THE CHRONICLE OF HIGHER EDUCATION

THE CHRONICLE REVIEW

Death Denial

Does our terror of dying drive almost everything we do?

Illustration by Kevin Van Aelst for The Chronicle Review

By Marc Parry | MAY 22, 2015

In October 1984, a young Skidmore College professor, Sheldon Solomon, traveled to a Utah ski lodge to introduce what would become a major theory of social psychology. The setting was a conference of the Society of Experimental Social Psychology, a prestigious professional organization. Solomon's theory explained that people embrace cultural worldviews and strive for self-esteem largely to cope with the fear of death. The reception he got was as frosty as the snow piled up outside.

The crowd's unease was apparent as he began talking about thinkers who had influenced him, such as Marx, Kierkegaard, and Freud. At least half the audience disappeared before Solomon could lay out the full theory, recalls Jeff Greenberg, a psychologist at the University of Arizona who had developed the ideas with Solomon and was watching the talk from the back of the room. Greenberg saw some well-known psychologists physically shaking. "It was like a visceral negative reaction to what Sheldon was conveying," he says.

What Solomon was conveying, called terror-management theory, clashed with the zeitgeist of the field. Social psychology in the early 1980s focused on mini-theories that explained the details of psychological processes (for example, the cognitive underpinnings of stereotypes). Terror management, by contrast, proposed a sweeping framework of human motivation that explained phenomena as disparate as self-esteem, conformity, and prejudice. The theory drew on ideas from psychoanalysis and existential philosophy that most psychologists viewed as unscientific speculation. What's more, its champions stuck out among the sport-coat-and-sweater-vest crowd at social-psychology conferences. The hirsute purveyors of terror-management theory seemed a better fit for Woodstock.

After their dismal debut, Solomon and Greenberg — along with a third originator of the theory, Tom Pyszczynski — tried to publish a paper about their ideas in *American Psychologist,* flagship journal of the American Psychological Association. They failed. "I have no doubt that this paper would be of no interest to any psychologist, living or dead," read one review in its entirety. An editor eventually gave them a more constructive response: "Although your ideas may have some validity, they won't be taken seriously unless you can provide evidence for them."

That comment provoked a life's work. Solomon, Greenberg, and Pyszczynski have now spent a quarter-century studying how the fear of death shapes human affairs. The result is an empirical behemoth built on the foundation of a few simple propositions. One, that our awareness of death creates tremendous potential for

anxiety or terror. Two, that we learn to manage that terror by embedding ourselves in a cultural worldview that imbues reality with order, meaning, and stability. Three, that we gain and maintain psychological security by sustaining faith in that worldview and living up to the values it conveys. By the researchers' tally, more than 500 studies, in more than 25 countries, have supported hypotheses derived from this theory.

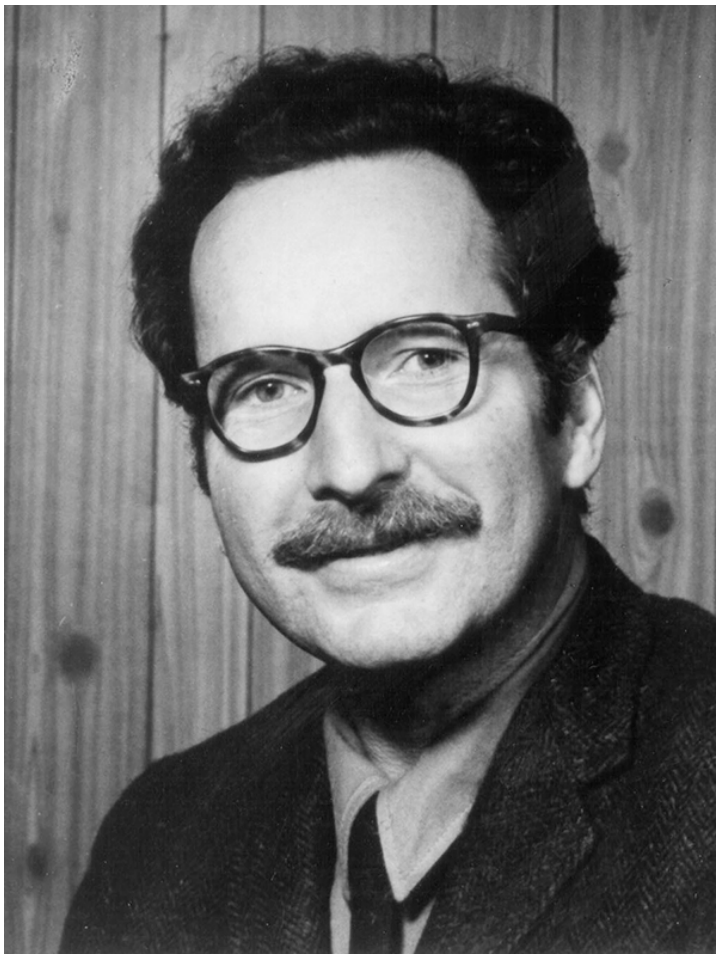
Along the way, the three scholars have gone from "laughable outcasts" — Solomon's phrase — to prominent psychologists. National news media have covered their work. Filmmakers featured them in an award-winning documentary, *Flight From Death*. The American Psychological Association honored them with a presidential citation. Even two colleagues critical of terror management, Leonard L. Martin and Kees van den Bos, credit the theory's creators with establishing "the first program of research successfully to address broad, existential issues using traditional social psychological empirical techniques."

In a new book surveying that work, *The Worm at the Core: On the Role of Death in Life* (Random House), Solomon, Greenberg, and Pyszczynski argue that fear of death drives our actions to a much greater extent than people realize. "The terror of death has guided the development of art, religion, language, economics, and science," they write. "It raised the pyramids in Egypt and razed the Twin Towers in Manhattan. It contributes to conflicts around the globe. At a more personal level, recognition of our mortality leads us to love fancy cars, tan ourselves to an unhealthy crisp, max out our credit cards, drive like lunatics, itch for a fight with a perceived enemy, and crave fame, however ephemeral, even if we have to drink yak urine on *Survivor* to get it."

But as the authors seek a mass audience for their new book, within academe they remain locked in a lively debate over the validity of their ideas. Critics say terror-management theory conflicts with what we know about evolution. They complain

that the theory is so elastic it can generate a story to explain any experimental finding after the fact. They criticize its overemphasis on mortality.

Can fear of death really explain that much about human behavior?



The Ernest Becker Foundation

The fear of death, wrote Ernest Becker, a cultural anthropologist, impels us to try to feel that we're significant beings in a meaningful world.

The course of these three scholars' careers sprang in part from Solomon's chance discovery of the cultural anthropologist Ernest Becker. On a recent Saturday, Solomon visits New York City to be interviewed for a film that will examine how Becker's ideas influenced the development of terror-management theory. I tag along to hear the story.

Meeting Solomon, you can picture him as the brash upstart at that conference 30 years ago. With his scuffed boots and pine-green gym shorts, the shaggy-haired 61-year-old looks, as he likes to put it, "like a homeless janitor." He talks with a combination of academic verbosity and teenage hyperbole. Raised by working-class parents in the Bronx and then New Jersey, he describes his family as "twitching blobs of biological protoplasm cowering under the chairs groping for sedatives the size of sport-utility vehicles, just like totally worried about whether the sun's gonna rise." A person, in Solomon-speak, is a "culturally constructed meat puppet." Or better yet: a "breathing piece of defecating meat."

Solomon and his colleagues spent five years writing *The Worm at the Core*. (The book takes its title from William James's words about death being "the worm at the core" of the human condition.) But as we walk across Manhattan to the filming, the Skidmore professor readily concedes that for many people, some of its core claims require no confirmation from social psychologists. "In the early days, when we would go talk about these ideas, philosophers and theologians would be like, 'Welcome to the 20th century,' " he tells me. In fact, a good chunk of the book has nothing to do with psychology experiments. The text sprints across millennia of science and culture — "from ancient burial sites to futuristic cryogenics labs," as Solomon puts it — to document death's dominant role in the human psyche.

One voice that appears over and over is Becker's. "Although the idea that humans dread death and are preoccupied with transcending it has been floating around since antiquity in both religious and philosophical thought," Solomon writes, "Becker seized readers by the throat in 1973 with his powerful articulation of this notion in *The Denial of Death*." Becker's book plumbed the depths of everyday human motivation. His analysis boiled down to the problem of death: We're animals driven to keep living, but unlike other species we know that we're going to die. Becker viewed this as a unique psychological burden. We wouldn't be able to function if we faced it fully. So the fear of death, he argued, impels us to try to feel that we're significant beings in a meaningful world. We do that by living out our lives in a symbolic reality in which we will somehow continue on beyond our physical death. We might believe in an immortal soul. Even if we don't, we still believe in our identity.

"Recognition of our mortality leads us to love fancy cars, tan ourselves to an unhealthy crisp ... and crave fame, however ephemeral."

As Greenberg puts it: "I can think to myself that, well, 'Jeff Greenberg' will continue. My body will die, but that's not my identity. My identity is tied up in the things that I write, in the impact I have on other people, in my family — I have two kids, so they carry on my name, my memory." So much of what motivates human behavior, Becker argued, is this need to establish and maintain that sense that we are significant beings who will in some way transcend death.

Becker's ideas got a lot of attention in his day. *The Denial of Death* made a brief appearance in *Annie Hall*. It changed the life of a young Bill Clinton. It won a Pulitzer Prize in 1974. By then, though, Becker was dead. He had died earlier that year, at the age of 49. Interest in his ideas soon dissipated. Among academics, his interdisciplinary focus was disparaged.

As Solomon tells it, other professors saw Becker as an "entertaining performer who amuses undergraduates" — a writer whose "highly speculative" ideas "cannot be subjected to empirical scrutiny."

Terror-management theory originated as a distillation of Becker's sometimes turgid psychoanalytic prose. As graduate students at the University of Kansas, Solomon, Greenberg, and Pyszczynski had studied two seemingly separate subjects: self-esteem and prejudice. Becker's books, which Solomon didn't stumble on until taking a job at Skidmore, in the early 1980s, were like a key that opened up the underlying explanations for both phenomena: Self-esteem is the sense of being a valuable contributor to a meaningful world. And conflicts arise because cultures prescribe different paths to significance. Since people's psychological security hinges on believing that their own worldview is correct, learning about competing beliefs can be threatening. A lot of intergroup conflicts stem from this collision of worldviews.

Which was fine to ponder in a coffee shop. What the three psychologists quickly realized was that none of their colleagues would take these ideas seriously without evidence. So they began testing a series of hypotheses that seemed to tumble out of their theory.

The self-esteem part was simple enough. But how could they test Becker's other claims, about the death-denying functions of our beliefs about reality? They settled on an experimental model in which some subjects would be reminded of their mortality while others would not. If terror-management theory were correct, they reasoned, then people who got the death reminders should more intensely cling to their culturally acquired beliefs.

In their first experiment, the psychologists had municipal-court judges in Tucson set bail in what looked like an actual case involving a woman cited for prostitution. Half of them first filled out a questionnaire designed to remind them of death. It consisted of two questions: (1) Please briefly describe the emotions that the thought of your own death arouses in you; and (2) Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead.

The results were striking. Judges not reminded of their mortality set an average bond of $50, the typical amount. Those who had thought about death set an average bond of $455. Hypothesis confirmed. "The results showed that the judges who thought about their own mortality reacted by trying to do the right thing as prescribed by their culture," the psychologists explain in *The Worm at the Core*. "Accordingly, they upheld the law more vigorously than their colleagues who were not reminded of death."

A slew of studies followed, many showing in one way or another how death reminders lead people to criticize and punish people who oppose or violate their beliefs and praise and reward those who support or uphold them. In one study,

Christians who were reminded of death liked fellow Christians more and Jews less, while in a control condition they didn't discriminate between them. In another, participants were asked to rate pro- and anti-American comments by professors purportedly interviewed in a political-science journal. People reminded of death rated the pro-American interviewee much more positively and the anti-American much more negatively. Another study found that students reminded of death were more aggressive toward people who disagreed with their political beliefs.

The psychologists also extended Becker's ideas to show how these psychological processes work. Two puzzling events helped bring this about. First, while playing volleyball at a conference, Pyszczynski discovered a lump on his neck. A doctor told him there was a chance it could be lymphoma. Staring mortality in the face, Pyszczynski didn't think about seeking self esteem or affirming his cultural beliefs. He thought about trying to stay alive by finding the best cancer specialist. His reaction didn't seem to square with his own theory.

The lump turned out to be just a cyst, but then came the second mystery. A German psychologist, Randolph Ochsmann, couldn't replicate the terror-management theorists' early results. Digging into the details, Pyszczynski and his colleagues discovered that Ochsmann had employed death reminders far more dramatic than their own. When Ochsmann tried the simpler ones instead, he did replicate their effects.

The attacks of September 11, 2001, catapulted terror-management theory to greater prominence.

The terror trio's conclusion: People react differently to conscious and unconscious thoughts of death. While thinking about death directly, Pyszczynski says, folks do rational things to get away from it, like trying to get healthy. It's when death lurks on the fringes of consciousness that they cling to worldviews and seek self-

esteem. "That helps explain why these ideas might seem strange to some people," says Pyszczynski, a professor at the University of Colorado at Colorado Springs. "You can't really introspect on it. While you're thinking about death, this isn't what you do."

Pyszczynski, Solomon, and Greenberg published their work consistently in the prestigious *Journal of Personality and Social Psychology*. But early on, as Greenberg tells it, "its main impact was to get us ostracized by the rest of the field of social psychology." Part of that was due to the disconcerting subject matter. Colleagues referred to them as "the death guys."

At the same time, the death guys didn't ingratiate themselves with fellow social psychologists. They openly condemned them. Starting in graduate school, Solomon says, the trio felt that social psychologists studied things because they were easy to research in the lab. "Let's face it," Solomon tells the documentary filmmakers in New York. "You're a distinguished social psychologist. And you've spent decades doing painstakingly sophisticated work. And then the three of us, smelling like ambulatory Bob Marley commercials, waltz into a conference, looking like the Three Stooges, declaring everything that you do to be radically inconsequential. It's not exactly a recipe for intellectual engagement."

Nathaniel Brooks for The Chronicle Review

Terror-management theory, developed by scholars who include Sheldon Solomon, a social psychologist at Skidmore College, has gained prominence but still raises objections in academe.

To Solomon's discomfort, it was the terrorist attacks of September 11, 2001, that catapulted the three researchers' work to greater prominence. Within days journalists began calling, asking the psychologists to analyze the assaults in light of their theory. Colleagues confessed to finally understanding their work. In 2003 the American Psychological Association published their first book about terror-management theory, *In the Wake of 9/11: The Psychology of Terror*.

As Solomon and his colleagues write in *The Worm at the Core*, 9/11 represented "a powerful one-two death-threat punch to Americans." The attacks struck symbols of American culture. They also functioned as an enormous death-thought induction for the American public. Terror-management theory helped explain the motives of the terrorists, who were said to be adhering to a cultural

worldview in which "heroic martyrdom against evil confers death transcendence." And it shed light on Americans' reactions, including patriotic zeal and the appetite to attack Muslims.

The dramatic headlines also pushed the trio's work in a more political direction. In *The Denial of Death*, Becker had argued that, when mainstream worldviews fail to serve people's need for psychological security, concerns about mortality drive them to follow charismatic leaders. Such figures buttress people's self-worth by making them feel like actors in a heroic campaign to triumph over evil. Within days of the attacks, President George W. Bush had declared his intention to "rid the world of the evildoers." Could concern about mortality explain his surging popularity?

In a series of experiments, the psychologists found that death reminders increased support for charismatic leaders in general and for Bush and his policies in Iraq in particular. For example, the researchers asked students to think about death or a control topic and then read statements supposedly written by gubernatorial candidates of varying leadership styles. *You are not just an ordinary citizen, you are part of a special state and a special nation*, the charismatic leader said. *I can accomplish all the goals that I set out to do. I am very careful in laying out a detailed blueprint of what needs to be done so that there is no ambiguity*, a task-oriented leader said. *I encourage all citizens to take an active role in improving their state. I know that each individual can make a difference*, the relationship-oriented leader said. Participants then picked the candidate they would vote for. After thinking about a control topic, four of 95 people chose the charismatic leader. After a death reminder, that candidate's votes increased nearly eightfold. Such results, the psychologists wrote, suggested that "close elections could be decided as a result of nonrational terror-management concerns."

And on it went. Aging, dating, smoking, marketing, parenting, robot-designing, health decision-making — those subjects and more have now been studied through a terror-management lens.

With that ubiquity has also come criticism. One of the most persistent challenges goes back to the theory's origins: how humans developed into these worldview-protecting, self-esteem-seeking creatures in the first place. To some opponents, terror management conflicts with evolution.

In *The Worm at the Core*, Solomon and his colleagues hark back to the emergence of human consciousness to make the case that early forms of terror management altered the direction of history. Knowledge of death "arose as a byproduct of early humans' burgeoning self-awareness," they write. That knowledge could have incapacitated people, they say, without simultaneous adaptations to transcend death. So early humans invented a supernatural world in which people do just that. The groups of humans who "fabricated the most compelling tales" could best cope with mortal terror, function effectively, and pass on their genes. "Psychologically fortified by the sense of protection and immortality that ritual, art, myth, and religion provided, our ancestors were able to take full advantage of their sophisticated mental abilities," the authors write. "They deployed them to develop the belief systems, technology, and science that ultimately propelled us into the modern world."

Lee Kirkpatrick doesn't buy that story. Kirkpatrick, an evolutionary psychologist at the College of William & Mary, argues that self-awareness could not have evolved if its consequences included a debilitating terror of death. The genetic mutations producing that self-awareness would have been eliminated by natural selection. "I just don't see how a brain system that produced such maladaptive effects could stay around long enough for people to figure out the proposed terror-management solution to the problem," he says.

Terror-management theory is spurring researchers to propose alternative interpretations. Leonard Martin, a professor at the University of Georgia who last year published a wide-ranging critique of terror-management theory in *European Review of Social Psychology*, says "a number of people are rejecting the idea that there's this universal, overriding fear of death that is the one big motive that accounts for everything."

One of those critics is Daniel M.T. Fessler, an evolutionary anthropologist at the University of California at Los Angeles. The phenomena reflected in the terror-management literature are broader than the theory can accommodate, he argues. Yes, death reminders lead people to defend their worldviews. But so do many other things, says Fessler. You can get the same effects when you make people think about a situation in which they would need assistance — building a house, for example. People become more ethnocentric and xenophobic, he says. The presence of uncertainty can also elicit worldview defense, Fessler says.

Fessler likens terror management to a theory about fire that claims that matches are its unique cause: "If someone comes along and says, well, gosh, you know, lightning causes fire. And just plain old friction can cause fire. And, heck, if you want to talk technology, cigarette lighters can cause fire. ... If your goal is explaining fire, it doesn't look like your match theory really is up to the job."

When I ask Greenberg about Fessler's critique, he describes it as a narrow and selective way to look at the empirical literature. Greenberg and his colleagues have contrasted death reminders with control conditions in which people thought about many other difficult or unpleasant things, like failure, uncertainty, meaninglessness, physical pain, and social exclusion. Well over 100 studies have shown that death reminders produce effects different from those other threats, they point out. "Death is a unique threat," Greenberg says, "because it's the only inevitable future event."

The question is where that knowledge leaves us. *The Worm at the Core* offers no simple answers. Greenberg hopes that, through greater understanding of these mental processes, people will be led to embrace less rigid worldviews. "We're all striving for self-worth in some way," he says. "We don't have to value the path somebody else is taking. But we can realize that, well, that's the way they're coping. That's the way they're getting through their days. And, as long as they're doing it in a way that's not harmful to others, we should be OK with that."

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