Chapter 27

The Roar of Awakening

Mortality Acknowledgment as a Call to Authentic Living

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> The certain prospect of death could sweeten every life with a precious and fragrant drop of levity—and now you strange apothecary souls have turned it into an ill-tasting drop of poison that makes the whole of life repulsive.
>
> —FRIEDRICH NIETZSCHE, *The Wanderer and His Shadow* (1880/1967, p. 185)

The first thing that comes to mind for many people when they think of existentialism is doom and gloom. For these people, an interest in existentialism is synonymous with an interest in topics such as death, depression, and anxiety. This is certainly true in the popular culture, but it also seems to be true among a number of serious researchers. In this chapter, we try to move beyond a doom-and-gloom conception of existentialism by emphasizing some of the broader, more optimistic implications of existentialist thought. Specifically, we explore the possibility that acknowledgment of the uncertainty and impermanence of one's existence can operate as a wakeup call. It can lead individuals to guide their lives by passionately chosen personal values rather than by passively internalized cultural values. This possibility was captured forcefully by Kuhl (2002) based on his work with terminally ill patients. He suggested that a confrontation with mortality "serves as a roar of awakening. . . . It ends the routine and indifference. . . . Because they know that they cannot escape death, they embrace life—their own life. The 'prescription' of how to live given by family, culture, profession, religion, or friends loses its grasp. Perhaps, in this way, knowing that you have a terminal illness is of value" (p. 227).

In making the case that acknowledgment of life's uncertainty and impermanence can facilitate more authentic living, we discuss the range of possible reactions that, according to several prominent existential philosophers, individuals might display when they come to realize their death is certain and the universe contains no objective, universally applicable, logically defensible standards of value. Then, we look for evidence of these possible reactions in the attitudinal and behavioral aftereffects observed in individuals who have had a close brush with death in the real world. We also consider some psychological mechanisms that could account for these aftereffects. After that, we synthesize the preceding strands of thought into a theoretical framework, and we report on three experiments that tested some implications of that framework. Finally, we explore the relation between our research and research suggesting that mortality salience leads to defensiveness and simple cognitive processing (e.g., Solomon, Greenberg, & Pyszczynski, Chapter 2, this volume).

EXISTENTIALISM: WHAT SHOULD I DO AND WHY SHOULD I DO IT?

Although it is difficult to provide a concise, generally agreed-on definition of existentialism, it is possible to summarize some of the area's general features (Grene, 1984; MacDonald, 2001). Perhaps the most useful feature to keep in mind is that existentialism is essentially a philosophy of values. Its primary focus is on the difficulties individuals face as they try to make moral and ethical choices in the absence of a system of values that can be shown in some objective way (e.g., logic or science) to be valid for each and every individual. The emphasis existentialists place on individual values over absolute, universal values is based in large part on the existentialists' assumption that "there is no single essence of humanity to which we may logically turn as a standard or model for making ourselves thus or so" (Grene, 1984, p. 41). In other words, we are not provided with a fixed, ready-made, individual nature from birth. Instead, we develop our individual nature as we make choices over the course of our lifetime.

To consider a concrete example, an individual is not born a theist or an atheist, an omnivore or a vegetarian, a liberal or a conservative. An individual may choose one of the values at some point in his or her life, but he or she may also choose the alternate value at a different point in life. These different choices are possible because, from an existentialist perspective, individuals have the "freedom to *put out of play* all those factors which would have given you good 'cause' to do just this and *not otherwise*" (MacDonald, 2001, p. 39). As Ortega y Gasset (1936) described it, "To be free means to be lacking in constitutive identity, not to have subscribed to a determined being, to be able to be other than what one was, to be unable to install oneself once and for all in any given being" (p. 303). In short, from the existentialist perspective, the essence of human nature is that it has no fixed essence, at least not at the level of individual choices and values.

When considered in this light, it becomes clear that the existentialist description of life as meaningless does not imply that there is no reason to live. It implies that there is no invariant, objectively defensible reason to live. Individuals are free to act on the basis of the values that feel valid for them in the specific context in which they find themselves. Thus, far from being a call for individuals to give up on life, existentialism is a call for individuals to live passionately out of their own personal values.

Of course, guiding one's life on the basis of personal values is no more defensible in the logical sense than guiding it on the basis of externally defined values. The former, however,

does allow individuals to develop their unique essence. This is important to existentialists because if individuals do not develop an essence for themselves, they will have their essence defined for them by outside forces (e.g., their culture). When this happens, individuals may live in accordance with values that are not personally valid for them and thus fail to reach their unique, individual potential. The result would be a life filled with anxiety, banality, and missed opportunities.

The strong emphasis existentialists place on developing one's unique essence led Grene (1984) to propose that in existentialism the ultimate value is not freedom but honesty. As she put it, "We are free in any case; from that fact, glorious and fearful, there is no escape as long as we live at all. But it is a fact that we may or may not face honestly. Good for the individual resides in the integrity with which he recognizes his freedom and acts while so recognizing it. Evil, conversely, is the lie of fraudulent objectivity, the denial of freedom" (p. 143). The existential call, therefore, is for each of us to individuate ourselves from the ostensibly valid, ready-made value systems (e.g., our culture) into which we have been born and to guide our life on the basis of freely chosen personal values.

There is one final implication of existentialist thought we should mention as relevant to the ideas we discuss in this chapter. If there really is no objective, universally valid system of values, there can be no logically justifiable way to reward or punish an individual for choosing one direction in life as opposed to another. It is possible, therefore, to question the existence of even an ultimate payoff (e.g., heaven and hell). Although one may choose, through faith, to believe in such an eventuality, even religious existentialists (e.g., Kierkegaard and Tillich) agree that there can be no logically justifiable reason for believing.

Not surprisingly, some individuals react with denial or anxiety when confronted with the existential conception of the universe. From an existentialist perspective, however, this reaction is not inevitable. After all, if humans have no built-in value system, and if there is no logically defensible, objective value system, then each individual is free to choose how he or she reacts to a universe in which death is certain but important values are not. Individuals may find such a universe to be overwhelming and depressing, or they may find it to be liberating and exhilarating.

In our opinion, these speculations about the different reactions individuals could display when confronting death and value uncertainty are among the more provocative implications of existential philosophy for empirical research. We believe these speculations could provide the basis for a number of interesting research questions. For example, can individuals really acknowledge the lack of objective certainty in important values as well as the certainty of death yet still live a vital, fulfilling life? To what extent can individuals free themselves from internalized cultural values to live a more self-directed life? Because we consider these speculations to be among the more provocative ones in existentialism, we discuss them in more detail later by highlighting some of the relevant points made by two of the most prominent existentialist thinkers: Kierkegaard and Heidegger.

Kierkegaard

Like most existentialists, Kierkegaard (1961, 1983) began with the assumption that there is no universally valid, objectively defensible system of values, and, therefore, that there is no logically defensible basis for any given life choice (e.g., profession, ethics, and mate). Kierkegaard argued, however, that despite the absence of a logically or objectively defensible basis, individuals still need to make choices, and they should do so by taking a *leap of faith*. In much the way that individuals may believe in a supreme being or an afterlife without any

objective support for their belief, so too can they make other choices in their life. Specifically, they can make passionate, committed choices even while being fully aware that they can never know with objective certainty that they are doing the right thing. In Kierkegaard's (1961) terms, "An objective uncertainty held fast in an appropriation process of the most passionate inwardness, [is] the highest truth attainable for an *existing individual*" (p. 182).

Individuals who take a leap of faith become fully immersed in life while maintaining an attitude of nonattachment toward the details of this life. Thus, they are able to "live joyfully and happily . . . every moment on the strength of the absurd . . . to find not repose in the pain of resignation, but joy on the strength of the absurd" (Kierkegaard, 1983, p. 79). Individuals who have not taken a leap of faith, on the other hand, act within the world in a completely different manner. They lose themselves in their daily business and worldly affairs and fail to define their essence for themselves. They end up making their life choices on the basis of widely shared cultural values that may not be valid for them as unique individuals. As a result, these individuals fail to become the unique individuals they are capable of becoming.

Individuals who have not taken a leap of faith are also likely to experience a form of anxiety Kierkegaard referred to as dread. Dread is a general feeling that signals to the individual that something is generally not right with his or her life. According to Kierkegaard, dread can be interpreted as God's way of prompting individuals to adopt a personally valid way of life. Unfortunately, though, individuals may misinterpret their dread and end up trying to ignore or repress it. In doing this, they miss the call to more passionate living.

In sum, for Kierkegaard, the meaning of life is revealed not through objective, logical inquiries but in the concrete actions individuals freely choose as they define their individual essence. An individual's choices should be made passionately on the basis of values that are subjectively valid for them even if the values are at odds with the cultural norms and even if there is no way to prove the values objectively valid. Adoption of this committed lifestyle involves a leap of faith, and this leap, in turn, may be facilitated by a correct interpretation of one's dread as a call to active, self-directed living.

Heidegger

Like Kierkegaard, Heidegger (1927/1982) distinguished between a life of active choosing and a life in which individuals allowed their essence to be defined by values external to themselves. He referred to the former as an authentic life and the latter as an inauthentic life, and he provided detail on the role one's society could play in influencing which of these modes of life an individual adopted. Specifically, Heidegger noted that individuals are born into a world of preformed values (i.e., a culture), and that, as they develop, individuals internalize many of these values, even without intending to do so. To live an authentic life, therefore, individuals need to shed any cultural values they may have internalized that are not personally valid for them and make choices based on personally valid (i.e., authentic) values.

Heidegger believed, as did Kierkegaard, that individuals could be helped along the road to a personally valid mode of life by a form of anxiety. Specifically, Heidegger believed that individuals not living authentically might come to experience a form of anxiety he called angst. This unpleasant feeling arises from the individuals' realization that the cultural values on which they have been basing their choices may not be valid for them as individuals. With this realization, the stage is set for the individual to live an authentic life.

Unfortunately, individuals may rarely arrive at this realization. This is because society can provide individuals with an everyday life that is so distracting that individuals get im-

mersed in the details of their life and lose contact with their angst and their personally valid values. When this happens, individuals fail to create their essence through their own choices but instead fall back into their culture and allow their choices to be determined for them by the cultural norms.

Ironically, the one factor that can set an individual reliably on the path to authentic living is a full acknowledgment of his or her personal death. According to Heidegger, full realization that "*I* am going to die. Not anyone else, but I, alone, as an individual" arouses in individuals a primordial sense of certainty that shocks them into identifying themselves as an individual apart from their culture. It is as though an individual's unique personal existence stands out most sharply when contrasted with the individual's unique personal nonexistence. If *I* die, then *I* must live. With a genuine acknowledgment of his or her personal death, individuals develop the insight to individuate themselves from their culture and the motivation to choose their own goals and pursue them passionately.

Commonalities

Obviously, we have not reviewed all of existential philosophy, nor have we addressed all the important ideas put forth by the two philosophers we highlighted. We have, however, outlined some points we consider central to an empirical study of existentialism. These points can be summarized as follows:

1. There is no value system that can be shown logically to be valid for each and every individual.
2. Each of us is born into a world awash in preformed values (i.e., our culture), and we inevitably internalize many of these values even without intending to do so.
3. We need to realize that our cultural values are not logically defensible and that some of these values might not be subjectively valid for us.
4. Some forms of anxiety can facilitate this realization, but only if we interpret the anxiety for what it is, a sign that we are not guiding our lives on the basis of personally meaningful values.
5. The most powerful inducement for us to adopt a personally valid, self-directed life is the acknowledgment of our personal death. This acknowledgment provides us with both the insight and the urgency we need to define our essence through active choices based on passionately chosen personal values rather than inappropriately internalized cultural values.

In short, existentialism suggests that each of us is in the ironic position of having the very experiences we may be trying to avoid (anxiety, uncertainty, death) be precisely what we need to acknowledge in order to live more authentically.

THE EFFECTS OF REAL-LIFE CONFRONTATIONS WITH MORTALITY

It is clear from our brief summary that although most existentialists do address doom-and-gloom topics such as death, anxiety, and meaninglessness, they typically do so in a way that allows us to go beyond doom and gloom. For example, the two philosophers we discussed (see also Frankl, Jaspers, May, Nietzsche, and Yalom) agreed that it is possible for

individuals to live a rich, fulfilling life even while acknowledging that their death is inevitable and their value judgments are not logically defensible. In fact, they agreed that it is only by acknowledging the certainty of death and the uncertainty of values that individuals can live a rich, fulfilling life.

Of course, finding that a number of philosophers agree on a certain conclusion does not necessarily make that conclusion valid. After all, the philosophers could have used faulty reasoning or they could have gone beyond their reasoning to speculate on psychological reactions (e.g., anxiety). We could have more confidence in their conclusions, therefore, if we could find some converging evidence. Interestingly, such evidence exists. It can be seen in the changes in attitudes and behavior often displayed by individuals who have had close brushes with death (e.g., Grey, 1985; Kinnier, Tribbensee, Rose, & Vaugh, 2001; Noyes, 1982–1983; Ring, 1984).

Relative to individuals who have not had a close brush with death, those who have tend to be more serene, more self-assertive, and more confident. They are also less concerned with the opinions of others, less easily intimidated, and less concerned with materialism, fame, and money. They may also report a sense of liberation, of being able to choose not to do what they do not want to do. Although they report some regret, they report little or no remorse. They consider the former to be a part of life but the latter to be a waste of time and energy. They also display a greater appreciation for nature and the ordinary things in life (e.g., a sunset and hugging a child). Clearly, individuals who have acknowledged their death are not sentenced to a life of anxiety, depression, and meaninglessness.

This conclusion should not be particularly surprising when one considers that aspects of growth have been observed after a variety of traumatic experiences (e.g., Collins, Taylor, & Skokan, 1990; Davis, Nolen-Hoeksema, & Larson, 1998; Lehman et al., 1993; Ellard, 1993; Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 2004). In fact, it appears not only that traumatic experiences can produce positive as well as negative aftereffects but that the two are related. Calhoun and Tedeschi (1999), for example, found that individuals who acknowledged the unpleasant aspects of their traumatic experience were more likely to show growth than individuals who did not acknowledge those aspects. Thus, a close brush with death can be profoundly upsetting, but it can also set the stage for growth.

If the existentialists are correct, however, then not only might we see growth in some generic sense after a close brush with death, but we might see specific kinds of growth. Specifically, we should find that survivors of a close brush with death experience less fear of death, less reliance on cultural values, greater reliance on personally valid values, and greater appreciation of life moment to moment. We consider each of these possibilities in turn.

Lower Fear of Death

One of the most common aftereffects of a close brush with death is a decrease in the survivor's fear of death and dying (Greyson, 1992; Noyes, 1982–1983). Individuals who believe their death is imminent (or who thought they had in fact died) often report that the approach to death felt more like a letting go than an annihilation. This is true even when the close brush with death did not increase the survivor's belief in an afterlife. In fact, the fear of death decreases even if the survivors have no clear interpretation of their experience. As one survivor put it, "I can't tell what happened to me because I don't know, but something happened and I've never been the same since. People describe me as being high on life, and they are right" (Ring, 1984, p. 99). Another said, "I find I no longer have any fear of death, even

though I have no more knowledge than I had before about whether [I am] going to reincarnate, or survive death in some nonmaterial form, or simply come to an end as far as time is concerned" (Wren-Lewis, 1988, p. 117).

What is responsible for the decreased fear? Two factors, at least, seem crucial. One is the survivor's certain belief that death is imminent. The more intensely survivors experience this thought, the more positive aftereffects they experience (Greyson & Stevenson, 1980; Roberts & Owen, 1988). The other is an attitude of acceptance. Individuals who struggled to stay alive during their close brush with death displayed fewer signs of growth than individuals who were open to the possibility of their death (Noyes, 1980). Together, these findings suggest that fear of death decreases when individuals look death in the eye and think, "This is it. This is where it ends. Right here, right now, like this. And it's OK." This conclusion fits perfectly with the existential assumption that honest acknowledgment of the certainty of our death can produce positive outcomes, including a decrease in our fear of death.

Shedding of Cultural Values in Favor of Self-Values

Another common aftereffect in individuals who have survived a close brush with death is a decreased concern with extrinsic, cultural values and an increased commitment to intrinsic, personal values (Flynn, 1984; Ring, 1984; Sutherland, 1990). An individual dying from AIDS put it this way:

> When you're dying, you're stripped of everything that's important to society—money, image—so all you have left is that honesty. It takes so much energy to pretend when you can use that energy for other things . . . all that crap just flies off of you; it just sort of comes off you like layers of skin. All of a sudden, you're starting from scratch, like when you were born. . . . I believe in myself now. I never had that before. And I am not afraid of being who I am. (in Kuhl, 2002, p. 230)

A woman dealing with terminal cancer expressed the same insight this way:

> There's less fear in my life because I'm not in the loop of stress that most of us get into from working and worrying about money and the kids, rather than just being with what is. It's about acceptance rather than still struggling to make it your way. All the ego stuff, all the future fear—"God, did I gain weight? Am I turning gray?" Most of those things aren't important any more. It's like really downsizing to the essence. It wasn't things that I wanted. It was a way of life. And so I systematically set out to live it. A lot of the programming from my youth was still there before the illness, like "You need to be successful." You're in this prison. I've switched to what's important. (in Branfman, 1996)

Not only do these reports fit with general existentialist thinking, but the reasons survivors give for their change also seem to fit. As the AIDS patient discussed previously put it, "I realized when I was dying that I was going to die alone, that no one was coming with me; I was going alone. Then I realized that each person's journey is truly one of aloneness and that whatever happens in your life it's only you, it's always going to be only you" (in Kuhl, 2002, p. 228).

In sum, after individuals have acknowledged the certainty of their death, they tend to pay more attention to who and what they are as unique individuals and they rely less on culturally conditioned standards. With less pressure to meet the cultural standards, the survivors experience a feeling of freedom and forgiveness. As one survivor put it, "When I came

back from that, I really understood. I had a real feeling of understanding that I was a good person and all I had to do was be me" (in Ring, 1984, p. 107).

Greater Immersion in Life

So far, we have seen reports suggesting that survivors of a close brush with death experience less fear of death, less concern with preconditioned cultural values, and greater attention to their personal values. One obvious next question might be, "What is life like for these people?" The existentialists lead us to believe that such a life could be rich and meaningful. The data suggest that they are right.

Survivors of a close brush with death treat life as a gift and they try not to waste it. They trivialize the trivial and emphasize what seems important and valid for them (Noyes, 1982–1983; Yalom, 1980). This attitude toward life was captured dramatically by a woman following her diagnosis of terminal cancer: "Before I lived nice cotton—clean, cool, healthy. But now I live velvet—beautiful, purple, magic carpet velvet. I call this my "Year of Ecstasy." . . . Even though my previous life was good, it was not the bliss, the splendor, the ecstasy of how I live now" (Branfman, 1996).

These kinds of reports make it clear that individuals can live a positive life after acknowledging their mortality. It is important, however, to interpret correctly the nature of the positivity. Survivors of a close brush with death do not typically become shortsighted hedonists who have difficulty attaining long-term goals. To the contrary, they typically become more engaged in life, and they successfully pursue long-term personal goals. They do so, however, while staying mindful of their moment-to-moment experience. A good example of this shift in orientation can be seen in the reactions of former senator and presidential candidate Paul Tsongas following his repeated bouts with cancer. He noted that he lost his ego-enhancing ambition but not his desire to help (Shapiro, 1993). In short, survivors of a close brush with death do not live for the present. They live in the present.

Consistent with this mindfulness of moment-to-moment experience, survivors also tend to become more appreciative of the simple things in life such as a growing plant, a flying bird, or even the texture of the sidewalk. As one survivor put it, "You know you've seen them before but they meant nothing; you see them afterward and they mean everything" (Kuhl, 2001, p. 265). Another noted, "After my first cancer, even the smallest joys in life took on a special meaning—watching a beautiful sunset, a hug from my child, a laugh with Dorothy. That feeling has not diminished with time. After my second and third cancers, the simple joys of life are everywhere and are boundless, as I cherish my family and friends and contemplate the rest of my life, a life I certainly do not take for granted" (Jordon, 2000, p. 216).

It seems that without the burden of extrinsic, cultural expectations, survivors of a close brush with death can take life on its own terms. They experience each moment as complete in itself. This sentiment was captured perfectly by Wren-Lewis (1988) describing his own orientation to the world following his close brush with death: "I feel I know exactly why the Bible says that God looked upon the creation and saw that it was good" (p. 115).

ARE THE AFTEREFFECTS REAL?

As much as we might like to believe these positive reports from survivors of a close brush with death, we have to admit that it is possible to be cynical. After all, how do we know the

aftereffects are real? Is it not more likely that the aftereffects reflect the operation of some sort of defense mechanism? Perhaps the survivors are engaging in self-deception or self-presentation. Although it is difficult to rule out these interpretations definitively, there are reasons to question them.

For example, many of the aftereffects have been verified by close others. Specifically, in some studies (Groth-Marnat & Summers, 1998; Park et al., 1996; Weiss, 2002), when investigators asked the survivors to rate themselves in terms of a number of attitudinal and behavioral items indicative of growth, they also asked spouses, children, and friends of the survivors to rate the survivors on the same items. The two sets of ratings have been found to correlate significantly, and to reveal positive changes in a number of areas. Thus, if the survivors are faking it, they are being very convincing over long periods of time (e.g., years) in the presence of those who know them best and with whom they spend the most time.

Another reason for believing the survivors' reports is that these reports are not correlated with the motivation to report in a socially desirable way. Specifically, there is no correlation between the positive aftereffects survivors report and their score on the Marlowe-Crowne social desirability scale (e.g., Greyson, 1983; Tedeschi & Calhoun, 1996). Moreover, as we noted earlier, individuals actually display more growth if they acknowledge the negative aspects of their experience than if they do not. Together, these findings suggest that the survivors' reports reflect a complex, integrated view of the world and not a shallow Pollyana view of the world.

The conclusion that a traumatic event can lead to growth might be a little easier to accept if one moves beyond a simple happy–unhappy view of adjustment (e.g., Waterman, 1993). Survivors of a close brush with death are not necessarily happier than individuals who have not had a close brush with death (Greyson, 1992, 1996). On the other hand, they tend to report greater purpose in life, a greater sense of fulfillment or self-actualization, and greater wisdom (Noyes, 1982–1983).

It is reasonable to believe, therefore, that the aftereffects of a close brush with death reflect genuine responses to a real life wakeup call. This belief is made even more reasonable by the existence of theoretical mechanisms that could account for posttraumatic growth. Specifically, a number of researchers have begun to explore the psychological processes that can lead individuals to experience positive effects following a traumatic experience (e.g., Carver, 1998).

THE ROLE OF SHATTERED ASSUMPTIONS

One promising model of posttraumatic growth was proposed by Tedeschi and Calhoun (2004; Tedeschi, Park, & Calhoun, 1998). They began with the assumption that as individuals go through life, they build up sets of beliefs about who they are and how the world works. Tedeschi and Calhoun refer to this set of beliefs as an assumptive world (see also Janoff-Bulman, 1992; Janoff-Bulman & Yopyk, Chapter 8, this volume; Parkes, 1971). One's assumptive world might include beliefs such as "The world is just," "The U.S. mainland is safe from terrorist attacks," and "Heart trouble only affects people older than me." The problem, of course, is that events in the real world can challenge such beliefs.

When the challenge is great enough, individuals may be forced to drop their beliefs and develop new ones. It is in this context that growth can occur. As Janoff-Bulman (1998) put it, "It is not simply that some trauma survivors cope well and perceive benefits in spite of their losses, but rather that the creation of value and meaning occurs because of their losses,

particularly the loss of deeply held illusions" (p. 35). Subsequent to the trauma, individuals may rebuild their assumptions in ways that map more closely onto the world as it is for them now, and this, in turn, may facilitate future coping. Individuals may also be provided with opportunities they did not see before (e.g., new careers and new relationships). In these ways, and others, it is possible for individuals to experience some growth along side of, and because of, the loss and pain associated with the trauma.

This challenge–rebuilding process could plausibly account for at least some of the aftereffects of a close brush with death. Consider, for example, that each of us presumably believes we are going to die. We may tend to conceptualize our death, however, as something that happens to someone else (e.g., an older me) in another place at another time (e.g., years from now when I am ready to go). A close brush with death can challenge that conceptualization, however. For example, after receiving her diagnosis of terminal cancer, one survivor put it this way, "Like most people, I thought, 'This is something I'll only have to consider when I'm 84. But getting a terminal diagnosis was, 'You've got a limited amount of time. Now, really, what do you want to do? How do you want to be?' It hit me right here, in my heart" (in Branfman, 1996). Individuals may also have long-term plans (e.g., to have a family) or they may be engaging in immediate effort for a long-term payoff (e.g., saving for retirement). A close brush with death can cause individuals to reassess their plans and priorities (Yalom, 1980). In short, when individuals acknowledge their mortality, they may examine their guiding assumptions and open up to the possibility of adopting new assumptions.

This possibility was addressed explicitly by Furn (1987; Clark, 1987) when she proposed that the aftereffects of a close brush with death may be viewed as a form of culture shock. In both phenomena, she suggested, individuals experience a basic change in their worldview. "To the extent that a widely shared value system is synonymous with 'culture,' it may be said that NDErs [near death experiencers] have philosophically and behaviorally adopted a new culture. . . . The NDErs conception of self, of others, of nature, of the nature of life, and of time may be significantly altered during a generally extended period following the NDE" (Furn, 1987, p. 11).

PULLING ONESELF TOGETHER VERSUS LETTING ONESELF GO

Although a close brush with death and other traumatic events may induce individuals to revise their worldviews, the events may differ in the kinds of revisions they induce. As we noted earlier, individuals who struggled to stay alive during their close brush with death showed less growth than did individuals who accepted the possibility of their death (Noyes, 1980). Drawing on these findings, as well as on his own close brush with death, Wren-Lewis (2004) suggested that most traumas shatter benign or optimistic world assumptions (e.g., the world is a fairly safe, predictable, and controllable place), whereas a close encounter with death generally challenges more negative assumptions (e.g., I am not worthy, life is a vale of tears, and it's every man for himself). Wren-Lewis reported that his own close brush with death provided him with the

> mind-boggling discovery of oneness with an essentially benign inner reality underlying a world which had hitherto been superficially perceived as hostile, competitive and "red in tooth and claw." Far from being a sense of "dauntless human spirit," . . . the post-NDE [near death experience] feeling is of being able to relax into everlasting arms at the core of existence. (p. 92)

This difference may explain why the reactions seen after a close brush with death reflect more of a letting go than a pulling together, more of a feeling of coming home than of character building. Wren-Lewis (2004) described his own feeling as

> much more like that of having been suddenly and instantaneously cured of something akin to a brain cataract which had obscured my perceptions for as long as I can remember. Far from seeming like a new and more spiritual stage in my personal development, the deepened consciousness felt more natural, almost more ordinary and obvious, than the life-awareness I'd previously taken for granted for over half a century. (p. 91)

He added that the real wonder is not that individuals who have had a close brush with death see the world this way, but that the rest of us do not, for this is simply the way it is (Wren-Lewis, 1994).

A THEORETICAL SYNTHESIS

Taken together, these various lines of investigation suggest the following: As individuals make their way through the world, they develop beliefs about who they are and how the world works. Some of these beliefs arise from personal experience, whereas others are internalized indirectly from the individual's culture. In some cases, the cultural values will be congruent with the individuals' personal values. In other cases, they will be incongruent with these values. Moreover, some of the beliefs will have positive implications (e.g., the world is just), whereas some will have negative implications (e.g., no one will like you if you are overweight).

As long as these beliefs allow individuals to function more or less effectively in the world, individuals have no reason to question the beliefs. Sometimes, though, events occur that force individuals to question and revise their beliefs. Although this questioning and revising can be unpleasant, it can also set the stage for growth. It can motivate individuals to open up to new beliefs which, in turn, may allow them to function more effectively in the world as it is.

Although a variety of experiences, including positive ones, may lead individuals to revise their worldview (Calhoun & Tedeschi, 1999), acknowledgment of one's mortality may be a particularly effective and ubiquitous inducer of such revision. It may also have other unique features. For example, acknowledgment of one's mortality may cause individuals to focus their revising primarily on the beliefs they have internalized from their culture that do not fit with their personal values. It may also cause individuals to question beliefs with negative implications (e.g., contingent self-esteem) moreso than those with positive implications (e.g., you are inherently worthwhile)—presumably because the former are more likely to have been a function of imposed cultural standards.

In short, acknowledgment of one's death can cause individuals to realize that their life is their own whether it ends with death or there is a subsequent judgment and afterlife. Either way, the individual goes alone. This realization gives individuals the freedom to relax back into themselves. As a result, they may decrease their reliance on general prior knowledge (e.g., culture), increase their open, online evaluative processing, base their choices more closely on their self-knowledge, and place more emphasis on the pursuit of personal over culturally derived goals. We conducted three studies to assess these possibilities.

EMPIRICAL EVIDENCE

Online Bottom-Up Processing

If the preceding synthesis is correct, then when individuals give serious consideration to their death they are likely to adopt a more online, bottom-up form of processing. To test this hypothesis, we had participants write about their death or about television (e.g., Greenberg, Pyszczynski, & Solomon, 1990) and then evaluate the suitability of a target person for a job. We presented all participants with the same set of mixed valence information about the target person. For some participants, the positive information (e.g., works well with coworkers) came first, whereas for others the negative information (e.g., had some difficulties on a recent business trip) came first.

By definition, primacy effects occur when the initial information in a sequence exerts a disproportionate influence on participants' evaluations, whereas recency effects occur when the later information in the sequence exerts a disproportionate influence. Thus, primacy effects are thought to occur when individuals close off their processing prior to a full consideration of the information (i.e., the later information). Because of this premature closure, individuals may be less aware of plausible alternative hypotheses and/or inconsistent bits of evidence later in the sequence (Kruglanski, Ramat-Aviv, & Freund, 1983; Newston & Rindner, 1979). This characterization fits with the findings that primacy effects are more likely when participants are instructed to make global evaluations or make their evaluations under time pressure, whereas recency effects are more likely when participants are instructed to make differentiated judgments or believe it would be costly for them not to process the information fully (e.g., Freund, Kruglanski, & Shpitzajzen, 1985; Kruglanski et al., 1983; Newston & Rindner, 1979).

From these findings we can hypothesize generally that individuals processing in a more routine, top-down fashion will show primacy effects, whereas individuals processing in a more open, online evaluative mode will show recency effects. We predicted, therefore, that participants who wrote about watching television would show primacy effects, whereas individuals who wrote about their death would show recency effects.

The data supported these predictions. Specifically, among participants who wrote about television, evaluations of the job candidate were more favorable when the positive information came first than when the negative information came first. Among those who wrote about their death, however, evaluations of the job candidate were more favorable when the negative information first than when the positive information came first. This crossover pattern is consistent with the hypothesis that individuals who wrote about their death maintained a more open, online evaluative set (Freund et al., 1985; Kruglanski et al., 1983; Newston & Rindner, 1979).

Choices Directed by Self-Knowledge

According to the existentialists and the reports from survivors of a close brush with death, individuals who have acknowledged their death make evaluations more in accordance with their personal values. We tested this hypothesis using a procedure developed by Setterlund and Niedenthal (1993). These authors had participants rate the extent to which a series of trait adjectives (e.g., sociable and intelligent) were descriptive of themselves. Then, they had participants rate the extent to which they would like to eat at various restaurants. The restaurants were described in terms of the traits of the people who ate there. Restaurant H, for

example, was described by the traits unconventional, intelligent, friendly, and spontaneous. Restaurant K was described by the traits sophisticated, well-mannered, sociable, and witty.

Presumably, the more the traits associated with a restaurant overlap with those participants considered to be self-descriptive, the more participants would like to eat at that restaurant. This would be true, however, only to the extent that participants were in touch with their personal values. Consistent with this hypothesis, Setterlund and Niedenthal found a stronger relation between the self-descriptive traits and liking for the restaurants when participants had clear self-concepts than when they did not.

If a consideration of their death puts participants in touch with their personal values, then there should be a stronger relation between the participants' self-ratings and their liking for the restaurants when participants have thought about their death than when they have not. To assess this prediction, we had participants rate the extent to which they considered various traits to be descriptive of themselves. Then, we had participants write either about their death or about television. Finally, we had them rate their desire to eat at various restaurants described in terms of various trait adjectives.

Consistent with expectations, there was a greater connection between participants' self-ratings and their liking for the restaurants among participants who wrote about their death than among participants who wrote about television. The results suggest that following a confrontation with one's death, individuals move away from routine, generic processing toward individuated, online processing based on their personal values.

Switch from Cultural to Personal Goals

According to the existentialists and survivors of a close brush with death, acknowledgment of one's mortality can lead an individual to rely more on the self than the cultural values in making evaluations. To test this hypothesis, we had participants write about their ideal life while either considering their death or not. Then, we had them rate the extent to which they wished to pursue a variety of goals. Some of these goals reflected personal values such as growth and acceptance, whereas others reflected culturally derived values such as fame and appearance (Kasser & Ryan, 1996). Thus, we predicted that participants would show relatively less interest in the culturally derived goals after having thought about their death.

Some participants were asked to write about their ideal life, but no mention was made of their death. Other participants were asked to write about the life they ideally would like to live if they had only 1 year to live. Then, participants in both groups were provided with eight index cards with each card having printed on it a short description of a personal goal (e.g., growth) or a culturally derived goal (e.g., appearance). Participants were also given 100 poker chips and asked to distribute the poker chips over the eight cards to reflect how much of themselves they wished to invest in each of the goals. As predicted, participants who had written about their ideal life with only 1 year to live distributed proportionately less chips on the cultural values and proportionally more on the personal values compared to participants who wrote about their ideal life without considering their death.

Taken together, our findings are consistent with the suggestions of a number of existential philosophers and the reports of individuals who have survived a close brush with death. They have suggested that when individuals think about their death, the individuals open up to a more online, evaluative mode of processing guided by their self-knowledge, and this results in a shift away from the pursuit of culturally derived goals toward the pursuit of personal ones.

WAKEUP VERSUS DEFENSIVENESS

Following mainstream existential thought (e.g., Kierkegaard and Heidegger), we raised the possibility that in acknowledging their mortality individuals can gain the insight and motivation they need to question the preformed value system into which they were born (e.g., their culture) and to engage in more open, evaluative processing guided by their personally chosen values. The results of our three studies were consistent with this possibility. A quite different view of the effects of thinking about one's mortality, however, has been proposed in the context of terror management theory (Solomon et al., Chapter 2, this volume). That theory, derived from Becker (1973), has suggested that mortality salience leads individuals to engage in a strong defense of their cultural worldview and to simplified cognitive processing. Evidence consistent with this hypothesis has also been obtained.

The existence of evidence consistent with two seemingly opposing hypotheses raises at least three logical possibilities. The defensiveness hypothesis is entirely correct and can explain our findings, the wakeup hypothesis is entirely correct and can explain the defensiveness findings, or both hypotheses have some validity but operate under different conditions. We address the third possibility.

Whether thoughts of one's mortality leads to defensiveness or growth may depend on the way in which the thoughts were brought to mind. Effects have been observed when mortality has been brought to mind through subliminal presentation of death-related words (Arndt, Greenberg, & Pyszczynski, 1997), by having participants interviewed in front of a funeral home (Jonas, Schimel, & Greenberg, 2002), after individuals have experienced a life-threatening accident (Noyes, 1982–1983), and after individuals have received a terminal diagnosis (Kuhl, 2002). Obviously, these situations differ in terms of their blatancy and intensity, but they may also differ in the psychological processes they induce.

It is reasonable to believe, for example, that receipt of a terminal diagnosis is much more threatening than subliminal presentation of words related to death. One might expect, therefore, that the former would induce greater defensiveness than the latter. Presumably, the greater is the threat to one's life, the greater the defensiveness. One problem with this hypothesis, though, is that the opposite hypothesis seems just as plausible. Highly threatening experiences may be precisely the kind needed to challenge an individual's worldview and thus provide the openness needed for growth. It seems likely, therefore, that there is an additional variable that moderates the effects of blatancy and intensity.

Greenberg, Arndt, and Simon (2000) proposed that one's reaction to mortality salience may depend on when that reaction is measured. Specifically, they suggested that individuals may repress thoughts of mortality immediately following mortality salience. With the passage of time, however, the thoughts may drop out of focal awareness yet still be accessible. It is at this point that individuals defend their worldview. Although plausible, this time-course hypothesis seems incomplete.

As currently formulated, it provides no place for growth. Individuals either defend themselves through repression or they defend themselves by bolstering their worldview. Nowhere in the sequence do individuals question their worldview and open up to alternative beliefs. Moreover, there is evidence that posttraumatic growth does not follow a simple time course (Milam, 2004). Some survivors show immediate benefits that last for years, others show immediate distress that transforms into growth over time, and others show immediate positive effects that descend into difficulties over time (see also Downey, Silver, & Wortman, 1990).

Perhaps one way to find the moderating variable is to think about the difference between defensiveness and growth. In both cases, individuals experience a threat to their worldview. With defensiveness, however, individuals retreat from the threat, whereas with

growth, individuals change to meet the threat. It is possible, therefore, that factors that foster trust and the tolerance of ambiguity would facilitate growth, whereas factors that foster fear and the intolerance of ambiguity would facilitate defensiveness. To use a music metaphor, individuals who have learned only to play note for note from a musical score will feel less comfortable when the score is removed than individuals who have learned how to improvise.

From a psychology perspective, we might see more growth among individuals who, for example, can tolerate ambiguity, have a secure attachment style, or were raised by authoritative parents. Growth might also be facilitated when the thoughts of mortality are made salient in a supporting, nonthreatening environment, as might be the case in existential therapy (Yalom, 1980) or in some forms of Buddhist training. More generally, we should see growth among individuals who trust in their own ability and who believe in the benign nature of the universe.

It is interesting, in this context, to note the parallels between growth from acknowledging one's mortality and the features of successful therapy (Raft & Andersen, 1986; Yalom, 1980). Both involve an alteration of the individual's assumptive world. In humanistic therapy, for example, therapists try to create an atmosphere in which their clients can explore their true feelings and motivations in a nonevaluative context. In this encouraging, supportive environment, clients can recognize which of their values are truly representative of themselves as individuals and which reflect cultural values they have inappropriately internalized (i.e., conditions of worth). With this recognition, they may experience less anxiety and live more out of their personal values. Although much more directive, cognitive therapy seeks to do essentially the same thing. In this case, the therapist attempts quite forcefully to get the client to question his or her beliefs and replace them with new ones. The common denominator of these therapies and a close brushes with death is a dropping of the individuals' current beliefs and an opening up to new ones that allow the individuals to direct their lives more from their own values than from extrinsic values.

It is also interesting in this context to consider the therapeutic recommendations derived from terror management theory. Proponents of terror management (e.g., Simon, Greenberg, Harmon-Jones, Solomon, & Pyszczynski, 1996; Solomon, Greenberg, & Pyszczynski, 1991) have noted that, under the right conditions with the right clients, increasing mortality salience might improve psychological functioning. They suggested, for example, "carefully guiding mildly depressed individuals to contemplate their mortality may be a valuable tool for getting them to invest in their worldviews and to see them as meaningful, thereby making the goals and standards of their worldviews more apparent so that they can begin to find more effective ways to meet those standards" (Simon et al., 1996, p. 88). As can be seen, their suggestion that some forms of mortality salience can be beneficial is similar to ours, but the reason they give for the benefit is quite different from ours.

Following mainstream existentialism (e.g., Kierkegaard and Heidegger), we suggested that the benefit comes from inducing individuals to question their cultural worldview and follow their personal values. Following Becker, the terror management theorists have proposed that the benefit comes from inducing individuals to invest more strongly in their cultural worldview. The terror management theorists have emphasized the latter strategy for two reasons. First, they assume that "decay and death are inescapable physical evils that *we can only deal with via fragile symbolic social constructions*" (Solomon et al., 1991, p. 31; emphasis added). Second, they assume that "self-worth is inherently a cultural construction and thus must always be validated externally; otherwise it cannot be sustained. Thus, the client should not be focused on deriving self-esteem internally, but on adopting values, roles, and behaviors that provide compelling, consistent social validation of his or her self-worth" (p. 31).

In short, both positions agree that there can be some psychological benefit to having one's mortality made salient, under the right conditions with the right individuals. The terror management perspective, however, assumes that the fear of death is instinctual and so cannot be permanently put aside. It can only be buffered through symbolic cultural means. The wakeup view (e.g., Kierkegaard and Heidegger), on the other hand, assumes that the fear of death is a misinterpretation of the anxiety that arises when individuals fail to live in accordance with their personal values. It dissipates when individuals adopt an authentic life. Thus, we are again left with three possibilities. Either the defensive view is correct, the wakeup view is correct, or each has some validity under different conditions.

SUMMARY AND CONCLUSIONS

We have suggested that a genuine acknowledgment of one's mortality can be a powerful catalyst for personal growth. We think it is important when making this case, though, not to discount the painful and confusing aspects of such an acknowledgment. As we noted earlier, appropriate expression of negative feelings contributes to growth and an improved quality of life. In the words of Janoff-Bulman (1998), "In the end survivors often feel both more vulnerable and more appreciative, two states that are fundamentally linked. It is knowing the possibility of loss that promotes the gains of victimization, and that of disillusionment that creates a newfound commitment to living fully" (p. 35).

It may be most accurate, therefore, to conceptualize the acknowledgment of death as a *crisis* in the sense of the word revealed in the Chinese ideogram. The ideogram consists of two characters, one representing *danger* and one representing *opportunity.* The first aspect may spring more readily to mind when individuals acknowledge their death, but the second is still present, and it is that second, often overlooked, aspect we have emphasized in this chapter. Acknowledgment of death can be unpleasant, but it can also serve as a roar of awakening. We think it is time for experimental existentialists to help individuals find the roar rather than the doom and gloom.

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