

A Psychological Anthropic Principle: Can We Live Outside of the Boundaries (and Can We Live Within Them)? 1

Psychological Anthropic Coincidences: Can We Live Outside of the Boundaries (and Can We Live Within Them)?

Everett L. Worthington, Jr.

Virginia Commonwealth University

Talk given at the Washington Theological Union, March 16, 2013, Washington, DC

Psychological Anthropic Coincidences: Can We Live Outside of the Boundaries (and Can We Live Within Them)?

Until I was 28, I was normal. Okay, that passes for humor among psychologists. Also, among anyone who knows me personally, it would get a belly laugh.

The day my self-delusional normality unraveled was at a hike in the backcountry of Yosemite when we came upon the 10,000-foot elevation Cloud's Rest. I walked out on that 100-yard knife-edge rock-scramble. I looked down 4,000 feet on my right side and 2,000 feet on my left side. I looked out 100 yards to the end of the knife-edge cliff along the so-called path. As a psychologist, I now understand about perspective and vanishing points. As an engineer then, all I could think was that this path closes in to a point out there, and there is no way in the world I can balance on that point. The only wise thing to do was to retreat into a phobic sense of anxiety, fall to my knees, and literally (I kid you not) crawl backwards off of that knife-edge ledge. It's pretty terrifying to live on the knife-edge. The only thing worse might be falling off one side or the other.

The anthropic principle in cosmology is that physical existence as we know it, and life as we know it, exist only because three physical constants have values within a narrow band (Barrow & Tipler, 1986)—a knife-edge, so to speak. Those constants describe the fundamental forces of nature—gravitation, electromagnetism, and strong and weak nuclear forces. Thus, we can summarize this by saying, in simplified shorthand, physical reality is perfectly fit for human life. It is not that life evolved within existing conditions to adapt to or to fit them. Rather, the anthropic principle argues that before there was evolution, there were fundamental constants of nature, and

those constants made it “just right” for existence and “just right” for evolution. If those constants had different values (outside of a narrow band), existence much less human life, would be impossible. To reduce the anthropic principle to its essence, (1) some physical properties are constant and (2) existence can exist only in the margins between two boundaries—a high and low edge.

Now I am a psychologist. So I wanted to tackle a difficult idea, using the metaphor of physical anthropic coincidences. The question: Is there such a thing as *psychological* fine-tuning? Are there fundamental characteristics of human psychological experience that represent a tension within the bounds of which psychological integrity exists but outside of which psychological integrity does not exist? Certainly, knowledge of psychological scientific principles is less precise and less mathematically described than physical. But, there are suggestions that despite our inability to quantify such psychological fine-tuning, psychological fine-tuning might exist. In these brief moments, I hope to sketch these suggestions in broad, imprecise strokes. Then I suggest a tentative psychological anthropic principle. I will use four major headings: Psychology, Theology (briefly), Relationships, and Society.

What Are the Basic Areas of Tension by Which Psychological Integrity Is Bounded?

Psychological Range of Existence

Cognition. Human cognition is broadly described as System 1 cognition and System 2 cognition. Daniel Kahneman (2011) has summarized the working of these two cognitive systems brilliantly in *Thinking Fast, Thinking Slow*. System 1 thinking occurs outside of conscious awareness, and yet it accounts for most cognition. It is fast, automatic, intuitive, and

operates according to an efficient meaning-making system that has been fine-tuned by evolution to make fast decisions possible so that most of the time one can predict and control what might happen. System 1 cognition might include Freud's unconscious motivations, dynamics, and defenses, but it is not limited to Freud's observations. It can include cognitive heuristics that simplify decisions, judgments, and understanding but do so at the cost of occasional inaccuracies. System 1 cognition also includes expertise, honed into automaticity through at least 10,000 hours of concentrated practice (Kahneman, 2011).

System 2 cognition is slow, deliberate, rational, logical, judgmental, and can impose to some degree its "will" or understanding on System 1 cognition. I say, "to some degree" because System 2 cognition depends on having inputs to reason about, and often those inputs come from System 1 and thus—under the garbage-in-garbage-out principle—reasoning might not produce pure rationally driven products of thought if the products started with irrational materials to work with.

For our purposes, though, let's just say that all of life is a constant struggle in the mind to maintain the proper tension between System 1 and System 2. In the physical anthropic principle, the constants presumably do not change though masses, charges, and even fundamental nuclear arrangements might vary. Similarly, while the conditions in which System 1 and System 2 cognition are constantly changing and thoughts are whizzing helter-skelter through our consciousness, presumably the boundaries within which System 1 and System 2 reasoning interact with each other to yield coherent cognition and action are within some narrow band.

Morality—being virtuous (but within limits of context and of what we *can* do). We find similar tensions in the moral

realm. Humans seem to make moral motions—that is we treat things as moral or not. While different subgroups might disagree radically about what is or isn't moral, there is always a sense that *some acts* are morally right and some are not. Most psychologists take a position that there are some acts that are “good,” or virtuous. There are human strengths, and in positive psychology, virtue has made a resurgence in recent years (Peterson & Seligman, 2004). That has been mirrored by writings in theology (Charry, 2010; Wright, 2010) and philosophy (S. Bok, 2010) and political science (D. Bok, 2010). Humans have a sense of right and wrong within certain subcultural and personal boundaries.

Yet that is not the whole story. People seem to find it impossible to do what they believe to be right or virtuous consistently. And, unless one has an antisocial personality disorder and has little conscience, one is usually bothered by personal moral failures and suffers at least some self-condemnation (Worthington, 2013).

Self-control and willpower—it's like a muscle—versus self-indulgence. We seem continually at war with self-indulgence. Yet over-control of oneself seems to show up as psychopathology with diagnoses like obsessive-compulsive personality disorders, obsessive-compulsive anxiety disorders, and anxiety disorders that arise from lack of control.

In recent years, Social Psychologist Roy Baumeister has suggested that self-control is like a moral muscle. Like a muscle, it can be fatigued if it is over-worked. Thus, in any of eight interchangeable self-control tasks—from tolerating ice water to resisting hot, aromatic chocolate chip cookies to squeezing a grip bar—performance of any task results in less ability to perform well on a second task. Thus, optimum self-control is yet

again living within a thin membrane of managing one's tasks that deplete one's ego strength.

Like a muscle, of course, self-control can also be strengthened by successful efforts to control oneself. People asked simply to attend to good posture all week were able to perform better on a self-control task than people who do not exercise self-control. But our point obtains: we need to live within a narrow range of temptations to self-indulgence and we need also to succeed most of the time.

How we love—personal needs dictate our mates, careers, and leisure. People also struggle with relationships. There is an optimal balance of intimacy, co-action (i.e., doing non-intimate activities with others), and distancing (i.e., doing things alone) that we struggle with within any close relationship. That balance must be sustained over the course of the entire life (Worthington & Buston, 1986). We balance those needs through the ways we structure and use our time. We make the big decisions like our choice of career, mate, and leisure activities to commit large blocks of our time in predictable ways. For example, if we have a high need for intimacy, we tend to choose careers like counselor or pastor, which tend to have lots of intimate communications. If we have a high need for co-action, we might go into sales, where we interact a lot but mostly in co-active ways. If we have a high need for distancing or alone time, we choose careers like writer. Our choice of mates also largely affects the way we use time. Some mates demand lots of intimacy; others, co-action; others want private time.

Individual senses of justice versus mercy—wrongdoing and punishment, merciful versus forgiving motives and emotions. McCullough (2008) argues that primates evolved with (among others) two group-living motivated needs. First,

primates need justice. That is, primates need to patrol the borders of the troupe to prevent loss of resources to out-groups and also to prevent unfair use of resources by members of the in-group. But, if the punishment is aimed at exclusion from the group or violent retribution against in-group transgressors, then it would not be long before the troupe would be obliterated by isolated individuals being subject to predation. Thus, the second need arose—the need to reconcile. Forgiveness—a change in internal behavioral intent, emotion, and motivation—seems more human and is due to social evolution. Again, for the purposes of the present talk, we notice that a delicate balance exists between two fundamental motives in the human race—justice versus forgiveness.

Individualistic versus collectivistic self-construal.

Societies tend to develop cultural norms that favor individuals or groups. As people live within those norms, they begin to construe their own identities in ways that are consistent with the cultural societal norms. The way they see themselves is the internalized identification of the group norms. However, there are always tensions. We do things both alone and in groups. Most of us find that, within the boundaries of acceptable societal norms, we need a moderate commitment to individualist self-construal and a moderate sense of group identity.

Mindfulness versus division of attention. Singer (1970) argued that life is a battle for our limited attention, which flits back and forth between internal experience and external stimuli. When life gets demanding and we tune into our inner worries and concerns too much, we get into accidents.

Theology

Religious systems have articulated theologies or philosophies. Those systems of belief, value, and practice help

us live within the margins. But, life poses a number of unresolvable dilemmas, and each religious system tries to deal with them. Yet religious systems provide different answers to the fundamental religious questions, and people are more or less satisfied with the answers given. Thus, usually within a religious system, there is some room for staking out different positions.

Basic theological questions. Of the multitude of questions asked, we cannot always state that the middle way is the correct way. Religions take extreme positions, and within the religion consistency is approached. For example, the idea of whether religion ought to rule one's life tends to be emphatically endorsed by virtually all religions. People who do not endorse a religious framework of beliefs, values, and practices take an equally extreme position by asserting their belief that religious beliefs, values, and practices do not matter to ultimate existence.

On specific issues, for example,

- Religions and denominations provide different balances between free will and determinism.
- Within Christianity, some see God as completely sovereign, controlling virtually all of life in providential intervention. Others see humans as free to make responsible choices.
- We must try to resolve the ideas of whether life is unity, is all diversity, or whether it is something of unity-in-diversity.

Regardless of how committed one feels to one's theological positions, it seems an experience of life to feel doubts when those beliefs are put under strain with very good (or sometimes very bad) events.

Relationships

Individuals are responsible agents and also are acted upon by outside forces. They interact with other individuals. As we are clearly aware, when people get together in relationships, they act differently than they do alone or in other relationships. People can have vicious hate-filled marriages and be sweet and agreeable with everyone else in their entire lives. Or they can be grumpy, cranky and irascible in all their relationships except for one spouse or close friend. How many despots in society have killed millions and yet had close personal relationships with some people?

The bad is stronger than the good. Baumeister, Bratslavsky, Finkenauer, and Vohs (2001) reviewed several literatures from an evolutionary perspective. They supported an assumption informed by evolutionary psychology that **the bad is stronger than the good**. Their reasoning follows this path. If one does not attend to good events in life, one misses out on valuable resources. However, if one does not attend to danger and negatively tinged events, one is liable to be killed. Thus, Baumeister et al. argue that humans are hard-wired for attending to the negative and thus the bad is stronger than the good.

The good defeats the bad by outnumbering it. We are not doomed to an evil world. Good strikes back and makes up in numbers what it cannot match in power.

The positivity-to-negativity ratio. Thus, people tend to walk a social knife-edge, just like a psychological knife-edge. The ratio of positive to negative events is remarkably consistent. In their 2001 paper, they adduce evidence for this phenomenon in six different literatures: (1) in everyday events, (2) major life events (e.g., trauma), (3) close relationship outcomes, (4) social network patterns, (5) interpersonal interactions, and (6) learning processes. Since the review of Baumeister et al. (2001), three

other areas have demonstrated this positivity-negativity asymmetry.

Couples. One is long-term couple relationships. Gottman (1994) described the Gottman-ratio (positive to negative interactions) as the most crucial metric for predicting the longevity and happiness of a romantic relationship. He claimed that in ten minutes of recorded interaction, he could predict with 94 percent certainty which couples would be together and happy four years after the observation. Gottman described a discontinuous relationship for positive-negative interactions with a threshold at about 5:1 positive to negative.

Learning language. Language learning in children depends crucially on the relationship between parent and child (Hart & Risley, 1995). The degree of positivity versus negativity in their interactions predicts rate of development of the child's vocabulary. Like the Gottman ratio, a 6 to 1 positivity-to-negativity ratio was found to be a threshold with discontinuity at lower ratios.

Positive emotion. The field of positive psychology has arisen starting in 1999 (Seligman & Csikzentmahi, 2000). Within that field, Barbara Fredrickson (2001, 2009) has described yet a third area since the Baumeister et al. (2001) review. This is what she calls the Losanda ratio of positive to negative emotional reactions. She locates it at about 3.6 positive-to-negative emotional experiences for emotional health.

Overall, nine areas of research converge. They suggest an optimal range of positive-to-negative interactions is needed for relationship and emotional functioning. That positive-to-negative ratio is probably between 3 to 1 and 6 to 1. Personal and interpersonal functioning lies within that narrow band.

Societal Tensions

Good of the one versus good of the many. There is some balance that people and societies must establish between individualism and collectivism. Although we psychologists use concepts like individualistic and collectivistic societies and individualistic and collectivistic self-construal, there are tensions between the one and the many. As *Star Trek* was fond of posing, Does the good of the one outweigh the good of the many? The answer is always, *it depends*. But, that tension also is something that cultures embody, societies bear, families teach and inculcate, relationships strive for, and individuals balance. Each culture lurches its way to some balance, striving to maintain the balance as events unfold.

My point is that political and economic swings to extremes might succeed in the short term, but in the end, despite staggering around without a societal compass, people seem to find a middle ground.

Justice versus mercy. Not only to individuals have a sense of what is just and what is merciful, but societies establish a balance as well. Some governments tend to be more oppressive and others more lax in law and order. Some tolerate protest and allow public dissent. Others clamp down on the slightest criticism.

Some societies have a sense of social justice, of advocacy for the least well off members of society, and others tend to be more cold-hearted. Even within a country, political parties can show mercy to different minorities. For instance, in the United States, political liberals criticize political conservatives for being cold-hearted to the plight of the poor, but the shoe is on the other foot in conservative critiques of liberals' stance toward unborn children. In both cases, the political groups are trying to balance

justice and mercy, thinking they're close to good balance even though the other political group thinks they're out of balance.

Others. Let me mention but not discuss two others. Exclusion versus embrace of outsiders creates tension. Also there is an inherent tension between freedom and equality. When political systems are permitted to float without restriction, inequalities inevitably develop and those who are less well off feel unjustly treated, while those who have earned or been bequeathed greater status resist losing their status. To the extent that the state enacts controls to promote greater equality, it necessarily has to restrict people's freedom. People have different balance points at which they feel comfortable between freedom and equality. Much political struggle is aimed at balancing these virtues.

The Psychological Anthropic Principle

In summary, we have seen that there is a constant struggle for how to live between the margins—within the individual, within the relationships of individuals, and within collective social groups or societies. The edges pull and push on us. They create “tensions,” a word I have used many times. Why? What makes us feel tense as we move to the boundaries?

We seem to have a strong need for **psychological consistency**. This creates the range that is akin to the range for the physics anthropic principle that life is restricted to a narrow band of possible values for physical constants. Psychologically, people continually try to organize their experience so that it appears to them to be as consistent as possible. Inconsistency is not well tolerated and psychological functioning tends to go rogue with marked inconsistencies.

Thus, we might understand the psychological anthropic principle as being the need for consistency. Our brains, our minds, and our relationships are organized in such a way that we

value consistency. Yet the consistency must be flexible enough to permit innovation.

My “consistency”: Critical realism. For me, the consistency comes through critical realism. I cannot believe that we can have certainty of ideas—either religiously or philosophically. I cannot trust wholly that, through science, we can ever know physical reality, though I certainly do believe in a physical reality. (What we see and measure seem unable to represent true reality, but only approximate it.) Thus, we must ground our ideas in reality *as we perceive it* but remain skeptical that we have true knowledge and understanding of the ideas or of reality. We clearly act on our beliefs (and I have firm theological, philosophical and scientific beliefs), but I must remain somewhat humble about whether those are absolutely correct.

The need for consistency. This need for consistency makes evolutionary sense. We are more likely to survive if we can discern the “rules” that are consistent and use those to make survival-relevant decisions.

This need for consistency makes philosophical sense. We need *some* philosophical system to impose consistency on formal explanations of the meaning of life’s dilemmas.

This need for consistency makes theological sense. Theological systems seek to present views of the structure and functioning of reality that includes temporal and transcendent reality. Their starting points or central points tend to be transcendent and not corporeal, but consistency is all important in theology, just as it is in philosophy.

Areas requiring consistency. Three fundamental questions must be addressed by all individuals and all philosophical and theological systems. *Ontology* must be explained—what

explains existence or being? *Morality* must be explained—what are right and wrong things to do? *Epistemology* must be explained—how do we know what we know, and how do we know that we know what we know? Individuals, religions, philosophies, and science create logical and systematic answers for the three basic areas of questions (ontology, morality, and epistemology) in an attempt to be constant and consistent.

Obviously, each may succeed at consistency and constancy at different degrees. We also defend ourselves against inconsistencies. Theories in psychology like cognitive dissonance theory (Cooper, 2007; Festinger, 1957) have long known how people twist our cognition to fit pre-existing beliefs and biases. Research on heuristics in modern cognitive psychology (Kanneman, 2011) and the power of the dynamic unconscious mind (Freud, 1927/1961) are other examples that psychology has uncovered about the amazing power of needing consistency, and, when we do not detect consistency, we experience anxiety and discomfort. We then engage in behavioral or cognitive manipulations to experience relief from tension and anxiety and achieve a measure of tranquility—though that tranquility might be bought at a terrible psychological cost—by psychologically changing our perception, memory, or thought.

The Cost of Failures in Consistency

The need for perceived consistency—the psychological anthropic principle—is so built into the human race, that the consequences of inconsistency can be dire.

- What happens when the systems we adopt—as individuals, as religious believers, as philosophical believers, and as scientific believers—are inconsistent in the ways they answer the ontological, moral, and epistemological

questions or in the ways the answers disagree across ontological, moral, and epistemological areas?

- What happens when we have gross System 1-System 2 cognitive disagreements, disturbances in the brain and body's connection with the mind, large separation or conflict between individuals and groups or within groups?

Basically, there is malfunction, loss of integrity, implosion or explosion personally. This “disintegration” is a parallel to considering worlds in which the physical fine-tuning constants are outside of the range of the physical boundaries. Like worlds flying apart or collapsing within—exploding or imploding—psychological functioning similarly explodes or implodes.

In Table 1, I summarize the experience of disintegration that occurs with loss of sufficient consistency. In each of four areas (e.g., religion, philosophy, science, and the personal), I speculate on the experience, the way that people malfunction in the different areas, and the end that people come to in each area. For example, in the religious area, the experience of having an inconsistent religious worldview or one that is not providing answers that are sufficiently satisfying in areas of felt need include, as a core, a sense of “lostness.”

Religion. One struggles with God (or religious ideas) and feels that one has lost (or has never developed) a sense of religious rootedness. Exline, Park, Smyth, and Carey (2011) have described many of the effects of this religious struggle, and theologian, LeRon Shults, and psychologist, Steven Sandage, team up to talk about the periods of stable and relatively peaceful religious dwelling in our lives but also times of religious seeking (Shults & Sandage, 2006; see also Wuthnow, 1998), which can feel like heroic questing, but more often feels like wandering in the desert without a compass or canteen.

Philosophy. Consequences are similar for failures in philosophical systems. One feels a sense of existential crisis, loses a sense of meaning in life, and engages in existential wandering and a loss of identity. The existential philosophers like Sartre, Camus, Jaspers, and Heidegger have written extensively about the *rootlessness* of having no sense of meaning and the utter necessity to create (or in Christian existentialists like Kierkegaard or Tillich, find) a sense of meaning. They also have written about the heroic struggle to enact meaning and the ability of a sense of meaning to help people deal with horrendous suffering (Frankl, 1963).

Science. When scientists experience such profound inconsistency, the result is a sense of crisis that Kuhn (1970) observed and described. Scientists experience the “essential tension,” which is what Kuhn (1977) called the position in which a new conceptual framework could solve the crisis in the old conceptual or theoretical framework, and yet no experimental evidence supports the new conceptualization while the old conceptualization had plenty of evidence supporting important aspects of the theory, and yet it cannot solve the crisis. Lakatos (1978) described the tenacity with which scientists hold onto the core of a research programme when fundamental experiments fail. They attempt to hold onto consistency by revising theory to retain a sense of consistency by modifying the peripheral less central tenets.

The personal. Inconsistencies in personal life are met with distress. When the inconsistencies and distress are experienced in an important area, psychological distress, disorders, and disturbances occur. With them, psychiatric diagnoses. Each, as we will see below, is biological, psychological, social, and spiritual, but is in a sense a manifestation of disintegration.

Summary. Thus, in summary, something like psychological anthropic coincidences—at least as suggested metaphorically—is the need for psychological consistency, and something akin to the “fine-tuning constant” for psychological functioning of the human psyche might be the drive to be consistent in meaning in mind, mind-body, individual, and social realms and the interrelationships among them. Failures in consistencies push or pull minds, bodies, and relationships to alienation, disconnection, and disintegration. They push people toward psychological disorders.

Psychological Fine-Tuning

Major categories of psychological disorders. In Table 2, I have described six major categories of psychological disorders. Without at all dealing with the very sophisticated etiological identification of them, and even without considering the validity of looking at divisions so large instead of individual diagnostic categories, I observe the ways that the disorders can be interpreted to represent a disordering and disintegrating of consciousness as it exists in most people. Typically, people who are experiencing such disorders experience a separation and disconnection from their usual state of being. If we for the moment exclude people with chronic severe mental disorders, for whom the disordered state is experienced as stressful and distressful, but not unusual (because it is, of them, chronic), we see that almost all people who are experiencing psychological disorders feel that inconsistency exists with their “normal” sense of being.

We can tolerate a certain sense of inconsistency. We do it every day. But when we leave the boundaries of our normal experiences, then we experience distress and motivation to solve the problems, cope with the stresses, ameliorate the distresses.

We are having our *personal* Kuhnian mini-scientific revolutions, and like science, those revolutions have only a limited number of ways they can end.

- We can resolve the personal crises and cope with the inconsistencies by eliminating them.
- We can block them psychologically, hoping that in the future we might be able to deal with them, but also hoping that we just forget them and they go away.
- Or we can experience a psychological revolution that either kicks us into a new mode of being that spells creativity or pushes us into a new mode of being that spells psychological distress and perhaps disorder.

Can People Live Between the Edges?

If people need to live within the limits for psychological harmony, it is a fair question to ask this: *Can* we do so? Theologians and philosophers suggest that basic questions answered, more or less adequately, by theological and philosophical systems are questions of ontology, morality, and epistemology. If we take the simple observation that one perfect system would likely, by virtue of some survival of the fittest mechanisms in society, result in a hugely dominant system, then we might suspect that each of the human-made systems—whether of philosophy or theology (or science)—is imperfect in some ways. It forces adherents to grapple with life issues that are not answered neatly and unambiguously.

Christian pastor and speaker Larry Christensen once said that truth is like a hula hoop and human understanding is like a matchbox. One simply cannot fit truth into a matchbox. Thus truth comes at us in what seems to be paradoxes or antinomies (i.e., “laws” that appear to be contradictory to each other).

- If we look left, we see one side of a truth, call it free will; and if we look right, we see the other, call it determinism.
- If we look left we see the societal value of equality; if we look right, we see freedom.
- If we look left we see psychological disorder; if we look right, we see creativity.

By looking *to* one truth, we turn our attention *from* the other.

It would be nice to think that this could lead to living a balanced consistent life between the edges, between the sides of truth, comfortably within the margins or walking the knife-edge along a ridge that gives a beautiful vista of a valley while posing danger of falling on both sides of the ridge. Yes, that would be nice. But, in the way it lives out in our lives, we seem to run off the path on one side or the other, and then we look back at the other side of the truth and try to get back onto the path again. This can lead to repeatedly running off the path on our favorite side, or to weaving back and forth from ditch to ditch. In fact, humans are more likely as individuals to fixate on a single side, but as a society, we seem to be more likely to weave back and forth between opposites.

I am not a pessimist, seeing us consigned to plunge off of the psychological, religious, philosophical, scientific, social, or societal cliffs of our life into the “pit of despair.” (“Don’t even think about trying to escape,” as the albino from *The Princess Bride* so memorably said.)

Rather, I am that critical realist I mentioned earlier. I am epistemologically pessimistic about certainty of our knowledge and—and I use the word intentionally—I am *certainly* pessimistic about reason as the primary method of guiding us there. But, like the Romantics of ages past, I believe that there

are other things in life that that provide—in conjunction with reason—an adequate base for staying, if not on the path, at least on the mountain.

For me personally, that is my faith as rooted in historic Biblical Christianity, my sense of connection with people, with nature, and with the transcendent (which I see as manifestations of God). I acknowledge that other people may have a sense of the True that comes from different faiths or philosophic traditions, and that there are legitimate grounds for disagreement among the systems. Nevertheless, it seems to be not just empirically seeing the world that is there and then inferring the physical reality that is not observable that grounds us.

But also it is the non-rational, the intuitive, the mysterious, and our personal experiences with God that are needed (1) to keep us moving purposefully and with integration along that cliff, (2) to give us confidence to walk down that knife-edge that does not really converge into a real point but is just a vanishing point in perspective, and (3) to give us a perspective of the beautiful valley that stretches out all around us.

References

- Barrow, J. D., & Tipler, F. J. (1986). *The anthropic cosmological principle*. New York: Oxford University Press.
- Baum, (2010). *Confessions of a China Watcher*. Chantilly, Virginia: The Teaching Company.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*, 323-370.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology, 74*, 1252-1265.
- Baumeister, R. F., & Tierney, J. (2011). *Willpower: Rediscovering the greatest human strength*. New York: Penguin.
- Bok, D. (2010). *The politics of happiness: What government can learn from the new research on well-being*. Princeton, NJ: Princeton University Press.
- Bok, S. (2010). *Exploring happiness: From Aristotle to brain science*. New Haven, CT: Yale University Press.
- Cherry, E. (2010). *God and the art of happiness*. Grand Rapids, MI: William B. Eerdmans.
- Christakis, N. A., & Fowler, J. H. (2011). *Connected: The surprising power of our social networks and how they shape our lives—how your friends' friends' friends affect everything you feel, think, and do*. New York: Little Brown and Company.
- Christensen, L. (1971). *Paradoxes*. Unpublished audiotape recording of a talk given to the *120 Fellowship*, Berkeley. [exact date unknown]
- Cooper, J. M. (2007). *Cognitive dissonance: 50 years of a classic theory*. Thousand Oaks, CA: Sage Publications.
- Erickson, E. (1980). *Identity and the life cycle*. New York: W. W. Norton.

- Exline, J. J., Park, C. L., Smyth, J. M., & Carey, M. P. (2011). Anger toward God: Social-cognitive predictors, prevalence, and links with adjustment to bereavement and cancer. *Journal of Personality and Social Psychology, 100*(1), 129-148.
- Festinger (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fletcher, J. F. (1966). *Situation ethics: The new morality*. Philadelphia: Westminster.
- Frankl, V. E. (1963). *Man's search for meaning. An introduction to logotherapy*. Boston: Beacon Press.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Fredrickson, B. (2009). *Positivity: Groundbreaking research reveals how to embrace the hidden strength of positive emotions, overcome negativity, and thrive*. New York: Crown Publishers/Random House.
- Freud, S. (1927/1961). *The future of an illusion*. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 21, pp. 1-56). London: Hogarth Press and the Institute of Psycho-Analysis. (Original work published 1927)
- Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gunton, C. E. (1999). *The promise of Trinitarian theology*. London: T & T Clark LTD.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*(4), 814-834.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H. Brookes.

- Kanneman, D. (2011). *Thinking fast, thinking slow*. New York: Farrar, Straus, & Giroux.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago: University of Chicago Press.
- Kuhn, T. (1977). *The essential tension: Selected studies in scientific tradition and change*. Chicago: University of Chicago Press.
- Lakatos, I. (1978). *The methodology of scientific research programmes: Philosophical papers, Volume 1*. Cambridge: Cambridge University Press.
- Lazarus, R.S. (1999). *Stress and emotion: A new synthesis*. New York: Springer.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lewis, C. S. (1944/2001). *The abolition of man*. New York: Harper-Collins.
- Markman, H., Stanley, S., & Blumberg, S. L. (1994). *Fighting for your marriage*. San Francisco: Jossey-Bass.
- McCullough, M. E. (2008). *Beyond revenge: The evolution of the forgiveness instinct*. San Francisco: Jossey-Bass.
- McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, 135(1), 69-93.
- Nuland, S. B. (1993). *How we die: Reflections on life's final chapter..* New York: Vintage.
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford.
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257-301.

A Psychological Anthropic Principle: Can We Live Outside of the Boundaries (and Can We Live Within Them)? 24

- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shults, F. L., & Sandage, S. J. (2006). *Transforming spirituality: Integrating theology and psychology*. Grand Rapids, MI: Baker Academic.
- Singer, J. L. (198?). Navigating the stream of consciousness: Research in daydreaming and related inner experiences. *American Psychologist*, 30(7), 727-738.
- Volf, M. (1996). *Exclusion and embrace: A theological exploration of identity, otherness, and reconciliation*. Nashville, TN: Abingdon.
- Worthington, E. L., Jr. (2006). *Forgiveness and reconciliation: Theory and application*. New York: Brunner-Routledge.
- Worthington, E. L., Jr. (2013). *Moving forward: Six steps to forgiving yourself and breaking free from the past*. Colorado Springs: WaterBrook/Multnomah, in press.
- Worthington, E. L., Jr., & Buston, B. G. (1986). Transition to parenthood: A review and a model. *Journal of Family Issues*, 7, 443-473.
- Wright, T. (2010). *Virtue reborn*. London: SBKT.
- Wuthnow, R. (1998). *After heaven: Spirituality in America since the 1950s*. Berkeley: University of California Press.

Table 1

Effects of Inconsistencies in Four Areas of Life

Area	Experience	Malfunction	End of the psychological world
Religion	“Lostness”	Religious roots are lost	Seeking rather than dwelling (Wuthnow, 1998); agnosticism, atheism, religious struggle, religious angst
Philosophy	Existential crisis	Loses a sense of meaning	Existential wandering, loss of identity
Science	Kuhn’s crisis	The “essential tension”	Old scientists keep doing old science; young turks do new science
Personal	Distress	Psychological disorders	Psychological disturbance and diagnosis (diagnoses require that a disorder exists and that someone be bothered enough by it to bring it to the attention of a mental health professional)

Table 2

Different Manifestations of Personal Inconsistencies

Categories of Disorders	Examples	Experience of Disconnection and Disintegration
Anxiety Disorders	Generalized anxiety disorders, phobias, obsessive-compulsive anxiety disorder	Reasonable fears are disconnected from normal experiences
Somatoform Disorders	Hysteria, hypochondriasis, psychosomatic (stress-related, body manifested) disorders	Bodily experiences separated from normal physiology
Dissociative Disorders	Amnesia, fugue, and Dissociative Identity Disorder	Psychological identity is dissociated from normal identity
Mood Disorders	Unipolar depression, unipolar mania, bipolar disorder, major depressive episode	Emotional experience is disconnected from normal emotional ups and downs
Schizophrenic Disorders	Disorganized, catatonic, and paranoid schizophrenia	Brain functioning to perceived reality is disconnected from normal brain functioning in response to normal perceptions of reality
Personality Disorders	Narcissistic, borderline, and antisocial personality disorder	Character in relationships is not responsive to the relationships in the same ways