unconscious defenses instigated by death-related thought (e.g., Arndt, Cook, & Routledge, 2004; Greenberg et al., 2003; Pyszczynski, Greenberg, & Solomon, 1999).

This body of work has employed a varied range of MS inductions to increase the accessibility of death-related thought, including open-ended items about one's death, death anxiety scales, accident footage, word search puzzles with death words embedded, proximity to funeral homes and cemeteries, and subliminal primes of the word "dead" or "death." In addition, the effects of these reminders of death have been compared to, and found to be different than, reminders of a wide array of other aversive concepts, including failure, uncertainty, dental pain, intense uncertain bouts of pain, paralysis, meaninglessness, general anxieties, worries after college, giving a speech in public, and social exclusion.<sup>1</sup>

## TMT, PREJUDICE, STEREOTYPING, AND DISCRIMINATION

### TMT AND PREJUDICE AS A RESPONSE TO THE THREAT OF ALTERNATIVE WORLDVIEWS

Although Becker (1971) was broadly concerned with explaining the motives that drive human behavior, "what makes people act the way they do" (p. vii), his most fervent concern was with intergroup aggression, which he saw as the primary way in which people contribute to human suffering. Becker's perspective on intergroup aggression is nicely summarized in his final book, *Escape from Evil*:

What men have done is to shift the fear of death onto the higher level of cultural perpetuity; and this very triumph ushers in an ominous new problem. Since men must now hold for dear life onto the self-

<sup>1</sup> In well over 200 studies, MS has had different effects than these comparison inductions. Although a small number of researchers have reported a few similar effects with other inductions, heightened death thought accessibility may have played a role in these cases, and the alternative conceptualizations offered by these researchers have never been able to account for large proportions of the evidence supporting TMT (for more extensive discussions of these issues, see Greenberg, Solomon, & Arndt, 2008; Solomon et al., 2004).

transcending meanings of the society in which they live, onto the immortality symbols which guarantee them indefinite duration of some kind, a new kind of instability and anxiety are created. And this anxiety is precisely what spills over into the affairs of men. In seeking to avoid evil, man is responsible for bringing more evil into the world than organisms could ever do merely by exercising their digestive tracts. (Becker, 1975, p. 5)

Based on this analysis, the first implication of TMT we drew for understanding prejudice is that because people who subscribe to a worldview different from one's own are implicitly and often explicitly challenging the validity of one's own worldview, and one's worldview is the fundamental basis of one's psychological security, the individual must attempt to derogate, assimilate, or annihilate threatening others to restore faith in his or her worldview. We are sure the reader can think of many historical, often tragic, examples of such attempts. Harrington (1969) put it this way:

If those weird individuals with beards and funny hats are acceptable, then what about my claim to superiority? . . . Does he, that one, dare hope to live forever too—and perhaps crowd me out. I don't like it. All I know is, if he's right I'm wrong. So different and funny-looking. I think he's trying to fool the gods with his sly ways. Let's show him up. He's not very strong. For a start, see what he'll do if I poke him. (pp. 138–139)

If these efforts reflect a need to protect the worldview by which people ward off their terror of death, then reminders of mortality should increase negative reactions to others who subscribe to different worldviews. A variety of studies have supported this hypothesis. The first such study showed that MS increased American Christians' liking of a fellow Christian student and increased their disliking of a Jewish student (Greenberg et al., 1990). Harmon-Jones, Greenberg, Solomon, and Simon (1996) found that MS increased the minimal ingroup bias, but only to the extent that the basis for forming the two groups led participants to view their own group members as more similar to themselves than the outgroup members were. Nelson, Moore, Olivetti, and Scott (1997) found that gory accident footage led American viewers to recommend a more punitive monetary penalty to an auto manufacturer if they thought the manufacturer was Japanese, but only among Americans for whom the footage led to thoughts of their own death.

More recently, Castano, Yzerbyt, Paladino, and Sacchi (2002) found that MS increased Italians' bias in favor of fellow Italians and against Germans. He also found that this effect was mediated by ingroup identification and by perceptions of the ingroup as a real entity. Jonas, Fritsche, and Greenberg (2005) found that although Germans interviewed in front of a shopping area seemed to be equally favorable to German and foreign places and products, Germans interviewed in front of a cemetery a few blocks away from the shopping area strongly preferred the German things over the foreign ones. In the only reported MS study with children, Florian and Mikulincer (1998) found that although MS led 7-year-old Israelis to rate everyone negatively, it led 11-year-old Israelis to favor native-born Israelis over Russian immigrants. Although we cannot know definitively why the 7-year-olds did not display the typical ingroup favoritism and outgroup derogation after MS, two possibilities seem likely. One is that terror management defenses may not have been exhibited in the 7-year-olds because they lacked the cognitive maturity to understand the existential threat of their own mortality. The other is that this occurred because the 7-year-olds had yet to clearly distinguish their own worldview from that of Russian immigrants.

In these studies, the amplified derogation of the outgroup after MS presumably results from the challenge to the individual's faith in her or his own worldview posed by advocates of an alternative worldview. Although these studies provide no direct evidence that this is the case, other studies have supported the idea that worldview threat leads to MS-induced derogation. Indeed, the most common TMT finding is that after MS, people derogate others who directly criticize their worldview, whether these others are ingroup or outgroup members. As examples, after MS, Americans derogate American and foreign critics of the United States, Canadians derogate those who criticize

Canada, and liberal and conservative Americans derogate those who criticize their political orientation. Indeed, in three studies, McGregor et al. (1998) found that after MS, conservative and liberal Americans allocated high levels of painfully spicy hot sauce to another student who criticized conservatives and liberals, respectively. This is the one body of evidence to date that MS can instigate actual aggression against a different other.

Another way to interpret this substantial body of evidence is to suggest that it reflects MS-induced self-esteem defense and bolstering rather than worldview defense. As both TMT and social identity theory propose, people routinely base their self-esteem in part on their ingroup identifications. A variety of TMT studies have shown that MS increases self-esteem striving and defense (see, e.g., Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). It therefore remains quite plausible that the sizable body of evidence supporting a role of TMT in prejudice reflects the need to bolster self-esteem rather than the worldview.

These two possibilities are difficult to tease apart because self-esteem is predicated on both faith in the culture's worldview that prescribes standards of value, and the individual's identification with his or her culture. For example, asserting that U.S. culture is sick and vile potentially undermines an American's self-esteem both because it calls into question the cultural bases of self-worth (e.g., American Express cards, nice cars, publications, etc.) and the use of simply being an American as a basis of self-worth. So whenever the validity or goodness of one's culture is implicitly or explicitly threatened, self-esteem is potentially undermined as well. MS-induced prejudice supports TMT either way, and this distinction probably matters little outside of an academic context, but it is a methodologically challenging problem that may warrant additional research.

One set of studies does hint at a role of group-identification-based self-esteem in MS-induced prejudice (Greenberg, Schimel, Martens, Pyszczynski, & Solomon, 2001). In a preliminary study, White participants viewed a White person who expressed racial pride more negatively than a Black person who did so. However, a second study showed that MS increased liking for the White pride advocate and reduced liking for the Black pride advocate. The final study conceptually replicated this effect assessing reactions to a White or Black employer who discriminated against an employee of the other race, and who justified his actions by claiming his own race has been victimized by "massive discrimination" in the workplace. Again, after MS the White participants became more sympathetic to the White bigot and less sympathetic to the Black bigot. It is highly unlikely that the White participants subscribed to a White supremacist worldview, but after MS they became significantly more sympathetic to Whites who "stood up for the White race."

#### TMT AND TWO SPECIAL KINDS OF PREJUDICE: SEXISM AND AGEISM

So far we have explored the idea that terror management needs incite prejudice because the outgroup represents a threat to faith in one's worldview and one's self-worth. However, some forms of prejudice are directed at groups that do not necessarily subscribe to a different worldview. Two such groups are women and the elderly. Both groups are part of every culture. Do terror management concerns contribute to prejudice against these groups? These prejudices, like all others, are undoubtedly multiply determined, but there is a reason to believe terror management does play a role, even though ingroup women and old people do not generally threaten a nonelderly male's worldview.

TMT sheds some light on the psychological roots of misogyny and violent tendencies toward women. Research conducted by Goldenberg et al. (2000) shows that people are often ambivalent about the body and the physical aspects of sex because of the link between the physical and the mortal: Physical creatures die, and our terror management depends on viewing ourselves as more than mere animals, as enduringly significant beings in a world of meaning. Building on this research, Landau, Goldenberg, et al. (2006) reasoned that men sometimes distance from attraction to women and generally devalue them because, by being reminded of their susceptibility to sexual arousal, men are confronted with their own animal and thus mortal nature. Thus, women who arouse carnal

lust in men, especially outside the trappings of a symbolic conception of lust such as romantic love, may be viewed negatively.

This may at first seem far-fetched, but not if you consider the elaborate historical and cultural demonization and regulation of women's sexuality and animality across virtually every known culture. Indeed, according to the Bible it was that temptress Eve who got us into this existential mess in the first place by enticing Adam to taste the fruit of the tree of knowledge, which made awareness of mortality possible, and ambivalence toward the body probable. In one of six studies testing these ideas, MS led men to derogate a seductive woman, but this effect was eliminated when the same woman appeared more wholesome. Another study found that men reminded of death and subsequently asked to recall a time they were sexually aroused by a woman exhibited greater tolerance of aggression toward women when asked to choose a prison sentence for a man who assaulted his girlfriend. These findings suggest that the existential threat engendered by men's lust constitutes an important contributing factor to misogynistic tendencies.

What about the elderly? Well, to some extent, they may also represent the threat of reminding people of their animality, but even more directly, they remind us of our inevitable fate. We generally do not have to worry that we may transform into another gender or ethnicity, but we are fated to join this group, if we are lucky. But in the meantime, Martens, Greenberg, and Schimel (2004) argued that what we want to do is see ourselves as different from old people to minimize the extent to which they remind us of our own futures. To test this idea, in a first study, Martens et al. simply asked college students to look at pictures of old or young adults. In support of the idea that old people can serve as a reminder of death, pictures of elderly people increased death thought accessibility in the college students. In the second study, in response to MS, college students viewed the elderly more negatively and as dissimilar to themselves. In the final study, Martens et al. measured perceived similarity to the elderly during a mass survey and subsequently found that MS only increased negativity toward, and perceived dissimilarity to, the elderly among students who perceived themselves as relatively similar to elderly people in the mass survey. The fact that MS led to negative reactions to the elderly primarily in individuals who generally perceive some similarity to the elderly supports the idea that prejudice against the elderly is fueled by the self-threat of perceived similarity to the elderly combined with heightened salience of the threat of death.

### TMT AND STEREOTYPING

Although TMT is clear that mortality concerns should spawn prejudice against members of outgroups, the theory is less straightforward about prejudice against minority groups within the individual's culture. Sometimes these minority groups may represent a different worldview; American Muslims may be such a minority group in the United States. However, generally minority groups share much of the worldview of the majority group; for example, like most White Americans, most Black, Hispanic, and homosexual Americans are patriotic, and most are Christians. The theory of symbolic racism (Sears, 1988) notes that some White Americans may still see these groups as threats to their own worldview (values, etc.), and this is surely true of White supremacists and other avowed racists. However, ever since we began doing TMT research, we felt that worldview threat was not the primary basis of contemporary prejudice and stereotyping against these minority groups, so we never felt that MS would simply increase White prejudice against these groups.

However, Schimel et al. (1999) suggested another way that terror management concerns could contribute to White attitudes toward members of these groups. As popularized by the classic Devine (1989) article, it seems quite clear that stereotypes of minority groups are deeply entrenched in mainstream American culture. According to TMT, reminders of mortality should increase reliance on the internalized cultural worldview and preference for those who reinforce that worldview. To the extent that stereotypes of stigmatized groups are part of the American worldview, MS should therefore increase stereotypic thinking and preference for minority group members who conform to the stereotype over those who call the stereotype into question.

Indeed, Greenberg et al. (1990) provided initial evidence consistent with this idea by showing that MS increased Christian students' endorsement of stereotypic traits in evaluating a Jewish student. However, it was unclear in this study whether this reflected an MS-induced desire to derogate or an MS-induced desire to bolster belief in the stereotype.

To assess this latter idea more directly, Schimel et al. (1999) conducted five studies, examining stereotypic thinking and preferences regarding women, Germans, African Americans, and male homosexuals. Although in the late 1990s, Germans were generally not targets of prejudice by Americans, and their current worldview was very compatible with the American worldview, MS led Americans to view Germans more stereotypically (e.g., more orderly and rigid). In a second study, MS led both males and females to offer more explanations for behaviors inconsistent with gender stereotypes than for behaviors consistent with gender stereotypes, suggesting a greater need among these participants to defend against threats to stereotypic beliefs.

In Study 3, White participants in a control condition preferred an African American confederate if he appeared counterstereotypic (a diligent student and chess club member) rather than stereotypic (a beer-guzzling gang banger). However, after MS, there was a strong preference for the stereotypic African American over the counterstereotypic one. Study 4 replicated this finding using gender stereotypes, finding that MS increased liking for gender-stereotypic job candidates and decreased liking for gender counterstereotypic ones. Finally, in Study 5, participants in a control condition preferred a masculine homosexual male over an effeminate homosexual male, whereas after MS the effeminate homosexual male was preferred over the masculine homosexual male. A three-way interaction in this study also showed that this two-way interaction was carried by people high in need for closure, suggesting that rigid stereotyping provides terror-assuaging meaning primarily to those predisposed to simple knowledge structures.

These studies showed that MS will not necessarily increase negativity toward minority groups within one's own culture or toward outgroups that do not threaten one's worldview (Germans). However, the work also shows that people like their minority group members and nonthreatening outgroupers best if they fit stereotypes of these groups. The dark side of this preference is that MS does lead to dislike of such outgroup individuals when they do not conform the stereotype, such as when an African American is a highly diligent student.

#### TMT AND THE ERADICATION OF THE EVIL OTHER: THE ULTIMATE FORM OF DISCRIMINATION

In *Escape from Evil*, Becker (1975) argued that no matter how potent our terror management defenses are, residual anxieties about death are likely to surface, and a potentially controllable source for them must be found:

The fact is that self-transcendence via culture does not give man a simple and straightforward solution to the problem of death; the terror of death still rumbles underneath the cultural repression . . . . The result is one of the great tragedies of human existence, what we might call the need to "fetishize evil," to locate the threat to life in some special places where it can be placated and controlled. . . . [M]en make fantasies about evil, see it in the wrong places, and destroy themselves and others by uselessly thrashing about. (pp. 5, 148)

Therefore the most appealing worldviews for those in need of bolstered terror management are those that convince people that they are part of a special group that is heroically triumphing over evil. Unfortunately that evil to be heroically triumphed over tends to be some outgroup that can be viewed as the source of one's deepest fears and problems. In this way, people can falsely view the sources of their fears as controllable and eradicable, instead of having to face the deeper problem of their inevitable death, via cancer, heart disease, accident, or old age. For many centuries, charismatic leaders have been selling this grand vision of the ingroup heroically triumphing over the evil other and thereby setting up a paradise on earth. In this way, Becker, following Rank before him,

made the ironic point that the effort to escape from evil by following such leaders is the primary way in which humans cause evil.

If this analysis is correct, reminding people of their mortality should increase the appeal of such good versus evil ideologies and those who espouse them. A recent series of studies supports this hypothesis. The first study to do so showed that MS increased the appeal of a hypothetical candidate for governor only if that candidate promoted a special vision that emphasized that he would lead the people to greatness (Cohen, Solomon, Maxfield, Pyszczynski, & Greenberg, 2004). Related research by Landau, Solomon, et al. (2004) and Cohen, Ogilvie, Solomon, Greenberg, and Pyszczynski (2005) examined the appeal of George W. Bush in the months prior to the 2004 American presidential election. In response to the attacks of September 11, 2001, Bush became a strong proponent of the heroic triumph over evil: "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" (Office of the White House Press Secretary, 2001).

In four studies, Landau, Solomon, et al. (2004) found that MS and reminders of terrorism led both conservative and liberal college students to become more favorable to Bush and his war on terrorism. In the last two of these studies, conducted in May and September of 2004, Bush's political opponent Senator John Kerry was preferred over Bush in the control condition, but this preference was completely reversed when mortality was made salient. When terror management needs are elevated, the decisive crusader against evil was consistently preferred over the candidate portrayed as a waffler and flip-flopper.

Of course Bush and Kerry varied on other qualities besides the penchant for using the rhetoric of heroically defeating evil, so we cannot be definitive about why MS increased Bush's appeal. What if we more directly assessed the impact of MS on the appeal of ideologies focused on killing the evil other? A great opportunity to do so was afforded us when Iranian social psychologist Abdolheissen Abdollahi joined our research team. Just as Bush has condemned Iran as a member of the "axis of evil," the United States has been disparaged by Iranian leaders as "the great satan." After an MS manipulation, Pyszczynski, Abdollahi et al. (2006) asked Iranian college students to react to interviews of two fellow students, one of whom expressed strong support for lethal martyrdom against Americans, and the other who advocated peaceful resolution to the Middle East conflict. In the control condition, the Iranian students preferred the anti-martyrdom student; however, after MS, the pro martyrdom student was highly preferred. Indeed, after MS the Iranian students actually indicated substantial interest in joining the martyrdom cause.

Before we jump to the conclusion that Iranians are an atypically violent lot, we should consider a second study in which Pyszczynski et al. asked conservative and liberal American college students how supportive they were of the use of extreme military violence to kill terrorists in the Middle East, including chemical and nuclear weapons and the collateral killing of thousands of innocent people. As with the Iranian students, in the control condition, there was very little support for violent measures regardless of political orientation. However, after MS, the conservative students strongly supported these extreme measures to eradicate "evil." Perhaps one could argue this was a matter of strategy in the war on terrorism rather than reflective of discrimination based on prejudice. However, it seems highly unlikely these same conservative students would have advocated the use of nuclear weapons and thousands of innocent deaths if terrorists were known to be somewhere in Chicago.

Although additional research is certainly needed, studies to date clearly support the idea that mortality concerns increase the appeal of efforts to kill members of outgroups designated as repositories of evil. In this way, TMT and research shed new light on the age-old dynamic of scapegoating, which has led to so many genocidal atrocities over the course of recorded history—and continues to do so to this day.



## TMT AND THE PSYCHOLOGICAL CONSEQUENCES OF PREJUDICE

TMT has implications not only for understanding the causes of prejudice, but also for understanding the consequences for individuals within a culture who are targets of prejudice and discrimination. Such stigmatized individuals are likely to have difficulty sustaining a sense of self-worth because they are devalued within the prevailing mainstream culture. Although research suggests that such individuals use compensatory mechanisms to combat deficiencies in self-esteem, and self-report self-esteem measures generally fail to find lower self-esteem in stigmatized groups (Crocker & Major, 1989), TMT suggests that stigmatized individuals should have less stable and secure self-worth to the extent their self-worth is not well-validated within the context of the worldview to which they subscribe.

Furthermore, TMT (see, e.g., Solomon et al., 1991) posits that members of ethnic groups targeted by prejudice in the culture within which they reside typically are caught between two worldviews: the traditional worldview of their ancestral group and that of the prevailing culture. Under these circumstances, the individual is likely to have difficulty maintaining faith in both a meaningful worldview and a secure sense of enduring significance. In such contexts, three options seem possible to manage one's terror. Given that the traditional worldview and bases of self-worth are usually overshadowed by those of a prejudicial majority, one option is full assimilation. However, fully embracing the dominant worldview would require abandoning the traditional worldview and buying into a worldview that has treated one's group harshly for generations and that may still offer only limited bases of self-worth to members of one's group.

A second option is militancy, rejecting the mainstream worldview and attempting to sustain faith in and derive self-worth from the traditional worldview. However, this tends to be very difficult because the traditional worldview was adapted to different circumstances and is likely to be incompatible with aspects of the contemporary natural, social, and economic environment. Furthermore, such militant worldviews (e.g., The Black Panthers, the White Knights) are typically formed in reaction to a predominant worldview and therefore tend to be rigid and to offer limited bases of self-worth for their members.

The third option is pluralism, an attempt to construct a worldview that incorporates aspects of the traditional worldview and its bases of self-worth while participating in the larger stage and bases of self-worth of the predominant worldview. Although difficult to achieve, this alternative provides the best hope for deriving the meaning and significance likely to allow for effective terror management.

Salzman (2001) employed this TMT analysis to help understand the impact of colonization on indigenous groups around the world. He observed that in Alaska, other parts of North, Central, and South America, Hawaii, the South Pacific, and parts of Africa, colonization by Europeans has produced similar deleterious psychological effects on a genetically diverse range of peoples. The Yu'pik people of Alaska labeled this colonization experience as the "Great Death." The colonists brought deadly disease and pervasive cultural disruptions, wiping out up to 50% of the local population. In Australia, a wide range of means and interventions employed by White colonial settlers—including land dispossession, the theft of women, missionary activity, and slavery—severely undermined Aboriginal peoples' age-old sense of kinship and spirituality.

From a TMT perspective, such efforts undermined indigenous cultural belief systems, heightening anxieties and thus aiding the project of converting survivors to Christianity and instilling adherence to other aspects of the European worldview. Down to this day, relative to the ancestors of European settlers, the descendants of these indigenous peoples suffer from poverty, poor physical and mental health, alcohol and drug abuse, and anxiety (Manson et al., 1996; Salzman & Halloran, 2004). Salzman has labeled the experience of such colonization *cultural trauma* because the new culture arrives and shakes to its core the traditional culture that previously had been working fine for its people as a basis of psychological security.

Robbed of their traditional bases of terror management, members of these groups struggle to reconstruct a hybrid worldview in which they can sustain faith. Sometimes these efforts are

successful. One example is the Hawaiian Renaissance, a cultural revival that helped reinstate many aspects of Hawaiian music, art, literature, and religion. Hawaiians have begun to regain a sense that they have distinctive, stimulating, and instructive contributions to make to the broader society, providing the promise of a successful model of cultural pluralism. This suggests the possibility that traditional views may still serve terror management despite their minority status, as long as the dominant cultural context is sufficiently supportive of accommodating aspects of the traditional worldview in a way that is validating and valuing. Unfortunately, however, in many if not most cases, the dominating culture manages to maintain the inferior status of the indigenous culture and offers its members limited opportunities for valued activity within the context of their worldview.

Although research testing hypotheses derived from the TMT analysis of the consequences of prejudice has been limited to date, studies have shown that MS can lead members of stigmatized groups to distance from their ingroup and conform to negative stereotypes of their group. The first evidence that MS leads people to reduce identification with negatively framed ingroups was reported by Dechesne, Greenberg, Arndt, and Schimel (2000). They found that among fans of a college football team anticipating the opening season game, MS increased optimism about the team's prospects; however, after the team lost that first game, fans presented with a reminder of mortality reported reduced identification with the team.

Arndt, Greenberg, Schimel, Pyszczynski, and Solomon (2002) then showed that a similar process happens with stigmatized groups. In each study, when a negative view of the stigmatized ingroup was made salient, MS led ingroup members to reduce identification or increase negative reactions to the ingroup. First, they showed that when anticipating a difficult math test (a domain in which women are negatively stereotyped), MS decreased women's identification with other women. In a second study, after reading about a Hispanic drug dealer, MS led Hispanic participants to derogate paintings when they were attributed to a Hispanic (but not Anglo-American) artist. In a final study, Arndt et al. showed that after the Hispanic drug dealer article, MS led Hispanic participants to view their own personality as especially different than the personality of a fellow Hispanic. These findings suggest that when facing a negative stereotypic view of their own group, concerns about mortality led members of the group to distance themselves from their ingroup.

Dechesne, Janssen, and van Knippenberg (2000) demonstrated that when an ingroup is criticized, both individual differences and salient features of the ingroup can affect whether group members distance from the group or defend it. They found that that MS led college students high in need for closure (who are likely to view group identification as closed and definitive; Shah, Kruglanski, & Thompson, 1998) to report greater disliking of a critic of their university after MS. In contrast, students low in need for closure who contemplated mortality responded to criticism of their ingroup by disidentifying from the group rather than degrading the critic. Similarly, a second study by Dechesne, Janssen, and van Knippenberg (2000) found that MS led to defense of the group when group identification was portrayed as impermeable, but led to disidentification when the group was portrayed as permeable (i.e., it is easy to transfer from one school to another). Minority group members may view their ethnic ingroup as permeable to the extent that they believe they can identify with the larger culture instead of their ingroup.

A recent study showed that in addition to reducing identification with a stigmatized ingroup, MS can lead members of such groups to conform to negative stereotypes of the group. Specifically, Landau, Greenberg, and Sullivan (2006) reasoned that because negative self-relevant group stereotypes become socially ingrained components of individuals' death-denying worldview, MS may heighten their influence over behavior, leading individuals to show lessened success on ego-relevant tasks for which their group is viewed as inferior. Indeed, mortality-primed women who were stereotyped to fare poorly on an academic test underperformed even when the task was quite easy.

Finally research by Halloran and Kashima (2004) suggests the possibility of pluralism functioning within the individual. They found that after MS, bicultural Aboriginal participants decreased their valuing of collectivism when the more individualistic Anglo-Australian worldview was made salient and decreased their valuing of individualism when the traditional Aboriginal worldview was

made salient. Thus, minority group members may shift values as the context requires; however, TMT suggests that such biculturalism will work best for psychological equanimity if it stems from a well-integrated overarching hybrid worldview.

In sum, TMT posits that victims of prejudice face continual threats from the majority worldview to the meaning- and value-conferring structures that protect them from death concerns. Research testing this idea reveals, under some conditions, heightened mortality concerns lead stigmatized individuals to defensively disidentify from their ingroup and even conform to negative cultural stereotypes. However, research also shows that, under some conditions, prejudiced individuals can more constructively subscribe to hybrid worldviews that flexibly incorporate elements from their own culture and the broader culture. Additional research is necessary to gain a more complete understanding of the situational and personality factors that predispose members of stigmatized groups to pursue these different strategies.

## TMT AND OTHER APPROACHES TO UNDERSTANDING OF PREJUDICE

Generally we believe the TMT perspective is quite compatible with other theoretical approaches to prejudice. TMT adds another level of understanding of many of these phenomena by addressing more basic *why* questions. However, TMT does not supplant these other perspectives because they are often informative in their own right by elucidating other macro- or microlevel factors that contribute to prejudice, stereotyping, and group conflict. Next we briefly consider how TMT can complement some of the other prominent theories of prejudice, each of which is undoubtedly considered in much greater detail elsewhere in this *Handbook*.

### INDIVIDUAL DIFFERENCES

We begin with individual differences because any psychological theory of prejudice worth taking seriously should offer some insights into why in every culture and regardless of historical and socioeconomic circumstances, people vary in their levels of prejudice. Through various shaping influences, cultures tend to orient their members toward (a) particular outgroups within or outside the culture as designated inferiors and sources of evil; (b) particular stereotypic depictions of various groups; and (c) particular prejudice-fostering or prejudice-discouraging values such as tolerance, harmony, competitiveness, and order.

However, from a TMT perspective, people will differ in their levels of prejudice primarily because of the nature of the individualized, internalized version of the culturally derived worldview by which they imbue life with meaning and themselves with significance. Individuals form their own worldview based on how the broad cultural worldview is conveyed by their parents, other influential people in their lives, and the mass media, and their personal experiences, possibly in combination with genetically based propensities for hostility, conformity, structure, and reactance that may affect the appeal of particular aspects of the worldview-relevant concepts to which they are exposed. In addition, TMT suggests that the individuals' particular levels of self-worth and stability of self-worth, and the particular culturally based sources of self-worth on which they rely will also influence their levels of prejudice and the specific targets of their prejudice.

From this TMT perspective, individual difference variables associated with high levels of prejudice and stereotyping such as right-wing authoritarianism (Adorno, Frenkel-Brunswik, Levenson, & Sanford, 1950; Altemeyer, 1994), religious orientation (Batson & Burris, 1994), personal need for structure (Schaller, Boyd, Yohannes, & O'Brian, 1995), and social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994) are indicators of worldviews that are rigid, simplistic, moralistic, and that emphasize status hierarchies and just world beliefs. These are precisely the kinds of worldviews that should lead people to be harsh toward those who are different and who are lower in socioeconomic status. Indeed, one of the first TMT studies showed that after MS high but not low authoritarians became especially unkind toward another individual who expressed very dissimilar attitudes. Similarly, after

MS, compared to politically liberal Americans, politically conservative Americans seem to become more negative toward people with different political beliefs and more supportive of extreme military violence against outgroup members (Pyszczynski et al., 2006).

Another individual difference factor that has received a good deal of attention in both prejudice and TMT research is personal need for structure (PNS)—the degree to which the person desires clear, certain, or unambiguous knowledge (Thompson, Naccarato, Parker, & Moskowitz, 2001). Research shows that high-PNS individuals are more likely to form simple impressions of others (Neuberg & Newsom, 1993) and rely on stereotypes about other groups (Schaller et al., 1995). TMT posits that high-PNS individuals buffer anxiety by pursuing simple and coherent interpretations of the world, whereas low-PNS individuals are more comfortable with uncertainty and a lack of structure, and may even derive meaning from novelty, accuracy, tolerance, and diversity. Accordingly, TMT studies show that individuals high, but not low, in PNS respond to MS with rigid defense of their social identity, preference for stereotypic others, devaluing of behaviorally inconsistent others, and victim derogation (see, e.g., Dechesne et al., 2000; Landau, Johns et al., 2004; Landau et al., 2006). The picture emerging from these findings is that high-PNS individuals' motivated efforts to seek terror-assuaging meaning in simple and well-structured interpretations of other people and social events can contribute to stereotyping and prejudice.

Research has also shown that threats to self-esteem (e.g., Fein & Spencer, 1997), insecure attachment (Mikulincer et al., 2003), and religious fundamentalism (Altemeyer & Hunsberger, 1992) are associated with high levels of prejudice. From a TMT perspective, these findings suggest that among those whose terror management defenses are unstable and highly vulnerable to threat, derogating different others serves to bolster both faith in one's own worldview and, through a social comparison process, in one's own self-worth. Consistent with this analysis, TMT research has shown that boosts to self-esteem, secure attachment, and intrinsic religiosity mitigate the effects of MS on outgroup bias (Harmon-Jones, Simon, Greenberg, Pyszczynski, & Solomon, 1997; Jonas & Fischer, 2006; Mikulincer & Florian, 2000). The one exception is if the different other attacks the basis of the individual's self-esteem boost (Arndt & Greenberg, 1999).

### REALISTIC GROUP CONFLICT THEORY

Although individuals within a culture vary in their levels of prejudice, cultures clearly play a substantial role in determining the prevalent targets of prejudice for their members. Realistic group conflict theory (RCT) helps to explain the culture's particular choices of targets. The theory posits that feelings of hostility and prejudice arise when groups compete for scarce resources (e.g., Esses, Jackson & Armstrong, 1998). From this perspective, people derogate and even aggress against those perceived to be encroaching on valuable commodities such as jobs, education, and property. Partial support for RCT is provided by evidence that periods of downward mobility, job scarcity, and general economic frustration are positively correlated with prejudice and stereotypes (Dollard, Doob, Miller, Mowrer, & Sears, 1939; Hovland & Sears, 1940). Also, research in the laboratory (R. Brown, 1995; Jones, 1997) and the field (Sherif, Harvey, White, Hook, & Sherif, 1961) demonstrates that competing groups tend to derogate and stereotype each other.

RCT provides an intuitively sensible explanation of prejudice: People need to eat and survive and therefore feel contempt toward those perceived to threaten those basic goals. However, conflicting groups often seek resources far beyond what is necessary to sustain life; we therefore think it is important to consider psychological functions of procuring resources that RCT does not address. Many resources are sought at least in part for their symbolic value as bases of significance and immortality striving, above and beyond their pragmatic value for survival. The Israeli-Palestinian conflict provides an example of this. Although this is indeed largely a battle over lands, it is not just any lands that are sought, but rather lands that both groups consider holy, lands tied to the death-transcending ideologies of both groups:

Old Testament, Psalm 37:

If I do not remember thee, let my tongue cleave to the roof of my mouth;  
If I prefer not Jerusalem above my highest joys.

The Hadith (sayings of the Prophet Mohammed):

... The dew which descends upon Jerusalem is a remedy from every sickness because it is from the gardens of paradise.

Based on extensive historical and anthropological evidence, Norman Brown (1959) and Becker (1975) proposed that land is not the only resource with symbolic value; gold, property, and other time-defying resources represent culturally sanctioned symbolic testimony to one's value, with the consequent assurance of safety and security in this life and literal or figurative immortality thereafter. TMT thus posits that procuring wealth serves (at least in part) to allay concerns about the finality of death. Accordingly, multiple studies demonstrate that MS increases consumerist and materialistic tendencies, even if they have negative implications for social and environmental well-being (see Arndt, Solomon, Kasser, & Sheldon, 2004, for review). In one study (Kasser & Sheldon, 2000, Study 2), mortality and control-primed participants engaged in a forest-management simulation and were told that although harvesting large amounts of timber would be personally profitable in the short term, it would have negative long-term consequences for the environment. Despite the awareness of these consequences, those reminded of their own mortality reported intending to harvest more of the available acres of forest than control-primed counterparts.

In short, TMT and research suggest that deep-seated needs for death-transcending value may contribute substantially to the intergroup conflicts central to RCT's analysis of prejudice. Furthermore, TMT provides a framework for understanding aspects of prejudice that are difficult to account for if we consider only the pragmatic advantages of resources. For one, it explains how conflicts can spring from efforts on the part of each group to assert its symbolic superiority even when material concerns are minimized or nonexistent. A TMT perspective also helps explain why in many cultures (e.g., the Mbuti in Zaire; Goldschmidt, 1990) valuable resources are deliberately wasted in the service of asserting the individual's or culture's symbolic prestige, a practice that would be difficult to explain from an RCT perspective.

Third, TMT explains why, both past and present, efforts by one group to conquer another group and appropriate their resources are carried out in the name of gods, political missions, and other ideological abstractions. For example, after starting the ball rolling on the enslavement and subsequent murder of millions of indigenous Americans, Christopher Columbus proclaimed "Let us in the name of the Holy Trinity go on sending all the slaves that can be sold" (quoted in Zinn, 1995, p. 3). More recently, both the 1991 Persian Gulf War and the 2003 invasion of Iraq were portrayed by the Presidents Bush to the public as efforts to defend freedom and goodness against forces of evil rather than as efforts to protect American resources in the region and benefit the American economy. Although in some cases, a concern with establishing the supremacy of one's worldview simply serves as a façade for a more basic desire to accumulate material wealth, ideological motives clearly often play a role at least in garnering public support for the actions, and also often acquire their own psychological significance, helping to perpetuate hostilities even after material issues may have been resolved or forgotten.

The key implication of TMT for RCT is that cultures compete not only for pragmatic resources like food and mates but also for symbolic resources that buttress faith in their worldview and significance, and thereby serve their terror management needs. Members of different cultures seek to conquer death in part by amassing resources that establish their symbolic superiority over other cultures.

### SCAPEGOAT THEORY

Like RCT, scapegoat theory (Allport, 1954; Berkowitz & Green, 1962; Jones, 1997) posits that frustration over blocked goals can manifest in aggression and prejudice, but it goes further by suggesting that groups can also blame feelings of low status and moral inadequacy on a despised outgroup (i.e., the scapegoat). Allport (1954) discussed, for example, how Hitler solidified public support by blaming the Jews not only for Germany's postwar economic crisis, but also for undermining the purity and moral integrity of the German people. Because these tend to be convenient sources of blame rather than true competitors for resources, the choice of scapegoat can be quite arbitrary, but it is often a group maligned as different or holding an alternative worldview. This was expressed by one German leader: "The Jew is just convenient. . . . If there were no Jews, the anti-Semites would have to invent them" (quoted in Allport, 1954, p. 325).

As noted earlier, Becker (1973, 1975) proposed that even in the absence of a direct or external threat to the terror-assuaging worldview, there is residual death anxiety that is repressed and focalized onto a group either outside or inside the culture that is designated as the sole impediment to the realization of the culture's economic, moral, and religious superiority over others. Because the ultimate problem the worldview addresses is our animal mortal nature, something we cannot fully escape but that is disguised for us by our culture, an important aspect of derogating the scapegoat is viewing them as less than human, as animals—as though "we" are superior beings and true humans whereas "they" are mere animals unworthy of the rights afforded humans.

This can be seen very clearly in the Nazi equation of Jews with disease-spreading vermin, the American portrayal of blacks as animalistic, the Hutu reference to Tutsi as cockroaches, and the many dehumanizing names developed for despised outgroups such as krauts, nips, gooks, kikes, sandsharks, and wetbacks. By actively dehumanizing, humiliating, hating, and even eradicating the scapegoat, a group affirms its control over life and death and thereby symbolically secures itself against contingency and death—it is as if "they" perish so that "we" do not have to. In support of this analysis, Becker points to the cross-cultural ubiquity of human sacrifice as a means of symbolically cleansing the world of evil and assuring prosperity.

In this way, TMT addresses a deeper "why" question, rarely addressed by other theories of scapegoating, by positing that individuals and cultures sometimes attempt to cope with their existential anxieties by restoring faith in their worldview and their own significance through derogation, dehumanization, subjugation, and (in some cases) extermination of an outgroup perceived to be contaminating the group's enduring cultural legacy.

### SOCIAL IDENTITY THEORY

Social identity theory (SIT; Tajfel & Turner, 1979) is based on the idea that people derive self-esteem in large measure from their membership in social groups and the perceived status and significance of those groups. The underlying motive to enhance self-esteem drives people to highlight the distinctive and positive qualities of their ingroup and to derogate outgroups. Empirical support for SIT is provided in part by evidence that identifying with positively evaluated ingroups enhances self-esteem (e.g., Hirt, Zillman, Erickson, & Kennedy 1992), and that those whose positive self-image has been threatened reaffirm their self-worth by evaluating their groups more favorably (Cialdini & Richardson, 1980) and denigrating outgroups (Fein & Spencer, 1997). Also, research using the minimal groups paradigm (see Brewer, 1979) has shown that feelings of ingroup solidarity and superiority can arise even when the basis of determining group membership is relatively trivial (e.g., preference for one of two abstract painters).

Central to both SIT and TMT is the idea that people seek self-esteem by associating themselves with certain groups and viewing their groups as superior to others. TMT goes one step further, however, in offering an account of what self-esteem is and what psychological function it serves. For TMT, self-esteem consists of the belief that one is a person of value in a world of meaning, and

the primary function of self-esteem is to buffer anxiety stemming from the awareness of death. Through this perspective we can gain a deeper understanding of the psychological significance of specific functions of groups. For one, groups provide the individual with the broad consensual support necessary to sustain faith in a meaningful and enduring conception of reality. Also, groups prescribe what attributes and behaviors confer self-esteem and which result in social approbation, and provide the means to validate the individual's claims to certain achievements and identities, which confers a sense of enduring significance to their lives.

In addition to their role in self-esteem acquisition and maintenance, groups serve the terror management function of providing the individual with collective modes of immortality striving through identification with entities larger and longer lasting than the self. This function of groups was recognized by Rank (1930/1998), who proposed that people bolster faith in their continuance beyond death by merging with a death-transcending collective. This notion was echoed by Lifton (1979), who posited that in addition to seeking literal immortality (e.g., via an immaterial soul), people derive a symbolic sense of immortality by being a valued part of a larger collective such as a tribe or the nation that will live on in perpetuity. TMT converges with these perspectives in suggesting that people identify with and favor their own race, religion, and other social groups, and devalue outgroups, to perceive themselves as significant participants in a meaningful cultural reality instead of just nameless animals in a wholly material reality destined only to death and decay.

Combining insights from SIT and TMT, Castano and colleagues (2002) recently examined the effects of MS on the extent to which participants identify with and evaluate their ingroup. These researchers also reasoned that individuals motivated to seek symbolic immortality through their group identity would be more likely to view their group as high in entityity; that is, as a real entity rather than as a loose assemblage of individuals (Campbell, 1958), so they included a measure of group entityity to assess this possibility. The results showed that Italians primed with death identified more strongly with Italy, perceived Italy as more of an entity, and judged Italians, but not Germans, more positively. These findings add to the previously reviewed evidence from multiple studies that MS intensifies ingroup favoritism and outgroup prejudice (e.g., Greenberg et al., 2003; Greenberg et al., 1990; Harmon-Jones et al., 1996; Jonas et al., 2005; Nelson et al., 1997).

As just discussed, TMT posits that in addition to providing the basis for self-esteem, groups also provide people with a means of identifying with a larger and longer lasting entity that transcends the self. This raises the possibility that heightened mortality concerns would increase group identification even when doing so undermines rather than enhances one's self-esteem. In one set of studies assessing this possibility, Dechesne, Janssen, and van Knippenberg (2000) exposed mortality- and control-primed participants to a criticism of their university that had negative implications for their self-esteem. They found that under these conditions, participants with a low need for closure—who were not dispositionally inclined toward clear and stable meaning—readily disidentified from their university (see Arndt et al., 2002, for similar findings regarding gender and ethnic identifications). In contrast, participants with a high need for closure responded to MS and a criticism of their university by maintaining their university identification and derogating the source of the threat. Dechesne et al. also found that participants primed to think of their university identification as a stable and enduring identification maintained and defended their identification, whereas those primed to view such identifications as highly changeable and temporarily readily disidentified from their school when mortality was salient and their group was framed negatively.

In sum, TMT research demonstrates that MS increases group identification and favoritism. These results augment SIT's account of the self-esteem-conferring benefits of group identification by demonstrating that holding mortality concerns at bay is one important distal motivation for maintaining self-esteem. Furthermore, research shows that, at least for those inclined toward clear meaning and those led to conceive of groups as permanent and real, MS can strengthen group identification and heighten prejudicial reactions to outgroup threats even when one's social identity reflects negatively on self-worth. These findings extend SIT because they demonstrate that, in addition to provid-

ing a basis for self-esteem, groups confer the stable frameworks of meaning necessary to assuage existential concerns.

### JUST WORLD AND SYSTEM JUSTIFICATION THEORIES

Lerner's (1980) just world theory postulates that people are fundamentally inclined to believe that the world is a just place where people get what they deserve and do not suffer unjustifiably. Confronting disadvantaged groups or victims of tragedy threatens to undermine this core belief and consequently motivates people to restore it by dissociating from innocent victims or attributing their misfortunes to their prior misdeeds or dispositional shortcomings. By believing, for example, that rape victims must have behaved seductively (Carli, 1999) and that poor people do not deserve better (Furnham & Gunter, 1984), more fortunate people can justify inequality and suffering and avoid the unsettling prospect that equally dire circumstances could befall them.

Similar to just world theory, system justification theory holds that prejudice helps justify the economic and social status quo, even if it means rationalizing the inferior status of one's ingroup (e.g., Jost & Banaji, 1994; Jost & Burgess, 2000). Therefore, threats to ideological beliefs that serve to justify the status quo should result in defensive efforts to reaffirm faith in those beliefs (e.g., with the use of stereotypes), even if it means justifying one's own disenfranchised position within that ideological system.

TMT shares with just world and system justification theories the broad notion that individuals are motivated to maintain faith in meaningful cultural beliefs and therefore react defensively toward people or events that threaten to undermine those beliefs. According to TMT, however, these beliefs serve a more distal psychological function of keeping death-related concerns at bay. Throughout this chapter we have reviewed evidence in support of this claim: MS exaggerates positive and negative evaluations of people and ideas that uphold or violate one's ideological beliefs. Furthermore, there is research that bears more specifically on just world and system justification theories.

From a TMT perspective, the belief that social events follow a just and benevolent order constitutes a fundamental building block of terror-assuaging meaning. By believing that people get what they deserve and deserve what they get, individuals can obscure the brute fact that they are perpetually susceptible to the threat of death at the hand of incalculable natural and social forces. In one study assessing this analysis, Landau, Johns et al. (2004, Study 5) primed high- and low-PNS participants with mortality or a control topic; then, in an ostensibly separate study, they read about a student whose face was disfigured in an attack and were given the opportunity to choose among information that cast the victim in either a positive or negative light. Results revealed that high-PNS individuals primed with mortality were especially interested in discovering negative information about the victim of a senseless tragedy, presumably because such information helped them restore their belief in a just world. A subsequent study tested the idea that, to the extent that just world beliefs serve the protective functions of keeping concerns about mortality at bay, compromising those beliefs should unleash such concerns. Accordingly, results showed that threatening just world beliefs by presenting positive information about the victim of a senseless tragedy heightened the accessibility of death-related thought among high-PNS participants. Hirschberger (2006) recently provided a conceptual replication of these findings (without measuring PNS); in these studies, MS led people to assign blame to an innocent victim of a paralyzing accident, and reading about such an individual increased death thought accessibility. These results provide converging evidence that just world beliefs serve a terror management function.

Regarding the relationship between system justification and terror management perspectives, Jost, Fitzsimons, and Kay (2004) posited that one existential motive that may prompt individuals to cling to ideology is the need to repress death anxiety. This notion would seem to make system justification and TMT quite compatible, yet Jost et al. saw as an important distinction the fact that TMT research has historically implied that support for one's worldview works in concert with shoring up self-esteem, whereas system justification theory holds that self-esteem is often sacrificed to shore up the system or worldview. However, we believe that TMT actually converges with system



justification theory on this point because the worldview is the more fundamental component of terror management. The findings from the aforementioned studies by Landau et al. support this rapprochement by showing that MS does sometimes encourage people to sacrifice opportunities to boost self-esteem (e.g., performing well on a test) to maintain sources of cultural meaning (e.g., the exalted status of cultural icons; self-relevant stereotypes).

### SOCIAL COGNITIVE APPROACHES

According to social cognitive approaches, stereotyped beliefs and prejudiced attitudes exist not only because of social conditioning and motivation, but also as by-products of normal thinking processes. These approaches are based on the idea that people simplify an otherwise overwhelming amount of information in the social world in part by spontaneously categorizing people (e.g., on the basis of salient features such as race, gender, and age) and applying schemas associated with those categories to form further inferences and judgments about their characteristics and behavior (e.g., Allport, 1954; Moskowitz, 2005). Although on the whole these processes are very useful, they can also yield systematic biases and errors that contribute to prejudice and stereotyping.

Although earlier social cognitive views placed almost exclusive emphasis on the role of cognition, researchers have become increasingly interested in the role of motivational states (e.g., goals, moods, needs) and dispositional propensities (e.g., personal need for structure) in people's use of simple structuring strategies (Kruglanski, 1996; Kunda, 1990; Pyszczynski & Greenberg, 1987). These and other lines of research assessing a motivated social cognition approach indicate that people rely on simple structuring processes to seek closure on confident and coherent judgments and minimize ambiguity. TMT complements this approach by addressing why people are fundamentally disposed to seek simple, well-structured representations of the world and respond adversely to ambiguity and incongruity.

As discussed earlier, TMT posits that to buffer the potential for anxiety inherent in the awareness of the inevitability of death, the individual subscribes to a worldview that imbues the world with stable meaning and order. Therefore, one important distal motivation for the maintenance of stereotypes, heuristics, and other cognitive processes designed to minimize ambiguity and approach subjective consistency is the need to maintain the epistemic clarity necessary to sustain faith in one's terror-assuaging conception of reality as meaningful and orderly. Without a secure epistemic foundation in simple knowledge structures—knowledge of how people behave, what characteristics are associated with different groups, and how interpersonal relations are structured—the individual would have difficulty sustaining faith in the stable, anxiety-buffering conceptions of reality that investment in a worldview provides.

To the extent that seeking simple, structured interpretations of social information serve a terror management function, MS should exaggerate the tendencies to perceive others in simple and schematic ways. Furthermore, based on the aforementioned analysis of individual differences, MS should exacerbate these structuring tendencies particularly among those dispositionally inclined to simple structure. These predictions were confirmed in Schimel et al.'s (1999) aforementioned findings that MS led participants with high need for closure to evaluate homosexual men more favorably when they behaved in a stereotype-consistent manner and more negatively when they behaved in a stereotype-inconsistent manner.

Building on these findings, Landau, Johns et al. (2004) tested whether MS heightens more general tendencies to seek simple structure and consequently devalue those who undermine that structure. In one study mortality-primed individuals were more likely to overlook objective statistical evidence in forming group membership judgments and assume that others belong to certain categories to the extent that they represent the category stereotype. Another study was based on Heider's (1958) claim that people maintain a coherent understanding of others by viewing their actions as stemming from clear causes and dispositions. Results show that high-PNS individuals primed with mortality

were particularly disparaging of an individual who was portrayed in conversation as inconsistently displaying both introverted and extroverted behaviors.

In sum, TMT provides a unique existential perspective on the motivational underpinnings of epistemic clarity. These results are important in showing that stereotypes and other social cognitive structuring tendencies exist not only because of inherent cognitive limitations or the desire for closure, but also because of the more distal motive to maintain stable and orderly perceptions of reality to manage existential fears stemming from the awareness of death. Furthermore, as noted earlier, this research shows that there are important individual differences in the extent to which people derive terror-assuaging meaning from well-structured perceptions of others; therefore, these differences are likely to be important predictors of stereotyping and prejudice, particularly when people are reminded of their mortality.

### SUMMARY

A general theme emerges from our discussion of how TMT complements other theoretical perspectives on prejudice. At a general level, many of these perspectives view prejudice as arising from the perception that some group or groups are preventing the achievement of certain goals, whether they be the needs to bolster individual and collective self-esteem, maintain clear and certain conceptions of the social world, or accumulate material goods. TMT supplements these approaches by explaining how each of these separate goals, although valid and interesting in their own right, serves a more distal terror management motive. A growing body of research supports this integrative approach by demonstrating the influence of mortality reminders (and their interaction with relevant individual differences) on diverse attitudinal and behavioral phenomena that contribute to prejudice, stereotyping, and discrimination, as well as by showing the effects of worldview threats on death-thought accessibility.

### TMT AND THE AMELIORATION OF PREJUDICE AND INTERGROUP CONFLICT

This is the great moral that Albert Camus drew from our demonic times, when he expressed the moving hope that a day would come when each person would proclaim in his own fashion the superiority of being wrong without killing [rather] than being right in the quiet of the charnel house. (Becker, 1975, p. 145)

The research reviewed so far portrays a very dark picture—our need for terror management in the face of awareness of our mortality clearly spawns prejudice, stereotyping, and intergroup aggression. And once intergroup aggression begins, the specter of mortality is likely to loom large, fueling more hostility, stereotypic depictions of the outgroup, and lethal conflict. There are, however, a few glimmers of hope that emerge out of the TMT literature.

Pyszczynski et al. (2003) proposed that the current conflicts in the Middle East and elsewhere have humanity stuck between a rock and hard place, two very different types of worldviews. The rock is a rigid worldview in which there are very decisive moral judgments of rights and wrongs, and very clear designations of good and evil. This is the type of worldview charismatic leaders typically espouse. The prominent negative emotion for those who subscribe to the rock is anger and there is strong prejudice against others who violate the moral prescriptions or who are designated evil. The rock provides a strong faith in a basis for terror management, typically with death transcendence taking the form of religious afterlife beliefs or collectivist identifications with the state and a futuristic myth of continuing revolution or evolution toward some vision of fascist or Marxist utopia (see e.g., Lifton, 1968)

The alternative, the hard place, is a relativistic worldview in which right and wrong, good and evil, are less certain and considered more a matter of one's perspective. In this type of worldview tolerance is valued, prejudice tends to be low, and the prominent negative emotion is anxiety. As a

basis of terror management the hard place is shaky at best, and is often supplemented by the use of drugs such as alcohol, cannabis, Paxil, Zoloft, and so on, and ever-escalating consumerism. Often it seems that people who start out in the hard place end up latching onto a rock by idealizing some cult or cause such as environmentalism, animals rights, atheism, antiglobalization, and so on, as an ultimate *raison d'être*.

Consistent with the idea that the hard place is better for nondefensive responses to different others, terror management research shows that people low in need for structure and authoritarianism, and, at least among Americans, people who self-identify as politically liberal, are generally less prone to respond to reminders of death with derogation or aggression against different others (e.g., Greenberg et al., 1990; Greenberg et al., 1992). Similarly, making the value of tolerance salient to Americans ameliorates reactions to different others (Greenberg et al., 1992). Recent findings (Pyszczynski, Maxfield, et al., 2006) also suggest that creating a sense of common humanity across cultures may have a similar function. Specifically, whereas participants who received MS showed elevated implicit anti-Arab prejudice on an implicit association test after being primed with images of American families or American people just hanging out in groups, being primed with pictures of families from all over the world led Americans who received MS to show decreased implicit anti-Arab prejudice.

In addition to a relativistic worldview, good psychological adjustment seems to be associated with less defensive reactions to reminders of death. MS is less likely to arouse defense in individuals low in neuroticism and depression and high in self-esteem and attachment security (e.g., Goldenberg et al., 2000; Harmon-Jones et al., 1997; Mikulincer et al., 2003; Simon, Arndt, Greenberg, Solomon, & Pyszczynski 1998). Boosts to self-esteem and self-affirmations also seem to eliminate the need for defense after MS (Harmon-Jones et al., 1997; Schmeichel & Martens, 2005). Recently, Weise, Pyszczynski, et al. (2008) also showed that MS reduced support for extreme military violence candidate when participants were primed to think of an unconditionally accepting interaction with an important person from their past.

A final possibility is that increased awareness of death, resulting from more conscious thoughtful contemplation of this problem, might make humans better able to accept their mortality without hostility, scapegoating, and the like. Janoff-Bulman and Yopyk (2004) recently summarized evidence of benefits along these lines for people who have faced life-threatening traumas (e.g., Calhoun & Tedeschi, 2001) and Cozzolino, Staples, Meyers, and Samboceti (2004) found that having extrinsically oriented individuals read an elaborate but concrete scenario in which their death occurs eliminated the greedy response exhibited after a more typical, subtle MS induction.

The picture that emerges from this evidence is that if we brought our children up to sustain faith in a relativistic worldview that places a high value on tolerance and provided them with stable bases of attachment security and self-esteem, and encouraged them to face the problem of death with careful deliberation, they would grow into adults who could face up to the existential threat of death without lashing out at others. The general guidelines for how to accomplish this have been laid out by humanistic (e.g., Rank, 1930/1998; Rogers, 1963) and existential (Becker, 1971; Yalom, 1980) psychologists, and more recently by Ryan and Deci (2002). Precisely how to accomplish this in a world in which children are brought up by adults who do not necessarily embrace relativistic worldviews or serve as reliable bases of security and self-worth, and who have their own terror with which to contend, although a difficult matter, should be a top priority for social scientists, practitioners, educators, and politicians.

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