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Arnaud Wisman

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Digging in Terror Management Theory: To Use or Lose the Symbolic Self?

Arnaud Wisman

University of Kent

Without the meditative background that is criticism, works become isolated gestures, historical accidents, soon forgotten.

Milan Kundera

"I think therefore I am" is the statement of an intellectual who underrates toothaches.

Milan Kundera

Terror Management Theory (TMT) is a wellestablished theory that has provided major and frequent contributions to the field of psychology and beyond. An impressive number of studies have provided support for a variety of TMT hypotheses (Pyszczynski, Solomon, & Greenberg, 2003), and TMT is one of the few theories that can provide feasible explanations for a wide range of human phenomena, including taboos surrounding the human body (Goldenberg, Pyszczynski, Johnson, Greenberg, & Solomon, 2000), people's desire for offspring (Wisman & Goldenberg, 2005), rejection and avoidance of outgroup members (e.g., Greenberg et al., 1990; Ochsman & Mathy, 1996), and polarization of political views in the aftermath of dramatic historical events such as 9/11 (Pyszczynski et al., 2003). For these reasons, and more, TMT merits serious consideration, open examination, and continuous exploration.

Alongside of TMT's strength and breath, however, are some reasons to believe that the theory may not be complete. The theory focuses primarily on the symbolic mechanisms (cultural standards and self-esteem) that individuals use to cope with existential anxiety. In this article, I raise the possibility that individuals may also use presymbolic mechanisms to cope with this anxiety. Presymbolic mechanisms include phenomena such as flow, sex, secure attachment, and getting lost in a crowd. They operate, in large part, by reducing objective self-awareness. These mechanisms are evolutionarily and developmentally more basic than symbolic ones and do not require as great an involvement of symbolic capacities.

I begin by discussing the symbolic buffer that is at the core of TMT. Then, I describe some presymbolic mechanisms and present some evidence that they may also be useful in buffering existential concerns. After that, I discuss some factors that may determine when individuals use presymbolic mechanisms, rather than symbolic ones, to manage their existential concerns. Finally, I offer some speculations on the nature of optimal existential regulation.

Proximal and Distal Defenses in TMT

According to TMT, humans are unique in the animal world in knowing that they are going to die. Like other animals, though, human have an undeniable instinct to stay alive. Together, these features present humans with a unique and seemingly unsolvable problem. Humans are biologically motivated to stay alive, but they know that they cannot stay alive—at least not permanently. There are only two logical solutions to this problem: (a) eliminate the instinct to stay alive or (b) eliminate death. Although neither solution is possible in the literal sense, individuals cope with this existential problem by eliminating the problem of death awareness.

It has been suggested (Pyszczynski, Greenberg, & Solomon, 1999) that individuals manage the problem of death awareness through two types of defenses. In the proximal defense, individuals attempt to suppress thoughts of their death or else distract themselves from such thoughts. They may also engage in pseudological denials of vulnerability and the relevance of death concerns (e.g., "I am young. Why would I die?"). Proximal defenses work by removing the problem of death from consciousness. These defenses do nothing, however, to solve the problem. The individual will still die, and death related thoughts will still be accessible at the unconscious level. So, at best, the proximal defenses provide only partial and temporary relief.

With distal defenses, individuals make use of their symbolic abilities. According to TMT, individuals develop their own individualized version of the standards and values espoused in their culture (i.e., their individualized worldview) and then try to live in accordance with those standards and values. If they are able to do so, then they attain high self-esteem that, in turn, buffers them for the fear of death. By living in accordance with their individualized cultural worldview, individuals can come to believe that some important aspect of themselves (e.g., soul, children, values) will live on after the death of their biological body. Thus, unlike the proximal defenses, the distal one allows individuals to

believe that they can transcend death in some form. This means that the distal defense can eliminate death concerns at both the conscious and the unconscious level.

There is at least one weakness to the distal or symbolic defense. It only works if individuals have absolute faith in their worldview. Worldviews, however, are relatively arbitrary constructions and there are numerous conflicting worldviews in existence. So, individuals may be exposed frequently to threats to their worldview. If individuals experience any doubt that their worldview is absolutely valid, then they become susceptible to existential anxiety. After all, if individuals are not living up to the appropriate standards, then they are not assured of transcending death in some way.

In sum, TMT suggests that individuals may use distraction and suppression to cope with their existential concerns on a temporary basis. These proximal defenses do not actually eliminate the problem of death. So, individuals may resort to the distal defense. In this way, individuals come to believe that some aspect of the self will continue after the death of the biological body. There is an internal logic to TMT and a number of studies have provided support for its hypotheses. There are reasons to believe, though, that there may be more types of defenses than captured in the proximal–distal distinction.

Presymbolic Defenses

It is interesting to note that animals and young children do not seem to suffer from existential concerns. It is not that they buffer existential anxiety when it arises. It appears instead that, in the absence of a conceptual self, the anxiety does not arise in the first place. This observation raises the possibility that strategies that reduce an individual's awareness of his or her conceptual or symbolic self might help manage the problem of death awareness—and not just temporarily.

In his recent book, The Cultural Animal, Baumeister (2005) noted that humans, like other animals, have skills that allow them to survive in the physical and social world. These skills, for the most part, are rather basic and allow individuals (and other animals) to eat, reproduce, fight or flee when threatened, and so on. Baumeister (2005) also noted, though, that humans are unique in the extent to which they can create, maintain, and participate in a created, cultural environment. This environment grows out of socially shared information and provides individuals with goals, ideas, rules, purposes, and meaning structures. In other words, the cultural environment is largely conceptual. Humans are adept at operating in such a conceptual environment because they evolved as cultural animals living in a cultural world.

In line with Baumeister's (2005) distinction between the physical/social environment and the cultural environment, I refer to regulative behavior that is not specific to the cultural world as *presymbolic*. These behaviors include affiliation, eating, drinking, having sex, and sleeping. Individuals can enact these behaviors with little involvement of the symbolic capacities they need to deal with the cultural world.

I refer to regulative behavior that is specific to the cultural world as *symbolic*. These are behaviors that rely heavily on conceptualization and what might be called counterfactual knowledge (e.g., goals, standards, future consequences). For instance, students may endure days of hard work locked away from the sunshine by imagining themselves at some future time getting a Ph.D. and landing a job full of meaningful, enjoyable work. As I have just shown, TMT emphasizes the role of cultural or symbolic processing in the buffering of existential concerns. It is possible, though, that individuals may also use strategies in the less conceptual, more physical and social environment to buffer their existential concerns.

Losing the Self as a Defense Mechanism

Although some primates show some mirror mediated self-recognition, and as such seem to have a sense of objective self awareness (Duval & Wicklund, 1973; Lewis 1992), it is extremely unlikely that primates ponder their own mortality. They seem to lack the cognitive capacities required to entertain thoughts about their own death. In fact, even humans are happily unaware of their own mortality until they reach the age of approximately 7 years (Florian & Kravetz, 1985). Thus, to be fully aware of the consequences of life and death, a necessary condition seems to be what Sedikides and Skrowonski (1997, 2000, 2003) called a sense of symbolic self-awareness. These observations raise the possibility that a loss of self-awareness could lessen the psychological consequences of mortality salience. The individual will still die, but he or she will not be overly worried about this during his or her life.

Consistent with the hypothesis that reductions in self-awareness can act as a buffer of existential concerns, several studies have demonstrated a relation between mortality salience and unpleasant self-awareness. Various studies have shown that reminders of mortality promote behaviors that are directed at avoiding a self-focus (Arndt, Greenberg, Simon, Pyszczynski & Solomon, 1998; Taubman–Ben-Ari & Findler, 2005). For instance, participants who wrote about their death spent significantly less time in front of a mirror (a classic measurement of self-awareness developed by Duval & Wicklund, 1972, 1973), compared to participants in a control condition.

A recent study (Taubman–Ben-Ari & Findler, 2005) found that eating reduced the effects of reminders of mortality. More specifically, the results showed that participants who were asked to taste food did not show the usual increased defensiveness after reminders of mortality. By contrast, participants who were not offered food showed more severe judgments of transgressions (a measure of symbolic defense), as compared to a control condition. In short, this study suggested that reducing a self-focus by activating presymbolic mechanism (eating) may help to reduce thoughts about mortality.

Such an outcome would be compatible with a number of classic studies on obejctive self-awareness. For example, individuals smoked relatively more when seated in front of a mirror (Wicklund, 1975). Apparently, the smoking, although life threatening, allows individuals to escape the negative affect associated with their objective self-awareness (see for an overview, Baumeister, 1991).

In the context of TMT, the results of the studies just discussed would be attributed to a proximal defense. Eating, smoking, or avoidance of a mirror do not allow individuals to manage the problem of death. So, they are not likely to reduce the unconscious accessibility of death related thoughts (Arndt, Routledge, Cox, & Goldenberg, 2005). Contrary to this conclusion, though, several studies have shown that presymbolic behaviors that reduce self-awareness also reduce the accessibility of death related thoughts (Taubman–Ben-Ari & Findler, 2005; Wisman & Koole, 2003; Wisman & Shrira, 2006). It appears, therefore, that some forms of presymbolic defense go beyond simple distraction or suppression. They can contribute to effective coping with existential concerns.

Another TMT line of research that is relevant in this context reveals that reminders of mortality can increase the willingness to engage in risky behaviors such as reckless driving (Taubman-Ben-Ari, Florian & Mikulincer, 1999), unsafe sex (Goldenberg, Cox, Pyszczynski, Greenberg, & Solomon, 2002), and unhealthy food consumption (Ferraro, Shiv, & Bettman, 2005). These kind of risk taking behaviors are also associated with a loss of self-awareness (Baumeister, 1991). Losing self-awareness can help individuals to cope with unpleasant self-awareness that the symbolic self can engender. By engaging in presymbolic behaviors, such as continuous food taking, individuals shut down the symbolic self and, as such, regulate unpleasant self-awareness. For instance, research revealed that binging may function as a mechanism to avoid identity issues (Wheeler, Adams, & Keating, 2001).

In the context of TMT, such risk taking behaviors have been explained in terms of self-esteem enhancement. Although the behaviors threaten the individual's life, they also allow the individual to live up to the standards of their culture. However, a number of studies have shown that individuals sometimes engage in these risk taking behaviors even when their own beliefs or health are at stake (Ferraro et al., 2005; Taubman–Ben-Ari & Findler, 2005). Such findings are consistent with the hypothesis that when mortality is salient but symbolic means to buffer death anxiety are not accessible, individuals might engage in behaviors that lead them to lose symbolic self-awareness. When individuals are not objectively self-aware, they are more likely to engage in behaviors that are inconsistent with their own attitudes (Milgram, 1974, Zimbardo, 1973).

It seems reasonable to suggest, therefore, that both presymbolic and symbolic terror management mechanism can effectively reduce death-related thoughts, and that both can do so at the conscious, as well as the unconscious, levels. Although presymbolic mechanisms involve losing the self, and symbolic mechanisms involve using the self, both accomplish the same goal. They reduce the accessibility of death related thoughts.

The Social Roots of Presymbolic Defenses

Why should presymbolic defenses reduce the accessibility of death-related thoughts? An answer can be found in human cultural evolution. In line with TMT (Pyszczynzki et al., 2003), it can be argued that humans had to deal with the problem of death before they developed extensive symbolic solutions to address the problem. If this argument is correct, then in earlier stages of cultural development humans relied on presymbolic structures to manage death awareness. Moreover, these basic mechanisms may still in place. Evolution tends to build on the past, rather than cast it off and start anew. It does not throw out an old brain system, for example. Rather, evolution modifies and extends the existing system (Allman, 1999). Similarly, wings seemed to have evolved out of existing limbs rather than out of a total new structure. It seems reasonable to suppose, therefore, that the more recently developed symbolic solutions to the problem of death may have their roots in presymbolic structures. If so, then an examination of these roots may provide insight into other mechanisms that might buffer existential concerns.

Humanitie's ancestors lived the first 90% of their existence in small, close knit groups (Maryanski & Turner, 1992; Sahlins, 1972) that were linked to larger social networks (Van Vugt & Van Lange, 2006). Likely presymbolic candidates that may have preceded symbolic defenses, therefore, are affiliative strivings (Baumeister & Leary, 1995). From an evolutionary perspective, belonging to a group confers many impor-

tant advantages. It improved an individual's ability to gather food, increased likelihood of mating, and conferred greater protection against threats from the environment (Baumeister & Leary, 1995; Buss, 1991; Sedikides & Skowronski, 1997). Given the adaptive benefits associated with belongingness, it seems likely that vigorous psychological mechanisms would have evolved to ensure that individuals would form strong associations between themselves and their social group, and minimize the danger of becoming isolated or expelled from the group (Abrams, Marques & Hogg, 2005; Baumeister & Leary, 1995; Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Taylor et al., 2000).

Indeed, numerous studies have demonstrated the significance of a need to belong in human motivation. For instance, it has been shown that social exclusion impairs self-regulation on several tasks (Baumeister, DeWall, Ciarocco, & Twenge, 2005). Moreover, although some aspects of affiliation might have become more abstract and symbolic (belonging to a nation), others seem connected with innate mechanisms (MacDonald & Leary, 2005) and play a major role in coping with distress (Nachmias, Gunnar, Mangelsdorf, Parritz, & Buss, 1996; Taylor et al., 2000).

One way in which becoming immersed in a group can aid in coping is by lowering objective self-awareness. This has been demonstrated in a wide range of classic social psychology studies (Diener, 1979; Milgram, 1974, Mullen, 1991, Zimbardo, 1973). In addition, when individuals become immersed in a group, they cease comparing their behavior against their own standards and they feel less concerned about how others may evaluate their behavior (Mann, Newton, & tones, 1982).

It is possible, therefore, that mortality salience engenders a presymbolic defense related to belongingness and affiliation. From this perspective, it is natural for individuals who are threatened to seek to hide in a crowd. In doing so, they also reduce their objective self-awareness. This, in turn, can reduce their existential concerns, which can only exist in the presence of a symbolic self.

If this reasoning is correct, then mortality salience should increase the desire to lose one's self in a group and this, in turn, should reduce the usual effects of mortality salience (e.g., derogation of an outgroup member). Wisman and Koole (2003) obtained evidence that this is the case in a series of studies. In these studies, reminders of mortality induced in participants a tendency to sit next to and among fellow group members, as opposed to sitting alone. Moreover, this was true even when the increased affiliation meant that participants' worldviews were threatened by the group with whom they were affiliating, and when affiliating with the group meant that participants had to attack their own worldviews. It is difficult to interpret such

findings in terms of a distal symbolic defense (e.g., bolster worldview). It appears, instead, that mortality salience motivated participants to affiliate, and that in doing so participants lowered their awareness of their symbolic self.

Further evidence that it was a reduction in self-awareness that allowed participants to feel comfortable affiliating with individuals who held worldviews contrary to their own was obtained by Wisman and Shrira (2006). They found that, compared to participants in the control condition, participants reminded of death sought greater physical proximity with a group of individuals, but had no greater willingness to socialize with a confederate (such as having a cup of coffee). In other words, the effect of mortality salience was specific to losing one's self in the crowd and not merely affiliating with others. It is also interesting to note that participants who sat with a group of individuals who held worldviews different from their own expressed a weaker defense of their worldview. In other words, affiliation reduced defensiveness following mortality salience.

In sum, it appears that a presymbolic mechanism, such as affiliation, reduced symbolic self-awareness, which in turn reduced the effects of mortality salience. This outcome does not seem to be due to distraction or suppression and, unlike the worldview defense, it does not promise some form of immortality. Rather, individuals who lose themselves in the group seem to lose their objective self-awareness, and in the absence of a symbolic self there can be no existential concerns.

It is important that these findings and theories are corroborated by a developmental perspective (Bowlby, 1969; Florian & Mikulincer, 1998). Human infants are not born with a ready-made symbolic solution to the problem of existential fear. Therefore, it is likely that when death awareness first awakes in them, human infants have to rely on mechanisms (e.g., safe attachment) that do not require the cognitive capacities that are associated with symbolic awareness (Bowlby, 1969; Florian & Mikulincer, 1998). These presymbolic mechanisms may still function to ward off fears, including existential ones.

Consistent with this hypothesis, Mikulincer, Florian and Hirschberger (2003) proposed that close relationships may form an anxiety-buffer that is functionally distinct from worldview defense. Indeed, numerous studies have shown that secure attachment figures can function to ward off existential fear (Mikulincer & Florian, 2000; Mikulincer et al., 2003). In fact, only insecurely attached individuals were found to respond to mortality salience by increased worldview defense (Mikulincer & Florian, 2001). By contrast, securely attached individuals were found to respond to mortality salience by increasing their desire for intimacy.

Taubman–Ben-Ari, Findler, and Mikulincer (2002) obtained related results. They found that mortality salience led to more willingness to initiate social interactions, especially among securely attached individuals. Finally, research has demonstrated that thoughts of romantic commitment reduce death thought accessibility (Florian, Mikulincer, & Hirschberger, 2002; Hirschberger, Florian, & Mikulincer, 2003). In sum, this body of research, along with the Wisman and Koole (2003) findings, suggest that individuals can make use of affiliation, a presymbolic mechanism, to manage the terror that is associated with death awareness.

To Use or Lose the Symbolic Self?

When do individuals use symbolic mechanisms (e.g., culture, self-esteem) to buffer themselves from existential concerns, and when to they use presymbolic defenses? A consideration of the research derived from objective self-awareness theory (OSA, Duval & Wicklund, 1972; Wicklund & Gollwitzer, 1982; 1985)¹ may shed some light on the conditions that favor one strategy over the other. According to this theory, when individuals become aware of themselves as an object of evaluation, they become more aware of the discrepancies between their actual self and the standards set for the self. This discrepancy, in turn, arouses negative affect that motivates individuals either to avoid self-awareness or reduce the discrepancy.

If the discrepancy is relatively small or if individuals feel that they can reduce the discrepancy, then they attempt to do so. For instance, students may realize that they did not study enough for their last exam. So, they may decide to study harder for the next exam. In doing so, they may be able to reduce the discrepancy between their actual test performance and their desired performance

If individuals feel that there are unable to reduce the discrepancy, however, then they may attempt to reduce self-awareness more directly (Carver, 1975; Gollwitzer & Wicklund, 1985; Silvia & Duval, 2001; Wicklund & Duval, 1971). For instance, students who do poorly on a test may go out and drink unhealthy amounts of alcoholic beverages. This activity will not improve their performance on the next test, but it may help them avoid the negative feelings aroused by their poor performance (i.e., the discrepancy between their desired and actual performance). Indeed, various stud-

ies have illustrated that individuals eat, drink, or use drugs to reduce their sense of self-awareness (for a broad overview see Baumeister, 1991).

This research raises the possibility that individuals with strong, coherent worldviews may attempt to manage mortality salience with worldview defense, because doing so provides them with an unequivocal solution to the problem of death (see Dechesne et al., 2003). Individuals with weaker, less coherent worldviews, or individuals that believe that they cannot live up to the standards of their worldview, are left without a clear way to attain immortality. As a result, they may attempt to cope by using behaviors that reduce their objective self-awareness. More generally, bridging OSA theory and TMT suggests that individuals make use of symbolic solutions (worldview defense) to reduce death thought accessibility when symbolic solutions are accessible and seem sufficient to solve the problem of death, but they may attempt to lose symbolic self-awareness when symbolic solutions are not accessible or do not seem sufficient to solve the problem of death.

Toward an Optimal Existential Regulation

Both the proximal and the distal defenses suggested in TMT seem to have their weaknesses. The proximal defense seems to be temporary and restricted to conscious thoughts. Moreover, most of the behaviors (e.g., drinking or overeating) that individuals use to distract themselves from unpleasant thoughts contribute to nonoptimal functioning. By comparison, the distal defense can eliminate the problem of death, but it is based on an arbitrary, constructed worldview. These structures need continuous social validation. Because there are countless contradicting worldviews, individuals can never be sure that their belief system is the only correct one. The insecurity surrounding one's worldview could promote defensiveness and outgroup derogation, and even extremism (e.g., McGregor, Zanna, Holmes, & Spencer, 2001; Pyszczynski et al., 2006).

The final problem with distal, symbolic defenses is that they are abstract. They exist in individual's heads and lack a direct touch with reality. The great source of inspiration for all TMT researchers, Ernest Becker (1973), acknowledged this problem and noted that whatever symbolic solution people invent or choose, those people remain just as mortal as a cockroach or a peacock.

Is it possible for individuals to develop an existential defense mechanism that is more effective than either the proximal or distal defense? In general, such a defense would be grounded in the real world, would not be fragile, would be well connected to the individual's genuine values, but would not promote objective

¹Note that this comparison is not to suggest that death awareness is equal to negative self-awareness, but rather that the strategies that individuals may use to tackle the awareness of death may resemble the strategies to reduce self-awareness, as proposed by the OSA theory. For a broader discussion about the relationship between self-awareness and the awareness of mortality, see Silvia (2001).

self-awareness. Activities such as dance, martial arts, sports, or religious activities seem like promising candidates. These activities allow individuals to lose their self focus but at the same time to increase their feelings of self-worth by engaging in behavior that is approved by the cultural standards or their own set standards (Leary, 2004). Similarly, affiliative behaviors can be associated with a reduced focus on the self, as well as with prosocial behaviors (Joireman & Duell, 2005). It appears, therefore, that optimal existential regulation should incorporate some using and some losing of the symbolic self.

Perhaps the prototype of the use—lose balance is the flow experience (Csikszentmihalyi, 2000). During flow, individuals seem to lose themselves and become completely immersed in activities. They experience intense positive affect, a distortion of the sense of time, and few off-task thoughts. Flow also quiets the self. Individuals in flow are not aware of themselves as objects of evaluation.

Flow is more than just the absence of self-awareness, however. In fact, during flow, individuals are keenly aware of their activities. Moreover, individuals do not experience flow during activities that have no meaning or intrinsic value to them, and flow is associated with a growth in the self. In short, individuals engaged in flow are immerged in an activity that is close to their authentic self (Csikszentmihalyi, 2000). So, flow might come close to what one may call *optimal existential regulation*. It balances aspects of using and losing the symbolic self. As a result, it is a strong candidate for an effective, long-term buffer of existential concerns.

This hypothesis is congruent with suggestions by Martin (1999). He proposed that flow may be a general moderator of a number of social psychology phenomena, including mortality salience. In fact, he reported that, in comparison to control conditions, mortality salience increased outgroup derogation only among participants who reported experiencing low levels of flow. Mortality salience had no effect on individuals high in flow.

The Individual in Relation to the Group

I have suggested that getting lost in a crowd may serve as an effective buffer for existential concerns. However, as Heidegger (1982) noted, merely following the crowd keeps individuals from establishing their authentic self and allows them to hide from their existential concerns (Martin, Cambell, & Henry, 2004). Becker (1973) formulated the problem this way:

Most people play it safe: they choose the beyond of standard transference objects like their parents; the boss or the leader; they try to be a good provider or a solid citizen. In this way they earn their species immortality as an agent of procreation, or collective or cultural immortality as part of a social group of some kind. (p. 170)

This not necessarily optimal, though. As noted by Martin et al. (2004), by adopting widespread cultural values, individuals may

lose themselves in their daily business and worldly affairs, and avoid the awesome responsibility of having to define their essence for themselves. They base their life choices not on personal values but on widely shared cultural values that, while seeming to be absolute, may not be valid for them as unique individuals. As a result, these individuals fail to become the unique individual they are capable of becoming. (p. 434)

Although individuals often seek the crowd to buffer themselves from the fear of death, it is precisely this fear that may lead them to separate themselves from the group (Heidegger, 1982; Martin et al., 2004). Individuals who have had a near-death experience often switch their worldviews to a more individuated worldview and report greater well being (Tedeschi & Calhoun, 2004). They also experience a sense of liberation, of being able to choose what they really want to do and are less concerned about the opinion of others (Martin et al., 2004).

Related findings have been obtained by Cozzolino Staples, Meyers, and Sambioceti (2005; for a more elaborated discussion see Cozzolino, this issue). They distinguished between mortality salience and death reflection, and found that the former led highly extrinsic participants to manifest greed, whereas the latter led them to manifest intrinsic, unselfish behavior (Cozollino et al., 2005). This and other studies showed that reflections upon one's death may provide the soil for a more authentic life style. Such a lifestyle seems to involve a balance of losing the self and using the self, as well as a balance of hiding in the crowd and being a unique individual. With this balance, individuals lose their objective self-awareness and remain true to their authentic values. As a result, the fear of death, which is based on a highly accessible symbolic self, cannot take hold.

Thus, optimal existential coping may involve a consideration of the self in relation to the group. This may involve some degree of deviation on the individual's part. Thus, optimal functioning may come at a price. As Becker (1973) put it:

It takes strength and courage the average man does not have and could not even understand. The most terrifying burden of the creature is to be isolated which is what happens in individuation: one separates himself out of the herd. This move exposes the person to the sense of being completely crushed and annihilated be-

cause he sticks out so much, has to carry so much in himself. (p. 171)

Concluding Remarks

The psychological confrontation with death is undoubtedly one of the most puzzling and challenging problems that each individual must face. Because individuals evolved with an instinct for survival in juxtaposition with the awareness of the recognition of the impossibility of their mission, they need to rely on psychological defenses to shield themselves from existential anxiety. According to TMT, the belief in something larger and longer lasting than oneself and the conviction that what one does is meaningful are all elements of symbolic structures (worldviews) that function as shields against the awareness of one's terrifying fate. The current perspective recognizes the importance of symbolic solutions to the problem of death, but suggests that not all human beings are capable or willing to construct and maintain beliefs that provide an illusion of transcendence. For these individuals, presymbolic mechanisms may provide only a temporary respite. When used optimally, though, these mechanisms can lower objective self-awareness and effectively eliminate death-related thoughts.

I believe that the proposed framework contributes to TMT in several ways. First of all, the proposed framework synthesizes a wide range of theoretical perspectives into one comprehensive framework of existential regulation. Second, this framework provides a simplified model that can account for several anomalies within TMT. Third, the proposed framework extends the core logic of TMT. Fourth, the proposed framework provides unique predictions that might be applicable to clinical settings. Finally, a better understanding of the working of alternative strategies and perhaps more primitive solutions to the problem of death might elucidate why so many human beings endorse symbolic structures that not only terrorize themselves, but also constitute a major threat to peaceful coexistence.

Notes

Correspondence should be sent to Arnaud Wisman, Department of Psychology, Keynes College, The University of Kent at Canterbury, Canterbury, Kent CT2 7NP. E-mail: A.Wisman@kent.ac.uk

References

Abrams, D., Marques, J. M., & Hogg, M. A. (2005). A social psychological framework for understanding inclusion and exclusion. In D. Abrams, J. M. Marques, & M. A. Hogg (Eds.), The

- social psychology of exclusion and inclusion (pp. 1–24). New York: Psychology Press.
- Allman, J. (1999). Evolving brains. New York: Scientific American Library.
- Arndt, J., Greenberg, J., Simon, L., Pyszczynski, T., T., & Solomon, S. (1998). Terror management and self-awareness: Evidence that mortality salience provokes avoidance of the self-focused state. *Personality and Social Psychological Bulletin*, 24, 1216–1232.
- Arndt, J., Routledge, C., Cox, C. R., & Goldenberg, J. G. (2005). The worm at the core: A terror management perspective on the roots of psychological dysfunction. *Applied and Preventative Psychology*, 11, 191–213.
- Baumeister, R. F. (1991). Escaping the self: Alcoholism, spirituality, masochism, and other flights from the burden of selfhood. New York: Basic Books.
- Baumeister, R. F. (2005). *The cultural animal: Human nature, meaning, and social life.* New York: Oxford University Press.
- Baumeister, R. F., DeWall, C. N., Ciaracco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88, 589–604.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Becker, E. (1973) The denial of death. New York: Free Press.
- Bowlby, J. (1969) Attachment and loss: Attachment. New York: Basic Books.
- Buss, D. M. (1991). Evolutionary personality psychology. Annual Review of Psychology, 42, 459–491.
- Carver, C. S. (1975). Physical aggression as a function of objective self-awareness and attitudes toward punishment. *Journal of Ex*perimental Social Psychology, 11, 510–519.
- Cozzolino, P. J., Staples, A. D., Meyers, L. S., & Samboceti, J. (2004). Greed, death, and values: From terror management to transcendence management theory. *Personality and Social Psychology Bulletin*, 30, 278–292.
- Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55, 5–14.
- Dechesne, M., Pyszczynski, T., Arndt, J., Ransom, S., Sheldon, K. M., van Knippenberg, et al. (2003). Literal and symbolic immortality: The effect of evidence of literal immortality on self-esteem striving in response to mortality salience. *Journal of Personality and Social Psychology*, 84, 722–737.
- Diener, E. (1979). Deindividuation, self-awareness, and disinhibition. *Journal of Personality and Social Psychology*, 37, 1160–1171.
- Duval, S., & Wicklund, R. A. (1972). A theory of objective selfawareness. New York: Academic Press.
- Duval, S., & Wicklund, R. A. (1973). Effects of objective self-awareness on attribution of causality. *Journal of Experimental Social Psychology*, 9, 17–31.
- Ferraro, R., Shiv, B., & Bettman, J.R. (2005). Let us eat and drink, for tomorrow we shall die: Effects of mortality salience and self-esteem on self-regulation in consumer choice. *Journal of Consumer Research*, 32, 65–75.
- Florian, V., & Kravetz, S. (1985). Children's concepts of death: A cross-cultural comparison among Muslims, Druze, Christians and Jews in Israel. *Journal of Cross-Cultural Psychology*, 16, 174–189.
- Florian, V., & Mikulincer, M. (1998). Symbolic immortality and the management of the terror of death: The moderating role of attachment style. *Journal of Personality and Social Psychology*, 74, 725–734.
- Florian, V., Mikulincer, M., & Hirschberger, G. (2002). The anxiety-buffering function of close relationships: Evidence that relationship commitment acts as a terror management mechanism. *Journal of Personality and Social Psychology*, 82, 527–542.

- Gollwitzer, P. M., & Wicklund, R. A. (1985). The pursuit of self-defining goals. In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behavior (pp. 61–85). Heidelberg, Germany: Springer-Verlag
- Gollwitzer, P. M., & Wicklund, R. A. (1985). Self-symbolizing and the neglect of others' perspectives. *Journal of Personality and Social Psychology*, 48, 702–715.
- Goldenberg, J. L., Pyszczynski, T., Johnson, K. D., Greenberg, J., & Solomon, S. (2000). Fleeing the body: A Terror Management perspective on the problem of human corporeality. *Personality* and Social Psychology Review, 4, 200–218.
- Goldenberg, J. L., Cox, C., Pyszczynski, T., Greenberg, J., & Solomon, S. (2002). Understanding human ambivalence about sex: The effects of stripping sex of its meaning. *Journal of Sex Research*, 39, 310–320.
- Greenberg, J., Pyszcynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., et al. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, 58, 308–318.
- Heidegger, M. (1982). Being and time (J. Macquarrie & E. Robinson, Trans.). New York: Harper & Row. (Original work published in 1927)
- Hirschberger, G., Florian, V., & Mikulincer, M. (2003). Strivings for romantic intimacy following partner complaint or partner criticism: A terror management perspective. *Journal of Social & Personal Relationships*, 20, 675–687.
- Joireman, J., & Duell, B. (2005). Mother Theresa vs. Ebenezer Scrooge: Mortality salience leads proselfs to endorse self-transcendent values (unless proselfs are reassured). Personality and Social Psychology Bulletin, 31, 307–320.
- Leary, M. R. (2004). The function of self-esteem in terror management theory and sociometer theory: Comment on Pyszczynski et al. (2004). Psychological Bulletin, 130, 478–482
- Lewis, M. (1992). Shame: The exposed self. New York: Free Press. MacDonald, G., & Leary M. R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. Psychological Bulletin, 131, 202–223.
- McGregor, I., Zanna, M. P., Holmes, J. G., & Spencer, S. J. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology*, 80, 472–488.
- Mann, L., Newton, J. W., & Tones, J. M. (1982). A test between deindividuation and emergent norm theories of crowd aggression. *Journal of Personality and Social Psychology*, 42, 260–272.
- Maryanski, A., & Turner, J.H. (1992). The social cage: Human nature and the evolution of society. Stanford, CA: Stanford University Press.
- Martin, L. L. (1999). I-D compensation theory: Some implications of trying to satisfy immediate-return needs in a delayed-return culture. *Psychological Inquiry*, 10, 195–208.
- Martin, L. L., Campbell, K. W., & Henry, C D. (2004). The roar of awakening: Mortality acknowledgment as a call to authentic living. In J. Greenberg, S. L., Koole, & T. Pyszczynski (Eds.), Handbook of experimental existential psychology (pp. 431–448). New York: Guilford.
- Mikulincer, M., Birnbaum, G., Woddis, D., & Nachmias, O. (2000). Stress and accessibility of proximity-related thoughts: Exploring the normative and intraindividual components of attachment theory. *Journal of Personality and Social Psychology*, 78, 509–523.
- Mikulincer, M., & Florian, V. (2000). Exploring individual differences in reactions to mortality salience: Does attachment style regulate terror management mechanisms? *Journal of Personality and Social Psychology*, 79, 260–273.
- Mikulincer, M., & Florian, V. (2001). Attachment style and affect regulation: Implications for coping with stress and mental health. In G. Fletcher & M. Clark (Eds.), Blackwell handbook of

- social psychology: Interpersonal processes (pp. 537–557). Oxford, UK: Blackwell.
- Mikulincer, M., Florian, V., & Hirschberger, G. (2003). The existential function of close relationships: Introducing death into the science of love. *Personality and Social Psychology Review*, 7(1), 20–40.
- Milgram, S. (1974), Obedience to authority: An experimental view. New York: Harper & Row.
- Mullen, B(1991) Group compostion, salience and cognitive represtnations: The phenomenology of being in a group. *Jour*nal of Experimental Social Psychology, 27, 297–323.
- Nachmias, M., Gunnar, M. R., Mangelsdobf, S., Parritz, R. H., & Buss.K.(1996).
- Behavioral inhibition and stress reactivity: The moderating role of attachment. *Child Development*, 67, 508–522.
- Ochsmann, R., & Mathy, M. (1996). Depreciating of and distancing from foreigners: Effects of mortality salience. Unpublished manuscript, Universitat Mainz, Germany.
- Pyszczynski, T., Abdollahi, A., Solomon, S., Greenberg, J., Cohen, F., & Weise, D. (2006). Mortality salience, martyrdom, and military might: The great satan versus the axis of evil. *Personality and Social Psychology Bulletin*, 32, 525–537.
- Pyszczynski, T., Greenberg, J., & Solomon, S. (1999). A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review*, 106, 835–845.
- Pyszczynski, T., Solomon, S., & Greenberg, J. (2003). In the wake of 9/11: The psychology of terror. Washington DC: American Psychological Association.
- Sahlins, M. (1972). Stone age economics. New York: Aldine.
- Sedikides, C., & Skowronski, J. J. (1997). The symbolic self in evolutionary context. *Personality and Social Psychology Review*, 1, 80–102.
- Sedikides, C., & Skowronski, J. J. (2000). On the evolutionary functions of the symbolic self: The emergence of self-evaluation motives. In A. Tesser, R. Felson, & J. Suls (Eds.), *Psychological perspectives on self and identity* (pp. 91–117). Washington, DC: APA Books.
- Sedikides, C., & Skowronski, J. J. (2003). Evolution of the self: Issues and prospects. In M. R. Leary & J. P. Tangney (Eds.), Handbook of self and identity (594–609). New York: Guilford.
- Silvia, P. J. (2001). Nothing or the opposite: Intersecting terror management and objective self-awareness. European Journal of Personality, 15, 73–82.
- Silvia, P. J., & Duval, T. S. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review*, 5, 230–241.
- Taubman–Ben-Ari, O., & Findler, L. (2005). Proximal and distal effects of mortality salience on willingness to engage in health promoting behavior along the life span. *Psychology & Health*, 20, 303–318.
- Taubman–Ben-Ari, O., Findler, L., & Mikulincer, M. (2002). The effects of mortality salience on relationship strivings and believes: The moderating role of attachment style. *British Journal of Social Psychology*, 41, 3, p419.
- Taubman–Ben-Ari, O., Florian, V., & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: A test of Terror Management mechanisms. *Journal of Personality and Social Psychology*, 76, 35–45.
- Taylor, S. E., Cousini Klein, L., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107, 411–429.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15, 1–18.
- Van Vugt, M., & Van Lange, P. A. M. (2006). The altruism puzzle: Psychological adaptations for prosocial behaviour. In M.

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- Schaller, D. Kenrick, & J. Simpson (Eds.), *Evolution and Social Psychology*, (pp. 237–261). New York: Psychology Press.
- Wheeler, H. A., Adams, G. R., & Keating, L. (2001). Binge eating as a means for evading identity issues: The association between an avoidance identity style and bulimic behavior. *Identity*, *1*, 161–178.
- Wicklund, R. (1975). Objective self-awareness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 9, pp. 233–275). New York: Academic Press.
- Wicklund, R., & Duval, S. (1971). Opinion change and performance facilitation as a result of objective self-awareness. *Journal of Experimental Social Psychology*, 7, 319–342.
- Wicklund, R., & Gollwitzer, P. M. (1982). Symbolic self-completion. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

- Wisman, A., & Koole, S. L. (2003). Hiding in the crowd: Can mortality salience promote affiliation with others who oppose one's worldviews? *Journal of Personality and Social Psychology*, 84, 511–526.
- Wisman, A., & Goldenberg, J. (2005). From the grave to the cradle: Evidence that mortality salience engenders a desire for offspring. *Journal of Personality & Social Psychology*, 89, 46–61.
- Wisman, A., & Shrira, I. (2006). The terror of belongingness: Evidence that mortality salience promotes defensive affiliation. Poster presentation at the annual meeting of the SPSP in Palm Springs.
- Zimbardo, P. G. (1973). On the ethics of intervention in human psychological research: With special reference to the Stanford Prison Experiment. *Cognition*, *2*, 243–256.