

Joshua A. Hicks
Clay Routledge *Editors*

The Experience of Meaning in Life

Classical Perspectives, Emerging Themes,
and Controversies

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Springer

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Introduction

Joshua A. Hicks and Clay Routledge

Existential philosophers and psychologists have long argued that the experience of meaning lies at the heart of human existence. While philosophers have debated such issues as whether meaning exists or whether certain contingencies (e.g., properly relating the soul to God) must be fulfilled in order to experience “real” meaning (Klemke 2000; Metz 2002, 2007, Chap. 30, this volume), psychologists have primarily focused on the purpose, function, and importance of experiencing meaning in one’s life. Although scholars have taken different perspectives when examining the experience of meaning in life, central in many of their arguments is that perceiving life as meaningful is essential for healthy human functioning (Antonovsky 1988; Baumeister 1991; Frankl 1959/2006; Klinger 1975; Maddi 1967; Ryff 1989; Yalom 1980, to name a few).

People have pondered questions related to meaning in life perhaps as long as they have been able to think abstractly. For more than a century, theorists have provided rich, theoretical accounts of the experience of meaning in life (e.g., Baumeister and Leary 1995; Klinger 1975; Wong and Fry 2008). While some of these ideas have been corroborated by empirical research (e.g., Williams et al. 1998), until recently, empirical psychologists have largely neglected this construct. Fortunately, in the past few years, there has been a renewed interest in meaning in life as a subject of psychological inquiry (e.g., Lambert et al. 2010; Steger et al. 2008; Schlegel et al. 2009; Vess et al. 2009). Psychologists from different perspectives have started to use advanced data analytical strategies, longitudinal methodologies, and sophisticated experimental designs to examine the experience of meaning (e.g., Krause 2007; Steger and Kashdan 2007; Stillman et al. 2008).

In this volume, we showcase many of these approaches. Our aim is to expose readers to both a wide range of theoretical and empirical treatments of meaning. To address our former goal, the first section highlights many broad theoretical perspectives on the experience of meaning. In Chap. 1, Crescioni and Baumeister argue that individuals possess four fundamental “needs” for meaning and that the decline of religion detracts from their individuals’ ability to satisfy these needs. They then elucidate the role of modern society in filling this existential void. In the second chapter, Sullivan, Kosloff, and Greenberg present terror management theory which

provides a perspective on how the human awareness of self and death motivates efforts to fashion a world of meaning. Building upon the foundation of terror management theory, Cozzolino and Blackie (Chap. 3) consider the divergent ways that meaning is pursued as a function of how death is construed. Next, Proulx draws upon the writings of Soren Kierkegaard to discuss the meaning maintenance model which offers a framework to bring together a number of distinct findings that could be construed as efforts to preserve a sense of meaning. In Chap. 5, Park highlights the powerful role that trauma plays in the meaning-making enterprise and provides a theoretical and empirical review of the literature linking the experience of trauma to meaning. Next, Shmotkin and Shrira discuss a dynamic model that takes into account the unique function of subjective well-being and meaning in life following aversive life events. To close this section, Heintzelman and King argue that meaning is a basic aspect of awareness related to the detection of lawfulness, regularity, and pattern in the environment.

In the second section, we focus on the links between cognition, decision making, motivational processes, and the experience of meaning. First, Michaels, Parkin, and Vallacher draw on action identification theory to consider how the construction of meaning may be tied to the dynamic ways in which activities are perceived. Integrating recent work on the interface between emotions and motivation, Tang and colleagues describe how discrete emotions varying in motivational intensity contribute to the sense that life is meaningful. Hirsh then describes Heidegger's idea of the "horizon of interpretation" and considers how the structuring of goals relates to meaning. Next, Feldman examines the relationship between hope, goal pursuits, and the construction of meaning. In Chap. 12, Hershfield, Brown, and Kray highlight how counterfactual thinking and age-related processes inspire a sense of meaning. Finally, Davis and Hicks conclude this section by offering a perspective on how existential crises can bear on the meaning in life judgment process.

The third section of this volume focuses on the self, identity, and individual differences. In Chap. 14, Schlegel, Smith, and Hirsch examine the role true-self-knowledge has in the experience of meaning in life. Next, Sedikides, Hart, Cisek, and Routledge focus on the self and, in particular, the distinct ways that narcissists may find meaning in life. In Chap. 16, McLean and Morrison-Cohen discuss two unique ways in which stories can contribute to meaning in life. Juhl and Routledge then explore nostalgia, a sentimental longing for one's past, as a meaning-making tool. In Chap. 18, Maddi discusses the trait of hardiness and how it helps people turn stress into meaning. In the next chapter, de St. Aubin considers how creating a legacy through generativity fosters a sense of meaning in life. In Chap. 20, Newton and McIntosh then explore religion's contribution to meaning. Finally, Vess revisits terror management theory but with a focus on how individual differences in personal need for structure relate to meaning-seeking efforts in the face of an awareness of death.

In the fourth section, we turn to cultural and interpersonal processes. In Chap. 22, Mikulincer and Shaver advance the notion that attachment security provides the foundation for attaining meaning. Next, Stillman and Lambert consider the bidirectional relationship between belongingness and meaning. In Chap. 24, Chao and Kesebir take a broader approach and discuss culture as a creator of meaning.

This section concludes with Eggleston and Oishi's chapter examining how residential mobility can impact one's sense of meaning in life.

Notably, many of our chapters have applied implications. Therefore, in the final section of this volume, we showcase theory and research on meaning that is focused on specific domains of life. To this end, in Chap. 26, McCabe, Vail III, Arndt, and Goldenberg present the terror management health model and research derived from this model that demonstrates that death awareness plays an important role in health decision making. Next, Dik, Steger, Fitch-Martin, and Onder discuss how meaning can be cultivated at work. Singer, Singer, and Berry then present a meaning-based approach to the treatment of addictions. De Leo and Earleywine apply a unique perspective to understanding substance use by considering the role of drug use in meaning maintenance processes. Finally, in Chap. 30, Metz offers the hypothesis that meaning in life should be the ultimate goal of psychotherapy.

These highly engaging and thought-provoking chapters eloquently review classic and current perspectives on the antecedents and consequences of the experience of meaning. This collection showcases the most important theoretical and empirical contributions focused on this elusive construct. As editors, we hope this book inspires future generations of scholars to generate ideas aimed at tackling questions related to the causes and consequences of feeling that life is meaningful.

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Part I

Theoretical Perspectives

Chapter 1

The Four Needs for Meaning, the Value Gap, and How (and Whether) Society Can Fill the Void

A. Will Crescioni and Roy F. Baumeister

Humans rely heavily upon socially shared meaning as they go through their lives. Language is possible only insofar as words have agreed upon meanings, and economic systems continue to function based on the mutually recognized meaning of dollars, pounds, euros, yuan, and other physical markers of economic worth. When individuals talk of finding meaning in their lives, however, they are usually not referring to shared systems of meaning such as language or currency. Rather, they seek to interpret their own actions and experiences in terms of an existentially meaningful life story. Such stories depict actions and decisions as following from important, stable values and contributing to the fulfillment of one or more crucial goals. Baumeister and Newman (1994) found in analyzing narrative accounts that individuals often reinterpret past events in terms of their contribution to a general sense of meaning in life. People's stories of their lives reveal that finding meaning in life is of crucial importance to individuals. Indeed, the sense of self is based in part on a self-understanding that emerges through stories (McAdams 1985).

There is a good reason for people to seek meaning in their lives. Believing that one's life has meaning is associated with greater levels of satisfaction in life (Chamberlain and Zika 1988), enjoyment of work (Bonebright et al. 2000), happiness (Debats et al. 1993), positive affect (Hicks and King 2007), and hope (Mascaro and Rosen 2005). Perceiving meaning in life is also associated with better physical health and general well-being (Reker et al. 1987; Ryff 1989; Ryff and Singer 1998; Wong and Fry 1998; Zika and Chamberlain 1992), lower levels of stress (Mascaro and Rosen 2006), lower levels of psychopathology (Crumbaugh and Maholick 1964), and lower incidence of depression (Mascaro and Rosen 2005).

It might be a cause for concern, then, if the perception that life has meaning is in a general state of decline. In this chapter we will present four needs for meaning that

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humans seek to fulfill in order to view their lives as meaningful. We will then argue that the erosion of the societal influence of religion – traditionally the central source for meaning in people’s lives – has led to a value gap which modern society has attempted to fill. We will discuss the successes and failures society has encountered in this attempt. Lastly, we will speculate as to whether this value gap will have direct consequences for society moving forward.

The Four Needs for Meaning

When attempting to establish meaning in their lives, one of us (Baumeister 1991) has proposed that individuals possess four needs for meaning. First, people seek to establish a sense of purpose in their lives. Second, people seek to justify their actions in comparison to a set of moral standards. Third, people seek a sense of self-efficacy and control over their environment. Fourth, people seek to establish a sense of self-worth and to be seen as worthwhile individuals by others. We will now outline each of these four needs, beginning with the need for purpose.

Purpose

The need for purpose is concerned with goals. The framework of goals provides a ready-made template for the creation of meaningful life narratives. Such accounts typically provide a beginning (the setting of the goal), a middle (the actions taken to achieve the goal), and an end (ideally, the fulfillment of the goal). Thus an individual can establish a purpose (or, more likely, purposes) in his or her life by setting, pursuing, and sometimes reaching various life goals. A father can extract meaning from his life’s narrative of setting out to be a good father, of working long hours to provide his son with a better life than he himself had, and finally of the pride he felt when he watched his son graduate college. A doctor can find meaning in recalling how she first decided to become a doctor, subsequently spent countless hours dedicated to the study of medicine, and ultimately gained certification to treat patients.

Baumeister and Newman (1994) found in analysis of narratives that goals can serve to provide a sense of purpose by allowing causal connections to be drawn between temporally distal occurrences. In this way, events an individual engaged in in the past (studying, working overtime, spending extra hours practicing the violin) can be connected to events in the future (graduating with honors, purchasing a new home, being selected as first violin in the orchestra). Taylor (1983) proposed that patients suffering from serious illness or injury use this interpretive approach as a means of coping with their trauma. Such patients often interpret their current pain as a necessary step along the path to achieving some desirable end state. Similarly, Graham (1987) pointed out that parents who lose a child may respond by engaging in increased levels of prosocial behaviors or referencing the plan of a higher power,

allowing a present pain (the loss of the child) to be interpreted as a meaningful step toward a desirable goal (helping others or furthering God's plan).

One can also see how *deficits* in meaning can be explained in terms of a goal narrative. Individuals who feel they have wasted their lives may tell stories that follow the same narrative path as a typical goal account but which end with disappointment rather than fulfillment. Such a tale of disappointment may be especially detrimental to the perception of meaning if one believes the failure could have been easily avoided (as Hershfield, Brown, and Kray point out elsewhere Chap. 12, counterfactual thinking is the most poignant in cases where the actual and counterfactual events are separated by only minimal differences). Whereas the tale of a woman who decides to become a good mother, works hard to raise her children, and then watches them succeed in life may provide a sense of meaning, the same narrative with a different ending may have the opposite effect. If instead of watching with pride as her children graduate college and take up respectable professions the mother watches in dismay as her children turn to lives of crime, the narrative may be one that hinders rather than bolsters her sense of meaning. Indeed disappointment with how one's children turned out is a common pattern of unfulfilled meaning among middle-aged and older adults (e.g., Lopata 1971). Thus the fulfillment (or nonfulfillment) of goals can contribute to greater or lesser perceptions of meaning in life.

Values and Justification

The second need for meaning is the need to justify one's actions relative to a set of moral standards. This need has two important requirements: The individual must possess a firm sense of right and wrong, and the individual must feel that his or her own actions are in accord with what is deemed right by those standards. The importance of values to the perception of meaning in life can be seen in research on fluid compensation of meaning. When participants' sense of meaning is threatened, they sometimes respond by inflicting harsher punishments on individuals who have deviated from moral standards (Heine et al. 2006). Presumably, this act serves as a means of reaffirming meaning by appealing to the moral code as a source of meaning in life.

Individuals also seek to reinterpret events in the past so as to create a life narrative in which they have conformed to their own moral standards of right and wrong. Such a justification-motivated reinterpretation was found by Baumeister et al. (1990) in their analysis of participants' accounts of times when they had angered someone else or had themselves been angered. Whereas participants who recounted their experiences as victims tended to paint the transgressors' actions as having been arbitrary and unjustified, those participants who recalled an incident in which they themselves had been the transgressors tended to offer justifications for their behaviors. Transgressors tended to downplay the severity of their transgressions, shift blame to external sources, or distance themselves from the

offense (e.g., admitting that what they had done was indeed wrong, but pointing out that it was long ago and that they had changed since then).

Similar results were obtained in studies of unrequited love (Baumeister and Wotman 1992; Baumeister et al. 1993). In these studies, individuals who had rejected unwanted romantic advances went to great lengths to justify their rejections. The act of rejecting another person is itself a painful experience, and so individuals sought to distance themselves from the act of rejection. Rejecters frequently emphasized that they had done nothing to elicit the romantic interest of the rejected party, sometimes even portraying themselves as the victims of the other's advances rather than the villains who rejected their would-be lovers in the end.

Justification, then, is maintained both by possessing a set of moral standards and by viewing oneself as adhering to them. When meaning is threatened, moral values may be turned to as a source of renewed meaning (Heine et al. 2006). When an individual has engaged in a morally reprehensible action, he or she may seek to reinterpret that action so as to maintain the belief that he or she is a good person (Baumeister et al. 1990, 1993; Baumeister and Wotman 1992).

Efficacy

The third need for meaning is the need for a sense of efficacy. Individuals are motivated to feel as though they are able to exert control over their world and the course of their lives. One way in which the need for efficacy can be fulfilled is through completing difficult tasks. This path to efficacy is illustrated by the stories frequently highlighted as particularly inspiring or meaningful by media outlets. Stories of athletes from wealthy, stable families who went on to achieve success in professional sports are rarely featured as lead-ins to major sporting events. Rather, networks tend to feature stories of athletes from poor, broken families who overcame difficult circumstances to achieve success. The athletes' effort and desire having allowed them to overcome adversity makes the latter stories seem inspiring, while the lack of any such effort or adversity makes the former stories (of people from privileged backgrounds doing well) seem relatively mundane. Tasks that offer no challenge are unlikely to bolster one's sense of efficacy. Rather, it is the successful completion of challenging tasks that makes the strongest contribution to one's sense of efficacy.

Added difficulty does not always help a task to contribute to an individual's sense of efficacy, however. If a task is too difficult, it may actually erode one's sense of efficacy rather than bolster it. Competing against one's 5-year-old nephew is unlikely to increase the average adult's sense of efficacy (the task is likely to be too easy), but neither is competing against a professional athlete (the task is likely to be too difficult). Seemingly uncontested success will likely do little for one's sense of self-efficacy, and as such some level of difficulty is required if a task is to provide an opportunity for increased efficacy. However, if the difficulty of the task is sufficient to nearly assure failure, it is also unlikely to provide an opportunity for the

individual to bolster his or her sense of efficacy. In order for an individual to gain a sense of efficacy from a task, the task must demand an exertion of effort while simultaneously presenting the possibility of success. Consistent with this assertion, research on task difficulty has shown that individuals who seek out moderately difficult tasks rather than overly easy tasks or overly difficult tasks experience benefits relative to those who do not seek out such tasks. Brim (1988) found that individuals who consistently seek out tasks that demand roughly 80 % of their ability tend to be the best adjusted, and Csikszentmihalyi's (1982, 1990) research on peak experience concluded that individuals benefit from engaging in moderately difficult tasks that prevent the boredom of engaging in overly simple tasks and the anxiety of engaging in overly difficult tasks. Individuals may find efficacy in their lives through such tasks as completing challenging assignments at work, taking on highly involved home improvement projects, or competing in and winning athletic competitions. As long as these activities provide the individual with a surmountable challenge, they are likely to provide means of increasing perceived efficacy.

Individuals can also bolster their sense of efficacy by exaggerating the extent to which events in their lives are perceived to be under their own control. Langer (1975) found that individuals tend to perceive events that are actually due to luck or chance as having been under their control, and Hill et al. (1976, 1979) found that roughly 49 % of individuals who were interviewed about the dissolution of their relationships claimed to have been the ones who initiated the breakup (compared to only 37.5 % who attributed the cause of the breakup to their partners' decisions). Thus, individuals can increase their sense of efficacy either by seeking out and succeeding in tasks that challenge their abilities or by perceiving themselves to have had control over events that may in fact have been attributable to chance or that were under the control of others.

Self-Worth

The fourth need for meaning is the need for self-worth. In order to find their lives meaningful, people must feel that they are worthwhile human beings. Studies have shown that the perception of meaning in life is positively correlated with self-esteem (Steger et al. 2006), suggesting that there is indeed a connection between one's sense of self-worth and the perception that one's life has meaning. When seeking to establish self-worth, one important source of information is the esteem with which one is regarded by others. Research has shown that threats to belongingness can have an adverse impact on one's perception of meaning in life. Baumeister and Leary (1995) have proposed that the need to belong is a fundamental human need. It is no surprise, then, that fulfillment of the need to belong should contribute to the perception that one's life has meaning. Stillman et al. (2009) showed that both chronic loneliness and experimentally induced social rejection were related to lower levels of perceived meaning in life, suggesting that belongingness serves to foster the belief that one's life has meaning.

Self-worth can also be established by framing one's successes and failures. Work by Baumeister and Ilko (1995) showed that when participants were asked to recall failures in their lives, those participants with low self-esteem (who presumably were most vulnerable to further damage to their self-worth) were the most likely to distance themselves from the events by emphasizing that they took place in the past. Baumeister and Ilko (1995) also found that participants construed their accounts of success differently depending on the audience. Participants who expected to read their accounts aloud to others included many details about the help and support they had received, whereas those participants who did not expect to read their accounts to others mostly eschewed mentions of support, instead highlighting their own role in the success. This finding implies that narratives of success may include acknowledgements of aid only when they are necessary to satisfy social norms, whereas private accounts may focus on personal achievement so as to bolster self-worth and reinforce the perception of meaning in one's life.

Religion, Modern Society, and Meaning

The search for meaning involves a symbiotic relationship of sorts between culture and individuals. Individuals look to culture to provide means of fulfilling their needs for meaning, and culture depends for its continued existence on people's desire to fulfill their needs for meaning. When people seek to find purpose through work, to justify their actions in accord with a moral code, to maintain a sense of efficacy by participating in the political process, or to maintain self-worth by forming relationships, they tend also to perform activities that support the continued existence of culture. It is possible, then, that a decline in perceptions of meaning in life might necessarily imply a corollary decline in culture. We will now discuss the transition from religious to secular meaning bases in culture and the consequences that transition has had for general perceptions of meaning in life.

Religion

Throughout the history of human culture, religion has been perhaps the most efficient means of satisfying all of the four meaning needs in ways that are beneficial to a culture. Religion provides its followers with an overarching meaning of life based on the will of God and a supreme goal of attaining salvation. Goals such as sanctioned reproduction, converting other people to one's own faith, regular prayer, and attendance at services or ceremonies provide meaningful steps toward salvation. Thus some of one's own everyday goals are determined by God's goals, and purpose can be derived from working to further the will of God through one's own actions.

Standards of right and wrong are also provided by most religions. Religion provides directions on such diverse topics as eating, clothing, interpersonal relations, and

sexual behavior. Adherence to a religion provides an individual with standards of right and wrong that transcend the self, thereby furnishing an unwavering basis by which to justify one's actions. Determining whether one is a good person becomes as simple as determining whether one has adhered to the mores of the religion. Deviations from right can also be corrected, as most religions (notably Christianity) provide means of repenting and receiving forgiveness for one's transgressions.

Many religions also provide their followers with a sense of efficacy. Religions purport to allow their faithful to control even seemingly uncontrollable events by appealing to God through prayer, sacrifice, or other rituals. The progression of an illness, the strength of a storm, and the outcome of a sports game may all be affected by appeal to a higher power. Thus, a sense of efficacy and control may be obtained through religion even when objective control over one's environment may be relatively low.

The need for self-worth can also be fulfilled by religion. One way in which religion provides self-worth is through belongingness. Joining a religion typically involves participation in regular services, and such services allow the individual to join in a community of like-minded people. Even without creating interpersonal contact, religion can foster a sense of belongingness. Christianity makes a point of emphasizing God's love for all His people, as can be seen by the prevalence of the phrase "Jesus Loves You" on billboards, bumper stickers, and bathroom walls. Religion can also provide a sense of superiority. Membership in a religion often involves the belief that one has gained a chance at salvation that will not be available to those who are not members of the religion. Religion, then, provides two routes to self-worth by allowing individuals to feel esteemed by a community (and a deity) and to feel superior to those who are not members of the religious community.

The Decline of Religion as the Source of Life's Meaning

The influence of religion on Western society has seen a decline over time. A detailed account of this decline would require greater space than is available in this chapter, but a summary can be provided. During the late Roman Empire and after its decline, Christianity had pervasive and largely unchallenged authority, and it sought with some success to instill its control into almost every aspect of daily life. In the Middle Ages, the Christian church experienced a first major setback in the form of the papal schism. The separation of the Christian church governing structure into the Roman and Avignon papacies – each with its pope claiming that his authority descended from Christ – shook the foundations of the church in Europe. Following this schism, the Protestant reformation further reduced confidence in Christian doctrine. Instead of being able to confidently assert that one's life had meaning based on adherence to Christianity, Europeans in the sixteenth century were presented with the possibility of uncertainty regarding whether their particular brand of Christianity would assure their salvation.

The reformation was followed by the Enlightenment in the seventeenth and eighteenth centuries, during which many prominent thinkers began for the first time to openly question the validity of religious doctrines. Science gradually eroded religion's positions as the sole arbiter of truth. The emphasis placed on blind faith in previous eras was gradually replaced by an emphasis on critical thought and skepticism. Social changes such as the American and French revolutions highlighted this shift in attitudes, with the former resulting in a separation of a church and state (a stark contrast to the merger of religion and politics that had characterized most of European history) and the latter openly attacking the practice of religion in the country.

As capitalism came to replace communal agrarian economies in the Western world, Christian doctrines of community gradually gave way to greater emphasis on self-interest, further eroding the influence of religion in society. The growing emphasis on religious tolerance also proved problematic for religions. Most religions assert themselves to be the one and only source of truth. Such an idea is incompatible with religious tolerance, which requires that different religious views be treated with equal respect in society. As religious diversity within culture grew, the ability for religion to exert influence over culture at large diminished. By the modern era, religion had been transformed from a powerful force capable of controlling nations to a matter of private belief and practice.

Polls reflect the falling importance of religion in the lives of everyday Americans. As of 2008, only 53 % of Americans believe that religion is relevant for solving today's problems (down from 82 % in 1957; Gallup 2008). Americans also believe the influence of religion to be declining, with only 27 % believing that religion is gaining in societal influence (down from 69 % in 1957; Gallup 2008). Further, the number of Americans who do not identify with any religion is also increasing, from only 2 % in 1948 to 16 % in 2010 (Gallup 2010). To be sure, most Americans continue to profess strong belief in God and in other religious doctrines, but they seem to regard this belief as separate from many of the important affairs of daily life.

Meaning in Modern Society

As religion's role in fulfilling meaning needs has waned, secular society has stepped in to attempt to fill the void (see Schlegel et al. Chap. 14, for a discussion of an additional source of meaning – the true self). This replacement has encountered varying degrees of success across the four needs for meaning. Society has been able to provide an abundance of goals for people to choose from. Individuals can pursue careers, gain educations, learn skills, travel, or start families, among numerous other endeavors. Thus, society has presented modern individuals with various means of fulfilling their need for purpose.

Society also offers many ways to fulfill efficacy needs. Individuals in Western society have been left largely free to control their appearance, career path, and place

of residence according to their own preference and choices. Numerous challenges, from competing in sports to graduating college, are presented as means of proving one's competence. And control over the environment can be provided through voting and other contributions to the political process.

Society provides means for fulfilling self-worth needs by providing hierarchies through which one may rise and relationships one may form. An individual can prove him or herself superior others by gaining promotions at work, earning higher grades in school, or winning sports competitions against his or her peers. Self-worth can be obtained by forming numerous relationships as well. Friends may be made at work, at school, or by joining a club. The advent of social networking makes relationship formation easier – and more quantifiable – than ever. Sites like Facebook allow friends to be made – and tallied – with the click of a mouse. Thus, society provides numerous means of asserting self-worth.

Society has been less successful in supplanting the moral foundation provided by religion, however. Many long-standing religious proscriptions on dress, diet, and sexual practice have eroded without replacement. In their place, modern society encourages individuals to make their own decisions or to do what feels right. Such edicts may leave people at a loss for how to justify their actions. Religion may survive as a personal moral guide, but it can no longer be counted on as providing a shared sense of ethics in society. Individuals are therefore left facing a value gap (Baumeister 1991). Where once religion provided an absolute set of values, society provides a veritable buffet of moral codes from which to choose. Society has simply failed to provide a universal standard of values in the way that religion did.

The need for justification is not the only of the four needs to suffer from this lack of universality, however. Although modern society provides an abundance of goals, it does not tell individuals which of those goals are meaningful and which are not. As with values, people are left to decide for themselves. This task is made especially difficult given that the pursuit of many of modern society's goals may be mutually exclusive. One can choose to find purpose in life by starting a family, advancing in one's career, or traveling around the globe. But choosing to do all three would require resources beyond those possessed by most individuals. As such, most people must choose a single path and hope they have chosen correctly. Those who try to balance more than one of these life goals may find themselves lamenting the damage their work life causes to their relationships with their spouse and children or the fact that settling down and starting a family has left them unable to fulfill their goal of traveling across the globe. Resolving conflicts among the three becomes a practical manner, not a moral one.

In addition to being a less unified source of meaning than religion, modern society is also a less stable source of meaning. Religion offered an unchanging anchor for meaning needs. One's goals were determined by God's plan, moral standards were set forth explicitly in scripture, efficacy could be maintained through prayer, and self-worth was assured by the simple fact that being a member of the religion made one superior to unbelievers. Society and its secular values simply cannot match this level of stability. The goals advocated by society are capable of shifting

much more quickly than religion ever allowed. In the 1950s, the average American was encouraged to settle down and start a family. By the 1960s self-expression had supplanted domestic bliss as the ultimate form of fulfillment, and a “swinging single” lifestyle came to be admired and envied rather than stigmatized. Since then, such goals as pursuing one’s own self-interest, helping the impoverished, fighting for expanded civil rights, protecting traditional family values, spreading American ideals, and avoiding the spread of American ideals have all changed places at the forefront of society’s sanctioned goals.

Although modern society does offer many means of establishing efficacy by proving oneself, it does not offer a substitute for prayer. Modern sources of efficacy, such as rising though the hierarchy at one’s job or achieving home ownership, can be easily derailed by such factors as unemployment and financial recessions. Although such factors could certainly have assaulted an individual’s sense of efficacy even in religion’s heyday, religion offered the safety net of prayer. Because prayer served as a stable means by which individuals could influence the world, at least some sense of efficacy could be maintained. Modern society offers no such net, and as such the efficacy that modern society provides is subject to being pulled out from under one’s feet.

Society also provides less stable sources of self-worth than religion. While religion could exclude members through means such as excommunication, such instances were relatively rare. In most cases being a member of the dominant faith meant being part of a community, being the recipient of God’s love, and being superior to those who were not members of one’s faith. Society offers many opportunities to establish self-worth, either by forming relationships or establishing one’s superiority to others, but as with efficacy these sources are subject to removal. Romantic relationships may end, jobs may be lost, and friends may part ways. Society does not offer the automatic sense of community and superiority provided by religion.

Society, then, has been both a success and a failure as a replacement for religion as the provider of meaning. Society provides ample goals from which to choose, provides numerous routes to establishing efficacy, and many methods of maintaining self-worth. Society provides little guidance regarding how to choose among the many possible goals, however, leaving individuals largely on their own in the attempt to select a purpose in life from among the options society provides. What guidance is offered changes far more frequently than the relatively stable edicts of religion. And while needs for efficacy and self-worth can be provided by society, modern sources of efficacy and self-worth are contingent on external factors such as job security and relationship maintenance. Thus society cannot provide the kind of stability that prayer and membership in the religious community were able to provide.

Society’s greatest shortcoming is in the domain of values. While religion offered a set of concrete, largely unchanging values, secular society’s values are varied and can shift rapidly. Individuals in modern society receive less guidance regarding right and wrong and are more likely to find themselves uncertain of whether their

actions are morally justifiable, as compared to past generations whose religion gave them a sense of universal moral certainty. This value gap is likely to present the greatest challenge to the search for meaning going forward.

Conclusion

Does the decline of religion's influence coupled with the resulting value gap in modern society mean that humans have lost the sense of meaning in life? In one regard the answer is yes. The belief that life has *meaning*, in the sense of one singular, universal purpose, may have been irrevocably lost. Past generations may be said to have *known* life's meaning, insofar as they accepted religion as a source of absolute truth capable conveying God's purpose for mankind. Fractures in religion, combined with changes in the nature of society, have disentangled religion from culture, however, and as such this sense of a singular meaning in life has been lost. Modern society has replaced this meaning with multiple *meanings* from which its members must pick and choose. This choice carries with it the possibility of error, and that possibility leaves individuals in the modern era subject to crises of meaning as they worry over whether the choices they have made will make their lives meaningful.

Does this mean that society is inevitably on the decline? The Victorians feared as much when the grip of religion on society began to slip. Prominent members of Victorian Europe feared that as advances in science eroded religion, society's value base would be lost. Many went so far as to feign faith in public, fearing that if the general population came to believe that no greater truth underlay the moral code that lawlessness would run rampant (Houghton 1957). Since the existentialists posited that ethics and value must be a matter of our own making rather than ordained by God, philosophers have tried (with limited success) to construct a secular system of ethics that offers a level of moral compulsion equal to the promise of heaven and threat of hell. Modern pundits certainly love to extol the virtues of times past and assault the slipping moral fiber of our culture. Perhaps, then, the fall of religion as the source of meaning has indeed sent culture into a downward spiral from which it cannot recover?

Yet the world does not seem to have descended into chaos. Data show that rather than increasing, crime rates continue to decline across the globe (Tseloni et al. 2010). Individuals experience existential crises, to be sure, but such crises do not seem to have irrevocably damaged society. Economies still function, work is still done, and reproduction continues. It is possible that the human race is still in the midst of a transitional period as religion cedes its role as meaning provider to secular sources. Perhaps the value gap presently experienced in modern society will be filled by secular systems of ethics capable of supplanting the religious systems that preceded the gap. Even if the gap persists, it appears that society has managed to continue functioning despite a lack of concrete, absolute values. Finding life's meaning may be unnecessary. Though the process may be unpleasant at times, it may be enough for individuals to each find ways to make their own lives seem meaningful. Perhaps life's meaning lies not in finding answers, but in searching for them.

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Chapter 2

A Terror Management Perspective on the Creation and Defense of Meaning

Daniel Sullivan, Spee Kosloff, and Jeff Greenberg

Terror management theory (*TMT*) is based on the existential psychoanalytic tradition developed by authors such as Otto Rank, Gregory Zillboorg, Robert Jay Lifton, Ernest Becker, and Irvin Yalom. From this perspective, people desire to view life as meaningful because the prospect that they are only animals, fated to no longer exist in any form upon death, is too terrifying to accept. Thus according to TMT, a human being who lacked any sense that their life is meaningful would experience intense anxiety, if not abject terror, in the face of the death sentence to which we are all condemned. The theory and associated research program explore the implications of this idea for how people derive and defend a meaningful view of life and the consequences of doing so for a wide range of human experiences.

In this chapter, we intend to show that TMT provides a unique motivational account of the creation and defense of meaning that is both consistent with and goes beyond a variety of related psychological perspectives on meaning. To do so, we will first define what we mean by “meaning,” arguing that the variety of types of meaning people experience and pursue in their lives can be broadly categorized (and indeed have been categorized in much of the psychological theory and research on meaning) as falling into one of two types: “everyday” and “ultimate.”

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Everyday and Ultimate Meaning

In the history of psychology, theorists and researchers have adopted a variety of approaches to understanding *meaning*. Summarizing the vast research on meaning, Wong (1998) noted that most definitions of personal meaning fall into one of two broad, interrelated categories:

Generally, two types of meaning have been recognized...The ultimate meaning of human existence can be discovered through religious beliefs, philosophical reflections, and psychological integration, whereas specific meanings in everyday living can be created through engagement, commitment, and the pursuit of life goals. (p. 405)

Thus there are perspectives that place more emphasis on the need for *ultimate* meaning – a feeling of self-transcendent purpose (e.g., Frankl 1986; Maslow 1954) – and perspectives that focus on *everyday* meaning: the maintenance of a “paramount reality” (Berger and Luckmann 1967), constructed out of stable, known cause-and-effect relationships, within which the individual can pursue personal goals (e.g., Cantril 1941; Emmons 1986; Klinger 1977; Proulx and Heine 2010). Other theoretical frameworks incorporate both everyday and ultimate meaning in various ways (e.g., Antonovsky 1979; Baumeister 1991; Park 2010).

Speaking broadly, everyday meaning arises from the cognitive micromanaging of the social and natural environment, while ultimate meaning arises from the more emotion-laden process of macromanaging our lives and their relationship to a broader community, history, and cosmos. Everyday meaning involves the attempt to structure our social and natural environments into a series of dependable, recursive patterns and expected relationships, so that we may effectively engage in short-term goal-directed action within those environments. Ultimate meaning, on the other hand, is achieved by seeing the self as pursuing and achieving broad goals across an extended temporal span while embedded in a universe where human actions are highly significant. It is important to note at the beginning of our discussion that, in theory at least, it would seem possible to exist in a world of everyday meaning without ever creating or experiencing ultimate meaning. Many organisms do in fact seem to do just this. In principle even human beings could survive in and navigate a world that “made sense,” where people and things behaved in predictable ways, without perceiving that world as cosmically significant and themselves as infinitely valuable. And yet almost all of us feel like we live in a world of ultimate meaning, and Wong argues that, for humans, “coping with suffering, illness, and death require(s) *both* types of meaning” (1998, p. 405, italics added).

Despite the consensus that meanings may be everyday or ultimate in nature, questions remain as to the function that both types of meaning serve for people. One might speculate that making meaning informs objective, rational apprehension of experience in the social and natural worlds. Yet cross-cultural variation in the content of constructed meanings, as well as the extreme lengths to which people go in structuring their lives and defending beliefs, suggests that meanings serve motivational functions irreducible to rationality. Wars in the service of broad political and/or theological ideals are often carried out despite their negative socioeconomic impact,

and motivational states can influence construal of even the most basic perceptual events (e.g., Balceris and Dunning 2006; Bruner and Minturn 1955). If the construction and maintenance of ultimate and everyday meanings is motivated, what is the operative motivational impetus?

Motivational Accounts of Meaning Construction and Maintenance

Several thinkers have provided evolutionary accounts of the motivation behind meaning by proposing that perceptions of meaning are either directly adaptive insofar as they enhance survival and procreation, or they are by-products of other such adaptations. It is fairly straightforward to see how everyday meaning could serve an adaptive purpose. If we didn't have innate tendencies to classify objects in the social and natural world and to establish schemas based on recurring cause-and-effect relationships, it would be overwhelmingly difficult to navigate our environments and survive to reproduce (see, e.g., Kaschak and Maner 2009). But how do evolutionary accounts explain the need for ultimate meaning?

Multiple authors have proposed that many common sources of ultimate meaning – such as religious ideologies or the pursuit of peak experiences and self-actualization – are actually only by-products of more basic adaptive cognitive mechanisms. Sosis (2009) reviews some of the “by-product” accounts of religion, such as the popular idea that religious beliefs came about because trait ability to perceive agency in the natural environment was selected for. In a similar fashion, Kenrick et al. (2010) and Ridley (1993) contend that the felt need to pursue a unique calling and the growth motive Maslow (1954) referred to as “self-actualization” are actually superficial cognitive manifestations reducible to fitness-enhancing behavior such as the pursuit of mates.

It is ideal for any theory attempting to explain a basic aspect of human psychology to be compatible with evolutionary perspectives. However, labeling the need for ultimate meaning a “by-product” of other adaptations fails to explain the persistence of this need across time and why it has presumably been continuously selected for throughout human history by either biological or cultural evolutionary processes (see Reeve and Sherman 1993). This problem is especially pronounced because the pursuit of ultimate meaning often results in behaviors that thwart the successful passing on of genes. People in the grip of a religious or tribalistic meaning system will sometimes engage in ascetic or even suicidal behavior that seriously curtails genetic transmission (e.g., Bloom 1997). Perhaps the drive to find complex, ultimate meaning arose as a by-product of other adaptations, but why has such a seemingly volatile and energy-consuming phenotype not only persisted but flourished over the centuries? What adaptive psychological function of meaning-making could compensate for the cognitive and emotional resources that it demands?

Some social psychological accounts operating outside the explicit bounds of evolutionary theory attempt to explain the function of meaning by arguing that it

preserves a basic level of psychological security. One such perspective – the Meaning Maintenance Model (MMM; Proulx and Heine 2010; Chap. 4) – argues that people need to maintain the perception of expected, meaningful relationships in the world because the absence of clear meaning induces an aversive state of general arousal.

We find this model problematic for a number of reasons. First, it seems like an oversimplified version of cognitive dissonance theory. Second, its definition of meaning does not distinguish different types or levels of meaning. Surely the meaning of a word and the meaning of one's life are different in important ways. Third, the model overapplies the notion of the intersubstitutability of meaning frameworks. When a valued source of ultimate meaning is threatened, people are not content to simply reaffirm any other source of meaning – for an American, stacking a deck of cards enough times or waving the Iranian flag would not have compensated for the psychological impact of the 9/11 terrorist attacks. In general, people clearly prefer some meanings over others. It is just as meaningful to declare some person and group evil as it is to declare them good. Yet people seem to prefer to view themselves and their groups as good and to reserve the ascription of evil for out-group targets. In short, people do not want just any meanings; they want meanings that support their need to believe they are significant beings in a meaningful world.

A useful theory of meaning should explain the different levels and values of particular meanings. The MMM falls short in this regard by relying on the central circular assertion that people need meaning because meaninglessness is aversive – reminiscent of Argan's claim in Molier's *The Imaginary Invalid* that opium induces sleep “because it contains a sleepy faculty whose nature it is to put the senses to sleep” (as cited in F. Nietzsche 1886/1989, p. 19). We share Nietzsche's assessment that “such replies belong in comedy.” Furthermore, the MMM provides no explanation for why people created meaning structures in the first place, making it very difficult for the MMM (which defines “meaning” exclusively in terms of everyday meaning, the maintenance of expected relationships) to explain the need for ultimate meaning in particular. As the creators of the MMM themselves acknowledge (Proulx and Heine 2010), many of the “absurdist” expectancy violations we experience in our lives stem directly from our systems for maintaining ultimate meaning. For example, if a given person did not believe that the experience of art was what made her life meaningful, then she would not continually expose herself to bizarre and novel artworks that question her everyday understanding of reality.

What is required of a complete account of the need for meaning – and what evolutionary by-product accounts and the MMM fail to provide – is an explanation for why people create irrational meaning systems that often make reality seem far more complex and unpredictable than it need be and why they then invest in these particular symbolic constructions with such fervor. TMT is a security-based account of why people seek meaning, grounded in evolutionary theory. In contrast to the accounts reviewed above, TMT explains why people are motivated to maintain a sense of both everyday *and* ultimate meaning in their lives and why the need for ultimate meaning often trumps the need for everyday meaning.

Terror Management Theory: A Motivational Account of the Creation and Defense of Meaning

TMT is based on the writings of Ernest Becker, who sought to combine insights from sociology, anthropology, existential philosophy, and psychoanalysis into a coherent framework for understanding the motivations behind humans' pursuits of meaning and self-worth. Although aspects of everyday and ultimate meaning are present throughout his work, Becker began with an early focus on everyday meaning, rooting his analyses in the social interactionism of George Herbert Mead and pragmatist philosophy. In *The Revolution in Psychiatry* (1964) he wrote:

Meaning is the elaboration of an increasingly intricate ground plan of broad relationships and ramifications. It is the establishment of dependable cause-and-effect sequences which permit ego-mastery and action. Meaning is at the heart of life because it is inseparable from dependable, satisfying action. (p. 113)

However, by 1971, when he wrote the revised version of *The Birth and Death of Meaning*, Becker had elaborated his understanding of the meaning provided by culture. At this time he identifies cultural meaning as having two primary components: a "safety" component, which is analogous to the everyday meaning emphasized in his early work ("Action has to be dependable and predictable"; 1971, p. 83), and a "self-esteem" component, which is more comparable to a sense of ultimate meaning provided by the culture ("[Culture's] task is to provide the individual with the conviction that he is *an object of primary value in a world of meaningful action*"; p. 79, italics in original).

With the publication of *The Denial of Death* (1973), Becker's exploration of the construct of meaning reaches its pinnacle. By shifting from a symbolic interactionist to an existential perspective, Becker settles on the fundamental importance of ultimate meaning. To satisfactorily cope with the human problems of suffering, felt inadequacy, and ultimately death (all products of our unique cognitive capacity for self-awareness and temporal thinking), people need more than a feeling of efficacy within a framework of expected relationships. They need immortality, literal or symbolic: they need ultimate meaning that transcends the self and especially the self's physical, mortal limits. Thus, at the end of his career, Becker concludes that culture is ultimately "a mythical hero-system in which people serve in order to earn a feeling of primary value, of cosmic specialness, of ultimate usefulness to creation, of unshakable meaning" (p. 5).

Because TMT draws on Becker's multidisciplinary understanding of the nature of meaning, it is suited to provide a motivational account of the construction of both everyday and universal meaning. Consistent with other evolutionary perspectives (e.g., Deacon 1997; Gould 1982), TMT argues that the awareness of personal mortality emerged uniquely for humans as a consequence of the development of symbolic representation and the ability to psychologically project the self across time. Although humans, like other living organisms, are biologically predisposed to seek continued survival, they are also aware of death's inevitability. Accordingly, the abstract knowledge that death looms is for humans a source of potentially

overwhelming anxiety. To manage this potential anxiety, people utilize their symbolic abilities to construct a *cultural worldview*: a shared set of beliefs about the nature of reality and meaning of the universe. The worldview espouses standards of value that individuals can live up to to acquire *self-esteem*: a sense of personal worth in the context of a broader cosmology. Being a person of worth within a meaningful cultural framework qualifies the individual for entrance to an afterlife (in more religious worldviews) or for being remembered for prized accomplishments after death (in more secular worldviews).

Importantly, TMT draws on Becker's insight that both everyday and ultimate meaning are necessary for the individual to successfully defend against death anxiety. Because self-esteem serves as an anxiety buffer, the individual requires a sense of predictable everyday meaning within which she can reliably engage in those actions valued by her culture and thereby shore up positive self-regard. Beyond this, a sense of ultimate meaning must underlie the long-term goals and strivings of the individual, providing a guarantee of literal or symbolic immortality.

To date, over 400 empirical studies in dozens of countries have supported TMT's assertion that defense of meaning frameworks is at least partly motivated by awareness of death. Research examining TMT has often utilized the *mortality salience paradigm*, in which individuals are subtly induced to think about their own death – what is called “mortality salience” or MS. Responses from individuals under MS are typically compared to responses from control participants who have thought about negative topics other than death – like pain, uncertainty, being socially excluded, unexpected events, meaninglessness, and being paralyzed – in order to ensure that outcomes are consequences of thinking about death and not just generalized reactions to any negative thought. When people experience MS, they initially engage in *proximal* defenses to minimize the threat of death and remove thoughts of death from consciousness (for instance, by reassuring themselves that their death is still a long way off; Pyszczynski et al. 1999). After conscious suppression, however, the potential for death-related anxiety is triggered outside of conscious awareness (Greenberg et al. 2003). In order to minimize this potential, individuals then engage in *distal* defenses: bolstering the structures of meaning and self-esteem that defuse the threat of death. We now turn to a selective review of TMT research testing the idea that MS motivates the procurement and defense of everyday and ultimate meaning, but only once thoughts of death have receded from consciousness.

Everyday Death Denial: Structuring a World of Meaningful Action

If everyday meaning – the structuring of the social and natural world in terms of logical patterns and expected relationships – facilitates the distal defense process of terror management, then inducing MS should cause individuals to more ardently enforce everyday meaning. TMT research has shown that MS intensifies the tendency to rely on everyday meaning in various forms, influencing the ways

individuals order and construe themselves and other people, as well as basic processes that regulate the perception of fundamental features of experience, such as space and time.

Existential philosophers have long recognized connections between understandings of death and of time (Heidegger 1927/1982). Time may be understood as a relentless sequence of increments ticking along, bringing one closer to the inevitable end. Yet time also undergirds our everyday sense of meaningful order – when time is extended and orderly, we may feel a sense of poise and security; but if time proceeds too fast or is disordered, the world can seem dizzying and difficult to navigate. Research shows that the perception of time is influenced by death-related concerns. Martens and Schmeichel (2011) asked participants to estimate a time interval and found that MS increased the perceived duration of the interval relative to thoughts of social exclusion (in this and in all of the following studies, a delay task was interposed between the MS induction and the dependent measure to ensure that thoughts of death had receded from conscious awareness). Extending perceived time may afford opportunities to plan effectively, which could lend securing everyday meaning in the face of death. Indeed, research by Landau et al. (2009a) showed that MS intensified efforts to structure time. Participants led to think about death planned a hypothetical vacation in a more structured and detailed manner compared to those who contemplated uncertainty – an effect that was particularly pronounced among individuals who were predisposed to seek structure in their lives.

MS also influences the ways people physically orient to and construe objects and actions in space. Just as disordered time can generate a sense of meaninglessness, so can disordered space. Individuals often obtain a satisfying sense of focus and order from mapping out their day, cleaning their desk, or even finding Waldo. This sense of everyday meaning arises from the perception that one's environment is structured and easily navigable. We might expect death thoughts to increase people's preference for such environments. Accordingly, Koole and van den Berg (2005) found that, after a death reminder, people were less attracted to landscapes described as wild, overgrown, and uncultivated, but were more attracted to landscapes described as cultivated and ordered by human intervention.

Within perceived temporal-spatial landscapes, meaning can be lost or found in the smallest of places each day. Mundane objects and events may be construed simply as material things and mechanical movements in space or as tools linked to the completion of broader goals. Indeed, Landau et al. (2011) showed that MS increased the tendency to identify everyday phenomena in terms of their higher-order significance – e.g., construing “toothbrushing” as “preventing tooth decay” rather than “moving a brush around in one’s mouth.” Our tendency to construe our everyday actions as meaningful is related to a general process of human cognition that Becker referred to as “time-binding”: the perception of linkages between present, past, and future selves and actions. In a study investigating the role of death concerns in this process more directly, Landau et al. (2011) asked individuals to list some broad future goals, as well as some particular actions they anticipated taking within the coming days. Later, participants were asked to identify (by drawing lines) the number of upcoming actions that were meaningfully connected to their

long-term goals. Compared to control participants who had contemplated social exclusion, MS participants connected significantly more present actions to future goals. Similarly, after MS, people see more connections between past events and who they are now (Landau et al. 2009c) and subjectively experience positive past events involving close friends as being closer in time (Wakimoto 2011).

These findings suggest that one way individuals enforce structure on the physical world is by linking everyday actions and events to the meaningful goals of a coherent self, a core entity whose continuity extends across multiple domains of time and space. Of course, the self does not reside alone within the temporal-spatial environment. We inhabit rich social landscapes that we sometimes struggle to navigate and make sense of. Interpreting others' identities and actions is an essential part of maintaining a stable perception of everyday reality, and thus according to TMT helps to uphold the distal defense structures which let us deny death. One way in which individuals imbue the social world with a clear sense of everyday meaning – often inaccurately – is through reliance on *stereotypes*: generalized beliefs about members of a social category. Assigning stereotypes makes others appear predictable, pigeonholing them into reliable categories (Kunda and Spencer 2003). Indeed, Schimel et al. (1999) found that MS heightened preference for stereotype-consistent over stereotype-inconsistent targets (African Americans, Germans, gay men, and women). The preference for simple, structured interpretations of social events was also demonstrated in various ways by Landau et al. (2004). They found that, among individuals who greatly seek a structured reality, MS exaggerated the tendency to seize upon first impressions of others and ignore later information about them and to base an understanding of who another person is on stereotype-relevant information rather than statistical probabilities.

In sum, concerns with death motivate the imposition of clear structure on time, space, the self and its actions, and others, rendering them predictable and navigable, and generating opportunities for goal-directed action. Yet these everyday meanings provide only a basic but incomplete framework for our larger efforts to mitigate thoughts of annihilation. They routinely afford balance and security, but can never satisfy our most pressing terror management aim – the crown jewel called “immortality.”

Ultimate Meaning: Personal and Cultural Significance as Paths to Immortality

As we have proposed throughout this chapter, people need to see meaning in the world beyond expected relationships and recursive patterns. People want ultimate meaning. They want to see themselves on trajectories that will realize some positive, powerful, and ultimate end – not just today, but for eternity. The symbolic systems which cultures develop to provide such trajectories will be supported by the individual even when they are contradicted by the harsh and disorderly reality of everyday events, and many individuals will even sacrifice their lives for them.

We construct and elaborate these complex and ethereal meaning systems in a futile attempt to deny life's one certainty: that it must end. As Ionesco put it, "As long as we are not assured of immortality, we shall never be fulfilled, we shall go on hating each other in spite of our need for mutual Love" (cited in Becker 1975, pp. 136–137). It is by believing in one's heaven-bound soul, or in a personal legacy that will seemingly last forever in the eyes of others – in short, by believing that the self is embedded in "unshakable" ultimate meaning – that we psychologically transcend the insulting limits of our insignificant wormliness. TMT-based research provides snapshots of death-related concerns motivating these ultimate quests.

According to TMT, the pursuit of self-esteem is the pursuit of immortality – of feeling that one is an agent of primary value in the universe with the prospect of ultimate continuance. Research has shown that MS promotes efforts to succeed in domains relevant to the individual's sense of self-worth. After MS, people will drive faster, exercise harder, show off their physical strength, and cheer louder for sports teams – but only if such behaviors are relevant to the participants' self-esteem (for a review, see Greenberg 2008). Studies also show that self-esteem in valued domains preserves the individual's sense of ultimate meaning in the face of death. Specifically, Routledge et al. (2010) demonstrated that among those individuals whose sense of self-esteem was undermined (when asked to contemplate a time they failed to live up to a personal value), MS decreased perceptions of meaning in life, an effect that was buffered when participants' self-esteem was affirmed.

As important as it is to recognize the role of positive self-regard in maintaining meaning, the opposite side of the coin is also crucial. TMT emphasizes that the individual is only motivated to pursue self-worth within a culturally established framework of ultimate meaning: a framework that in some way guarantees the immortality of the self and its accomplishments. Without immortality, personal success and fame are fleeting and meaningless for the individual (Nietzsche 1874/1997). In line with this idea, empirical evidence suggests that, under MS, individuals will not self-enhance when doing so threatens the validity of existing meaning structures and cultural authority figures, a possible explanation for phenomena such as system justification and stereotype threat (Landau et al. 2009b).

By highlighting the importance of culturally derived ultimate meaning, TMT sheds light on why people often sacrifice their personal esteem and interests to the enhancement of a group – such as a nation – to which they are fiercely devoted. By feeling like one is part of a collective that will span generations, the individual can sustain a sense of symbolic immortality and ultimate meaning, despite her awareness of her imminent personal demise. In support of this analysis, Sani et al. (2009) have shown that, after contemplating death, individuals display elevated perceptions of the temporal continuity of their national group (i.e., they see traditions and values as being transmitted across the group's generations in historical perpetuity), and this increased sense of collective continuity predicts heightened ingroup identification. Such defense of meaning through emergence in the collective can ironically extend even to the willing annihilation of the self: studies have shown that MS increases Iranian college students' favoritism towards the prospect of suicide bombing in the service of one's ethnic group (Pyszczynski et al. 2006).

Herein lies the potential for the “hate” of which Ionesco spoke. In the history of humanity, untold millions have died in ideologically driven clashes between incompatible collective immortality ideologies. Such ideologies are symbolic constructions, concretized to a certain extent in institutions (e.g., the Supreme Court) and “sacred” objects (e.g., the U.S. flag) representing the worldview (Berger and Luckmann 1967). Worldviews often stand in potential conflict with one another: Democrat ideals are threatened by Republican ideals, aspects of religious doctrine appear to contradict the findings of modern empirical science, and so on. How can one be sure that one’s worldview provides the “true” route to immortality, when so many alternatives exist, espousing contradicting tenets? In the context of the quest for meaning, the question becomes: how does one maintain a sense of “unshakable meaning” in the face of competing worldviews?

TMT holds that, when death thoughts are active on the fringes of consciousness, this question becomes particularly important for the individual. Thus, one of the most replicated effects in the TMT literature is *worldview defense*: after MS, people defend symbolic structures that provide them with ultimate meaning by showing a preference for people and things that represent their worldview and a dislike for people and things representing opposing worldviews. For example, Greenberg et al. (1990) showed that Christians responded to a death reminder by showing increased liking for a fellow Christian target and decreased liking for a Jewish target. Kosloff et al. (2011) recently showed that MS prompts advocates of evolutionary theory to assimilate creationists into an evolutionary outlook.

The derogation, assimilation, and even annihilation of those who oppose one’s path to ultimate meaning are thus motivated in part by death-related concerns. Immortality striving, our efforts to procure ultimate meaning – to make life on earth as if it were in heaven – has the potential to spark intergroup conflict and make our lives a living hell. As Becker (1975) noted, “In seeking to avoid evil, man is responsible for bringing more evil into the world” (p. 5). However, we must remember that the quest for ultimate meaning in the face of death has also led thousands of people to adhere to charitable religions, create beautiful art, and benefit humanity through the pursuit of truth in science. In this regard, we should note the obvious: people do not all find ultimate meaning in the same way.

For example, among those low in dispositional tendencies to seek structured and ordered environments (Thompson et al. 2001), thoughts of death induce meaning-making outside of strict adherence to their local worldview. In fact, those who are not particularly attracted to clear, structured knowledge see their lives as more meaningful when, after MS, they are given an opportunity to contemplate novel, unfamiliar information (such as artworks from foreign cultures) or to reflect on possible ways in which their lives might have turned out completely differently (Vess et al. 2010). In short, some individuals sustain ultimate meaning in the face of death awareness not by sacrificing themselves but rather by sacrificing everyday meaning in exploratory engagement with alternate realities.

Different people find ultimate meaning either through subservience of their personal interests to a transcendent collective or through defending the symbolic structures in which they are immersed or through creatively breaking out of the

confines of everyday meaning. What is important from the present perspective is the wealth of empirical evidence demonstrating that the quest for symbolic or literal immortality contributes to all these diverse attempts to pursue and maintain ultimate meaning.

The Death and Future of Meaning

As the prior section suggests, research has supported Becker's insight that the human quest for immortality has historically bred extreme psychological rigidity and countless instances of cultural conflict. This raises a fundamental question for TMT research on meaning-making: how can individuals obtain a sense of ultimate meaning independent of the potential for conflict inherent in most meaning systems? This is an under-researched phenomenon, although some extant findings suggest why it might be such a difficult goal to obtain.

For one, the sometimes deadly consequences of worldview defense are in many ways an undesirable outcome of an otherwise very adaptive tendency for human groups. The substantial TMT-based empirical literature and the theoretical work on which it is based strongly suggest that most individuals need unshakable faith in clear meaning systems to maintain psychological equanimity despite death awareness. This point is illustrated by recent research showing that among individuals whose sense of meaning has been threatened by severe trauma, those who cope successfully with the event and restore their faith in the world's meaningfulness subsequently show *exaggerated* worldview defense effects, whereas those who develop post-traumatic stress disorder – who fail to rebuild their sense of meaning – no longer show these effects (Pyszczynski and Kesebir 2011). In other words, although a sense of ultimate meaning can breed hostility towards out-groups, if our society attempts to reduce such hostility through the simple detachment of individuals from their meaning systems, we run the risk of severely maladaptive outcomes.

The question seems to be how we can provide individuals with meaning systems that maintain psychological security but simultaneously promote tolerance and openness to other worldviews. Recent research has suggested some possibilities as to what the substance of such worldviews would be like. For example, participants who have been induced to fantasize about alternate realities (Cohen et al. 2011) or who are characterized by high dispositional mindfulness (Niemic et al. 2010) do not show typical worldview defense after MS. It is unclear whether these two effects occur through a similar mechanism. Mindfulness typically involves a heightened awareness of present experience divorced from distraction, while in Cohen et al.'s (2011) work the effect of flight fantasizing on reduced concerns with death was mediated by a sense of freedom from one's bodily limitations. There may be similarities but also differences between these processes: mindfulness entails a fresh mode of processing that heightens our engagement with and awareness of the everyday meaning in which we are embedded, while fantasies of flight transcend the everyday into the realms of ultimate meaning. Yet both involve a full and

attentive immersion in one's current experiential state, whether it is physical or more "cerebral." Future research should investigate whether different worldviews that promote these forms of liberation from a more mundane experience of meaning are more or equally effective at mitigating death concerns while also promoting tolerance.

The potential contrast but also compatibility of mindfulness and fantasy as routes to peaceful death transcendence is a key one in the modern world. With the rise of capitalism, residential mobility, and globalization alongside continuing intergroup violence and environmental uncertainty, traditional meaning systems are increasingly drawn into question, and our ability to experience awe at the more wondrous aspects of existence potentially fades. In the tumult of modernity, both the ability to calmly and non-defensively "just be" in the moment and the capacity to sustain a sense of fantastic awe seem increasingly rare. Yet both may be seeds for resilient but flexible trees of meaning, which can stand immortal atop the bones that continue to accumulate beneath our feet.

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Chapter 3

I Die, Therefore I Am: The Pursuit of Meaning in the Light of Death

Philip J. Cozzolino and Laura E.R. Blackie

Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma, which is living with the results of other people's thinking. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become. Everything else is secondary.

In 2004, Steve Jobs, the late CEO of all things cool (i.e., Apple Inc.), was told that he had a cancerous tumor in his pancreas. Although pancreatic cancer is normally a death sentence, Jobs was fortunate that his cancer was not as aggressive as is typically found, and after surgery he survived. In 2005, during a commencement speech delivered to graduates of Stanford University, Jobs reflected on his illness and on the period of time when doctors told him that he would be dead within 6 months. As seen in the quote above, which comes from that speech, recognizing that death is real, unavoidable, and not a "purely intellectual concept" (Jobs 2005) had a significant impact on Jobs, on his overarching view of life, and on what he found meaningful.

Humans seek meaning. In the art we view, in the suffering and the joy we observe others experiencing around us, and even in the most simple of daily events, we are in a near-perpetual state of interpreting all that we encounter. We seek to understand the purpose and the significance of these events, and sometimes we seek to confirm what we have already concluded (Kunda 1999). Ultimately, many of our attempts to find meaning are motivated efforts to view the world through the lens of our own expectations, which no doubt provides a profound sense of certainty, even security, allowing us to move forward in the environment. The search for meaning, however, is more than a socially focused process; it begins "at home" with often enduring efforts to understand the purpose and the significance of our own lives.

In fact, as Frankl (1984) posited, it may be that the search for a personal sense of meaning is the most important motivating force in our lives. In this chapter, we place the genesis of that motivation in the broader context of mortality awareness. Moreover,

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we focus on experimental evidence that elucidates the divergent paths that individuals take in their search for meaning, paths that are distinct in their focus on that which is either predominantly external or internal to the self. Finally, we make the case that it is not death awareness itself that necessarily generates these divergent efforts to find meaning, but rather it is the manner in which individuals construe death and whether or not that construal leads to an integrated, holistic view of the self. A self that is uniquely meaningful, and at the same time inevitably becoming meaningless.

Meaning in Life

Individuals are motivated to make sense of their own existence (Baumeister 1991). This need for life to feel meaningful can cause individuals to question, “what is the purpose of my life?” and “what is worth living for?” The process by which individuals answer these types of questions lies at the heart of their search for meaning in life (Reker 2000). Broadly speaking, meaning in life can be considered as “the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceive themselves to have a purpose, mission, or overarching aim in life” (Steger 2011, p. 682). Research has demonstrated that meaning in life is associated with greater subjective well-being (Steger 2012), satisfaction with life (Steger et al. 2006), self-reported happiness (Steger et al. 2009), and is inversely related to indicators of psychological distress, such as negative affect and depression (Steger et al. 2006, 2009). Thus, a sense of meaning enables individuals to understand the significance of their life, which in turn facilitates psychological well-being and optimal functioning.

Despite a general consensus that meaning in life facilitates healthy and optimal functioning, theorists differ regarding the source(s) from which they believe individuals derive meaning. One influential theorist, Viktor Frankl, developed a meaning-based therapy grounded in his own struggle to maintain a sense of self-worth and purpose in Nazi concentration camps. According to his perspective, the failure to find meaning or to take responsibility for one’s existence is a fundamental cause of psychopathology. Frankl (1984) asserted that it was necessary for each individual to pursue a purpose that was unique to himself or herself. Perhaps not surprising given his experience in concentration camps, Frankl posited that the bold manner in which we face adversity, suffering, or even death can lead to a deeper sense of meaning. As he said, “suffering is an ineradicable part of life, even as fate and death. Without suffering and death life cannot be complete” (p. 88).

Mortality Awareness

Frankl’s point notwithstanding, the prospect of death is daunting. The objective awareness of our inevitable nonexistence seems at times to be both a blessing and a curse. On the one hand, it can be quite unsettling to realize that you are destined to

die and decay, no more meaningful “than lizards or potatoes” (Conover 2011). On the other hand, we would assert that death awareness enables or facilitates a focus on the time we do have and as a result can fuel our desires to find meaning. Despite this tension between the positive and negative aspects of knowing that we die, it seems that most individuals would still rather possess that knowledge. In preparation for this chapter, we asked 200 people if they would rather *not* know that they were going to die someday, to which only 25 % responded “yes.” Although there may be little utility to a hypothetical thought experiment such as this, it remains clear that many individuals would rather battle the positive and negative tension inherent in our awareness of death than be blind to that information all together.

That said, actually thinking about death is not pleasant. Given a choice to actively contemplate mortality or to escape thoughts of death altogether, most individuals would likely choose the latter option. Despite our best efforts, however, thoughts of death are as inevitable as death itself. In addition to documenting a generalized fear of mortality, past research has also established that thoughts of death are multidimensional, in that people think about death (and are fearful of it) in different ways (Florian and Mikulincer 2004). Our research and theorizing is focused on the extent to which individuals respond to death either with desires to deny its consequences or with a willingness to engage with its reality.

Terror Management Theory

Research supporting terror management theory (TMT; Greenberg et al. 1986; Sullivan and Greenberg, Chap. 2, this volume) demonstrates how an overwhelming fear of death motivates individuals to behave in a manner that assuages that fear. Based on the theorizing of cultural anthropologist Ernest Becker (1973, 1975), TMT begins with the inherent conflict between our biological predisposition for survival and our highly developed cognitive capabilities that render us uniquely aware of our inevitable demise. As a result of the existential crisis generated by this conflict, humans seek to deny their vulnerability to death by embracing that which cannot die. Specifically, humans endorse cultural worldviews – social beliefs and standards that are imbued with value and that become abstract or symbolic representations of the self. By adhering and conforming to worldview-relevant expectations, individuals develop a sense of meaning and purpose, which enhances their self-esteem.

Because cultural worldviews provide relief from the prospect of death and provide an abstract, symbolic framework from which individuals can construct meaning, individuals become more likely to defend their worldviews when reminded of death. Mortality awareness in TMT studies is known as mortality salience (MS) and is designed to have people ponder the concept of death (e.g., Solomon et al. 2004). TMT researchers posit that the unspecific “subtle reminders of death” embedded in MS manipulations activate processes outside of the individuals’ consciousness (Pyszczynksi et al. 2004, p. 439). For example, TMT researchers have made mortality

salient for participants by exposing them to gory video scenes, subliminal primes of the word “dead,” and assessing them in close proximity to funeral homes (Arndt et al. 2002; Greenberg et al. 1994; Jonas et al. 2002; Nelson et al. 1997). Most often, however, mortality salience takes the form of a two-question manipulation (“Briefly describe the emotions that the thought of your own death arouses in you” and “Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead”).

When exposed to MS, individuals have, among other things, increased stereotyping (Schimel et al. 1999), evidenced more acquisitiveness (Kasser and Sheldon 2000), and demonstrated a greater need to view humans as unique and different from other animals (Goldenberg et al. 2001).

Dual-Existential Systems

Whereas TMT assumes that individuals become defensive and predominately seek meaning from symbolic sources that are extrinsic to the self, Cozzolino (2006) has advanced a model of *dual-existential systems* that incorporates other forms of death awareness, which facilitate open, authentic, and intrinsic strivings for personal meaning. This conception of mortality awareness draws heavily upon posttraumatic-growth research (Calhoun and Tedeschi 2001), which has documented positive psychological and existential growth among many individuals facing, rather than denying, their mortality. The sort of growth often observed among individuals confronting potentially life-ending situations includes increased desires for self-direction, closer relationships, and reorganized priorities with a new appreciation of life. Similar patterns of growth have been documented among survivors of so-called “near-death experiences” (Noyes 1980; Ring 1984; Ring and Elsaesser Valarino 1998).

According to Cozzolino (2006), a key difference between the growth-oriented reactions to death awareness observed in posttraumatic-growth research and among near-death experiencers and the defensive reactions seen in TMT research is the degree of individuation and specificity with which individuals face their mortality. Thus, at a conceptual level, the model assumes that individuals can think about death in one of these two ways, either as an abstract concept (i.e., what do I think about death?) or as a specific and individuated reality (i.e., what do I think about MY death?).

Although this distinction may seem subtle at first glance, there is reason to expect differences in how people think and behave as a function of abstract versus specific information processing. For example, research has shown that the process by which individuals form impressions of other people is to some extent dependent on whether the target individuals are perceived of in either a specific and individuating manner or an abstract and categorical manner (Brewer 1988; Brewer et al. 1999; Fiske et al. 1999; Fiske and Neuberg 1990). Moreover, numerous models of “the self” focus on the tension between the personal self that is unique and distinct from others and the

social self that identifies with and assimilates into broader, more abstract social categories and groups (e.g., Brewer 1991; Tajfel 1982; Tajfel and Turner 1979, 1986; Turner et al. 1987). Cognitive neuroscience has also shown that abstract and specific visual information processing occurs in two different neural subsystems (Marsolek 1999, 2004), a distinction also apparent in perceptual-motor sequence learning (Marsolek and Field 1999), memory processing (Westerberg and Marsolek 2003), and person perception effects (Zárate et al. 2000).

As designed, MS manipulations are subtle, unspecified reminders of death that keep the matter of mortality more abstract than specific. Alternatively, mortality awareness is far from subtle or abstract for individuals who are actually facing life-threatening situations and who are acutely aware of how and when they may die. Based on this distinction of abstract versus specific forms of death awareness, Cozzolino et al. (2004) validated a manipulation called *death reflection* (DR). In a scenario, participants imagine themselves dying in an apartment fire guided by vivid imagery, such as “It is getting very hard to breathe and the heat from the flames is almost unbearable.” Participants also respond to four open-ended questions designed to individuate death further and to tap into two key elements of near-death experiences (i.e., life review and perspective taking; see Ring and Elsaesser Valarino 1998). Content analyses (Cozzolino et al. 2004) revealed that 45 % of the open-ended narrative responses of DR participants dealt with thoughts related to the self, to the life they lived, and to important others, themes found in only 19 % of the text provided by participants facing MS. Moreover, 44 % of the writing from MS participants was classified as worldview supporting and as keeping death at an abstract level, themes found in only 15 % of the text provided by DR participants. Interestingly, despite DR participants imagining a fiery death, MS participants wrote significantly more about fearing the pain of death.

Thus, according to the dual-existential systems model (Cozzolino 2006), MS manipulations activate the *abstract-existential system*, by linking death to abstract, symbolic representations of the self (e.g., cultural worldviews) and generating a focus on external stimuli, standards, and demands. Conversely, DR manipulations are thought to activate the *specific-existential system*, linking death to individuating features of the self and generating an internal state of focus, allowing individuals to pursue intrinsic needs, values, and desires so they can move forward in a self-directed manner (e.g., Deci and Ryan 2000).

The Pursuit of Meaning in the Light of Death

So, what are the social-psychological consequences of considering death in either an abstract or a specific and individuated manner, particularly in the context of meaning? For specific examples, we turn first to the theorizing of Yalom (1980), who posited that, in the absence of cosmic meaning (i.e., religious traditions and beliefs), individuals engage in so-called “terrestrial” or secular pursuits of meaning. Yalom proposed that by pursuing these secular activities, individuals are able to

extract a sense of personal meaning and purpose. Among the secular activities he listed, we will focus on those that have been linked – directly or indirectly – to abstract and specific considerations of death.

Altruism

According to Yalom, engaging in charitable work, serving others, and trying to make the world a better place, among other sorts of prosocial acts, are powerful sources of meaning. Accordingly, research shows that prosocial behavior is influenced by specific and/or abstract considerations of death, although in different ways and sometimes for different reasons. For example, Blackie and Cozzolino (2011a) observed among a community sample in England significantly greater intentions to donate blood among DR participants compared to a control condition. However, participants who considered mortality in an abstract manner (i.e., MS) only evidenced increased intentions to donate blood when they were first told that the need for donations was high due to the national blood supply being at record lows. Thus, in the case of MS, donating blood served a functional role of satisfying desires to adhere to cultural expectations. Similarly, research has shown that DR and comparable manipulations that prime a specific, individuated form of death awareness can lead to increased helping, more social cooperation, reductions in greed among those who most desire wealth, and enhanced state gratitude, an emotion that is known to heighten altruistic tendencies (Cozzolino et al. 2004, 2009; Frias et al. 2011; Niemiec et al. 2007).

There is some research documenting prosocial behavior as a function of abstract considerations of death, although the effects are a bit more nuanced and open to other interpretations. For example, in a demonstration of a so-called “Scrooge effect” – in reference to the miserly Dickensian character Ebenezer Scrooge, who turns generous after confronting the specter of death – MS participants gave more money to charity than did control participants. This effect, however, only occurred when the charities were part of the donors’ worldview (Jonas et al. 2002). Other researchers have observed increased “worldview-free” prosociality as a function of MS that was due mostly to individuals seeking to satisfy relevant and/or salient norms or values (Joireman and Duell 2005; Gailliot et al. 2008). Finally, Hirschberger et al. (2008) found that after MS people did donate more money to the poor compared to a control condition, but they also donated less to a charity promoting posthumous organ donation.

Creativity

Another secular activity that Yalom (1980) viewed as serving the broader goal of developing a personal sense of meaning was the expression of creativity. Being creative, designing something beautiful or novel, and being flexible in how we think,

Yalom posited, facilitate meaningfulness by enhancing self-reflection and self-discovery. Unfortunately, when individuals consider their mortality in an abstract manner, they tend to avoid self-awareness and self-expression (Arndt et al. 1998), as these processes separate the individual from the collective safety of their culture. Accordingly, Arndt and colleagues (1999) observed that after engaging in a creative task, MS participants expressed significantly more guilt and stronger desires for social projection than other participants. Later work demonstrated that guilt was reduced and positive engagement with a creative task was enhanced when MS participants' need for social assimilation had first been satisfied (Arndt et al. 2005). There is some evidence that MS can enhance creative thinking, but only when participants believe that the task benefits their community (Routledge et al. 2008).

Due to the nascent nature of the dual-existential systems model (Cozzolino 2006), there are fewer published papers to cite in support of DR. That said, there are a number of unpublished findings from our lab that provide suggestive support for enhanced creative thinking as a function of a specific and individuated awareness of death. We have explored the effects of DR on the "framed line task" (Kitayama et al. 2003), which was designed to assess an individual's ability to incorporate and ignore contextual information. On each trial, participants are presented with a target square frame with a vertical line extending down from the upper edge of the square. Participants are then shown a second frame that is either smaller, larger, or the same size as the target, with the instruction that they are to draw a line in the second square frame. In the relative task, participants must draw a line in the new square that is proportional to the size of the target line. In the absolute task, participants must draw a line in the new square that is the same length as the original line, regardless of the new square's size. Different cognitive strategies are required to perform each of these tasks accurately, such that the absolute task requires ignoring the original frame, whereas the relative task requires incorporating the target frame. We found better performance (fewer errors) on both of these tasks among DR participants compared to MS and control participants, suggesting that specific and individuated considerations of death facilitated greater cognitive flexibility in switching between strategies (Cozzolino et al. 2013).

We have also asked participants to play the popular puzzle computer game, Tetris, after first being exposed to MS, DR, or a control condition. The game requires hand-eye coordination and complex spatial operations and has been linked to better performance on complex cognitive tasks and on difficult tests of reasoning (Haier et al. 1992, 2009). In our study, we included a "boredom" condition, in which the pace of the game remains persistent at a very slow rate, regardless of the player's performance (see Keller and Blomann 2008). In this condition, DR participants expressed greater negative reactions and reported feeling significantly more bored than did all other participants, suggesting that they were prepared to take on a more challenging version of the game (Cozzolino et al. 2013). It is important to note that for Frankl (1984), apathetic acceptance of boredom (found in our MS participants) is the manifestation of existential meaninglessness.

Additionally, we have tested these ideas using the famous Stroop test (1935), which is a test of mental vitality and flexibility. Participants were asked to name the

color of a word (its ink color) as it appears on a computer screen, which is very easy to do in the “congruent” trials. That is, the word “green” will appear printed in the color green. The task is much more difficult in the “incongruent” trials when, for example, the word green appears printed in the color red. In “neutral” trials, participants name the color of a word that is not a color itself (e.g., the word “chair” printed in green). If reaction times are significantly longer for incongruent trials than for neutral trials, you have a classic Stroop “interference effect.” In our study, there was no interference effect for DR participants, but there was for MS, again suggesting enhanced mental flexibility as a function of specific and individuated death awareness (Cozzolino et al. 2013).

Finally, using behavioral measures of relative hemispheric brain activation (e.g., line bisection tasks), we have observed relatively greater right hemispheric activation among promotion-focused DR participants, compared to greater left hemispheric activation among promotion-focused MS participants (Cozzolino et al. 2013). It is important to note that right hemispheric activation has been linked to increased creativity (e.g., Friedman and Förster 2005).

Self-Transcendence as a Secular Source of Meaning

Yalom (1980) and Frankl (1984) asserted that individuals must strive to find meaning beyond themselves by connecting to the external world. In Frankl’s view, “true meaning in life” can only be found when individuals integrate what they have learned about themselves into the world, moving away from selfishness (p. 133). Others have referred to this integration of the *specific-self* and the *symbolic-self* as taking a “holistic view of life,” which is required to attain a sense of existential meaning (Reker 2000, p. 41). The notion of integrating oneself into a broader social context is also consistent with research showing that intrinsically motivated individuals are not separate or independent of others or from culture (e.g., Deci and Ryan 2000), and is present in the original conception of the specific-existential system (Cozzolino 2006). There is emerging evidence of this sort of *holistic self* as a function of specific and individuated awareness of death, at least as assessed in the contexts of needs and values.

Needs

According to Higgins (1997), individuals motivated by growth needs strive toward being the person they hope to be and are especially sensitive to positive information that indicates what they stand to gain from achieving their goals. Alternatively, individuals motivated by security needs strive toward being the person they feel they ought be and are especially sensitive to negative information that indicates what they stand to lose should they fail to achieve their goals. Higgins proposes that the

fulfillment of both growth needs (referred to as nurturance needs) and security needs is essential for survival and social adaptation. Accordingly, we relied on a maze task frequently used to manipulate nurturance and security needs between participants, in which participants guide a mouse through a maze (Friedman and Förster 2001). One version, we call *Find the Cheese*, has a piece of cheese at the end of the maze and is thought to activate semantic and procedural representations associated with seeking nurturance (i.e., moving the mouse toward the cheese). A second version, we call *Escape the Owl*, has an owl hovering above the maze, ready to snatch the mouse at any moment, and is thought to activate semantic and procedural representations associated with seeking security (i.e., moving the mouse toward safety).

In our study (Blackie and Cozzolino 2011b), we modified the mazes for use as a dependent measure rather than a manipulation. After completing MS or DR manipulations, participants read descriptions of the two games and then reported how motivated they were to play them. Participants who faced an abstract form of death awareness were significantly more motivated to play the security game (i.e., Escape the Owl) than they were to play the nurturance game (i.e., Find the Cheese). Interestingly, participants who faced a specific and individuated form of death awareness reported equally high levels of motivation for playing both games, suggesting that DR activated desires to fulfill both of these important needs.

Values

Personal values are thought to be pivotal in our pursuit of meaning. For Yalom (1980), the development of meaning “gives birth” to values, upon which we then rely to foster and further develop our sense of meaning (p. 464). Similarly, Frankl (1984) asserted that values were so vital to the development of meaning that individuals are often motivated to live and die for their values. More recently, Reker (2000) referred to values as the “bedrock for sources of meaning” in life (p. 43). Thus, to explore the effect of differential forms of death awareness in the context of values, we relied upon the value domains advanced by Schwartz (1992), which reflect underlying motivations and that are thought to be recognized across cultures (Schwartz 2005, 2006; Schwartz and Bilsky 1987; Schwartz and Sagiv 1995).

Research strongly supports the existence of underlying dimensions that help to organize an individual’s system of values (Schwartz 1992; Schwartz and Sagiv 1995). Two of these dimensions that are particularly relevant to our theorizing are *openness to change* and *conservation*. Openness to change values reflect independence of thought, action, and the extent to which individuals are motivated to follow their own emotional and intellectual interests in unpredictable and uncertain directions. Conservation values emphasize order, certainty, and viewing the self as embedded in a larger social entity through which individuals find meaning (Schwartz 2006; Schwartz and Boehnke 2004; S. Schwartz, personal communication, November 1, 2009). We view this distinction between openness to change and conservation values as closely linked to values related to the specific-self and to the symbolic-self, respectively.

As expected, we observed a significant increase in openness to change values among DR participants, compared to MS and control participants (Blackie and Cozzolino 2011b). The data also showed that conservation values significantly increased among participants in both mortality awareness conditions, compared to the control condition. Consequently, it seems that inducing awareness of death, regardless of whether the induction is abstract or specific, generates an activation of thoughts and values that relate to the self as embedded in a larger social context. Although this enhanced valuing of the conservation cluster elucidates what the two manipulations have in common, the results also highlight where they diverge. That is, we now have empirical evidence of multiple self-related domains being activated as a function of DR, in that participants were simultaneously focusing on openness to change values and on conservation values. This suggests that processing mortality in a specific and individuated manner enables individuals to integrate their specific-self with their symbolic-self, rather than devaluing one source at the expense of another. Conversely, it seems that processing mortality in an abstract manner activates values predominately linked to the symbolic-self, even to some extent in spite of the specific-self.

In Pursuit of Existential Liberty

Finally, we move from specific examples of secular activities that help individuals develop a sense of meaning and purpose to a broader view of differential motivational states as a function of death awareness. Specifically, we have been exploring how thinking about death can activate motivations to pursue freedom – or to escape from it (Cozzolino et al. 2013). Pursuing or escaping freedom is inherently linked to understanding how individuals find meaning in life. Frankl (1984) suggested that existing in a state of meaninglessness is tantamount to being in an “existential vacuum,” an inner emptiness that lacks a meaning worth living for. Frankl posited that individuals in this existential vacuum are prone to simply “doing what others do,” which he called *conformism*, or “doing what others tell them to do,” which he called *totalitarianism*. These ideas map directly on to Fromm’s (1941/2001) conception of the psychological mechanisms by which individuals escape from freedom, which he called *automaton conformity* and *authoritarianism*. Furthermore, Frankl (1984) argued that individuals have an innate will to find meaning and that meaning is found as a function of agency, engagement, and self-direction. Rather than relying on some “abstract meaning” provided to us, he said, we must actively discover our own sense of meaning (p. 131). A point he made most clear when he said, “Meaning is something to be found rather than given” (Frankl 1988, p. 62).

A new series of studies provides strong support for this perspective of seeking freedom – or escaping from it – as a function of death awareness (Cozzolino et al. 2013). In particular, across four experiments we observed that DR participants (compared to MS participants) expressed significantly greater levels of interest in playing games and pursuing job opportunities that promised freedom and self-direction. Additionally, DR

participants were significantly less likely than were MS participants to follow external suggestions while navigating their way through an interactive game. Finally, DR participants were significantly more likely than were MS participants to extract themselves from a highly restrictive environment that generates a sense of feeling dependent and out of control (i.e., being temporarily blindfolded). Thus, it seems clear that specific and individuated forms of death awareness are distinct from abstract considerations of death, which are linked to efforts to avoid or deny mortality, especially in the context of freedom and liberty.

Taking these results forward, in the context of meaning, we turn to research from Steger and colleagues (2008) that addresses key motivational factors underlying the search for meaning. This research suggests that individuals who are motivated in the same manner as MS participants (i.e., avoidant, inhibited, not open to experience) are caught in a deficit-based search for meaning, in that the best predictor of their quest for meaning is the perceived lack of meaning in their lives. Conversely, Steger's research shows that individuals who are more like our DR participants (i.e., approach focused, uninhibited, open to experience) are not driven by a perceived deficit, but rather are engaged in an organic, experiential, and authentic quest for meaning. Thus, it may be that individuals actively contemplating the reality of death and its influence on their lives are better able, as Frankl (1984) suggests, to find meaning on their own terms, avoiding the possibility of being sucked into an existential vacuum.

Concluding Thoughts

...the paradox became clearer and clearer. Death destroys a man: the idea of Death saves him. Behind the coffins and the skeletons that stay the vulgar mind lies something so immense that all that is great in us responds to it.

—E.M. Forster (1910)

Few people yearn for death. We think it's fair to say that even those who believe in life after death would most likely prefer that their time in eternity begin later rather than sooner. But die we must, and no amount of motivated social-cognitive gymnastics can alter that fate. At the heart of our perspective, where we believe the rubber meets the "existential road" if you will, is the extent to which individuals deny or accept their mortal fate. Moreover, we assert – and have demonstrated empirically – that there is more than one way to make people think about death and that reactions to death awareness are equally multifaceted.

From the dramatic life changes observed among individuals who face death (e.g., Calhoun and Tedeschi 2001; Ring and Elsaesser Valarino 1998) to the basic sorts of reactions we have seen among DR participants, it seems clear that confronting death head-on generates a recalibration of the self. A specific and individuated awareness of mortality seems to enable a reawakening of the specific-self, which facilitates authentic and intrinsic pursuits of meaning, rather than behaviors that predominately serve the duties, obligations, and expectations inherently tied to the

symbolic-self. For those individuals locked in a state of denial and defense and who are likely to keep death at an abstract level, the path seems less clear. We would assert that rejecting the reality of death in our lives is akin to denying a true part of who we are, which may eventually lead to inauthentic conceptions of the self and to efforts to find meaning that are based on filling an existential hole that we ourselves dug. Despite their best intentions, individuals who consistently deny death are seemingly caught in an endless loop of seeking meaning and feeling meaningless; simultaneously moving forward in pursuit of meaning, and all the while looking back over their shoulder to see what they're missing.

We conclude by paraphrasing Frankl (1984), who said that it may be fruitless for us to ask what is the meaning of our lives, when really it is we who are being asked by life. On a regular basis, we are asked, who do we want to be, what do we need, and how are we going to satisfy those needs? In many ways, it's a great deal harder to answer these questions from life than it is to answer questions about death. The best description of death is "the absence of life," but in our view "the absence of death" utterly fails to capture the richness of living. Viewed in this manner, life is the real mystery, not death, and although we may never be able to answer all of life's requests with complete certainty and authenticity, we will very likely remain in the dark about who we are in life, if we do not first address who we will be in the light of death.

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Chapter 4

Meaning Maintenance Model: Introducing Soren to Existential Social Psychology

Travis Proulx

Part I Existential Theory: What Soren Said

Like most people who end up famous for something, Soren Kierkegaard began life as just some guy. Unlike most people who end up famous for something, Soren ended his life in much the same way – not really famous for anything. That Soren should eventually end up famous for something would probably have been as much of a surprise to him as to the few people who knew him.

Now, pointing out that Soren didn't start out famous isn't to say that he was entirely ordinary. In fact, Soren was more than a little peculiar. For example, he revered his religious father and defied him constantly. He was a serious student who submitted a doctoral dissertation that was so cheeky it was nearly rejected. He was engaged to a great girl that he was crazy about and dumped her just before the wedding (Kirmmse 1990).

And then he started writing.

Mostly they were essays that hardly anyone read. The running theme was fairly consistent – things *really* aren't making any sense. And not just a few little things. Big things. The biggest possible things. Our legal systems. Our social conventions. Our religious beliefs. Our sciences and philosophies and arts. And he could prove it. He could line them up with each other and with reality and show that they were riddled with holes and inconsistencies. And perhaps the greatest inconsistency could be found in how people seem to respond to all of these inconsistencies: they behave as though everything is just fine.

So Soren wrote more and more essays about how things weren't making any sense. To further this point, he submitted his essays under different, ridiculous pen

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names that had the different “authors” arguing against each other. And to take his point even further, he would submit angry letters attacking the “authors” by pointing out that their arguments didn’t make any sense.

(I told you he was a little peculiar.)

Now, if all of this were a movie about some typical famous person, we all know what would happen next: people would read Soren’s essays and think he was a genius. Publishers would beg him to write a book about his observations. It would sell thousands of copies and make him rich. The professors who misunderstood him would come to their senses and brand him a genius. Soren would come to his senses and marry the woman he loved. Then he’d lead a long and happy life, surrounded by loved ones, content with his acknowledged contribution to human thought.

As it turned out, Soren collapsed in the street and died alone at the age of 47. His possessions were given to the woman he should have married – and who had long since married someone else. Years earlier, it was revealed that he had written all of the contradictory essays, as well as the angry letters that pointed out their contradictions. Soren became a laughingstock, and the few people who took him seriously felt they had been played for fools.

At this point, you’re no doubt asking yourself: why should I care about this guy? If I remind you that he’s a nineteenth-century Danish philosopher [you start walking away] WAIT! Come back and let me explain.

The reason that you may be interested in Soren Kierkegaard is the same reason he ended up (posthumously) famous: he had some very interesting ideas. These ideas are so interesting, in fact, that they eventually caught people’s attention, in spite of his personal failures, contrarian nature, and extremely limited readership. These are ideas that were reiterated and developed by subsequent thinkers, and which eventually came to be known as existentialism. They’re the same ideas that inspired resistance fighters in Nazi-occupied France and Bruce Springsteen to write Darkness of the Edge of Town. They’re ideas you’ve likely encountered many times over the course of your life, in music and movies, and books. If you’re familiar with Philip Marlowe or Holden Caulfield or Taylor Durden, you’ve definitely run into these ideas. Or if you’ve enjoyed Radiohead or Miles Davis. Or watched Blue Velvet or Blade Runner or Being John Malkovich. Or Toy Story 3.

These ideas spread for the same reason that many good ideas take hold: they’ve sort of occurred to most of us already. Maybe not as clearly expressed or thoroughly thought through, but if you’re reading this chapter, it’s likely you’ve had these thoughts yourself at one time or other – the suspicion that the sense we impose on our reality is overlaid on a lot of nonsense. Maybe you’ve known kind people who’ve experienced unimaginable tragedy or known awful people who die rich and contented. Maybe you’ve been lied to by someone you love – or you’ve been the liar. Maybe the world around you is changing in ways that make your old plans obsolete, with little recourse to a new path. Maybe you’ve succeeded though blind luck after your best efforts have gone unrewarded. Maybe you’ve learned that a respected friend holds beliefs you think are awful or reflected on your own beliefs and found that they don’t add up. Maybe you’ve read history books that describe

people making the same mistakes – again and again and again. And maybe all of this has unnerved you, but at the same time, made you affirm what you believe even more strongly.

And maybe you've wondered why all of this should be so.

Soren Kierkegaard certainly wondered these things and even came up with a few answers that people found useful. While you may have run into these answers here and there, you may not be aware of how many of these answers – and the questions that inspired them – have been explored by experimental psychologists over the past century. And now, a new psychology of meaning is affirming and surpassing how it is that we made sense of sense-making, offering fresh support for ideas that are intuitive, intriguing, but also elusive. While the full spectrum of these ideas lie beyond the scope of this chapter – and the psychology of meaning – I'll try to highlight three of the central ideas that existentialism introduced, along with how they've informed our own theoretical perspective – the meaning maintenance model (Heine et al. 2006; Proulx and Inzlicht 2012).

Existentialism's New Idea # 1: Meaning Is Relationships

This is one of the oddest sounding things that Soren (or anyone) ever wrote:

The self is a relation that relates itself to its own self, and in relating itself to its own self, relates itself to another. (Kierkegaard 1848/1997, p. 351)

What could this possibly mean? The self is “a relation”? How can anything be “a relation”? Soren’s answer to this question: actually, *everything* is a relation. Every idea in our head, anyway. According to Soren, every idea we have (about our self, our world, and our relationship to the word) is actually a series of expected relationships between different ideas. And these different ideas are a series of expected relationships between other ideas. And what are those ideas made of? (You guessed it.) We expect snow to be white and cold, and we expect clocks to run clockwise. We expect friends to lend us a hand when we need it, and we have the same expectation of ourselves. We expect to like a new album by our favorite artist and likely expect our friends to like it too. Of course, a list of expected relationships is as endless as the ideas in our head, and you probably get the general idea. What Soren really wanted to highlight was the following: the content of our ideas can be very different, but the stuff that makes and sticks them together is always expected relationships. We call these expected relationships *meaning*.

Later on, other existentialist writers would follow up on Soren’s line of thinking. Like Soren, Albert Camus died relatively young at the age of 46. Unlike Soren, he had established himself as a world famous novelist, playwright, and resistance fighter by the time of his death (also a pretty decent football player). According to Camus (1955), people have a natural desire to relate everything to everything else, with the ultimate aim of connecting all of reality up into one, consistent, unified whole. Ever had a vague feeling that you were once connected up with everything in existence, only to be yanked out of this perfect unity? Camus certainly thought so

and saw a desire to regain this sense of lost unity as the central motivation for most of the activities that people get up to – or as he put it: “the nostalgia for unity is the fundamental impulse of the human drama” (p. 13). For Camus, religion, science, and philosophy were all “systems of relations” (p. 13). Even though the content of these systems are very different (spiritual connections and empirical regularities and logical coherence), he nevertheless imagined them all as different *meaning frameworks* and believed that the same *meaning motivation* brought them into being.

Existentialism's New Idea #2: Meaninglessness Feels Bad

People are pretty smart, and this allows us to create pretty sophisticated meaning frameworks to represent our reality. Somewhat ironically, the same smarts that allow us to assemble meaning frameworks allow us to take them apart – and to notice that (sometimes) they’re barely holding together to begin with. A lot of what Soren wrote dealt with this paradox. More than he wanted to acknowledge, the meaning frameworks he had assembled from experiences were contradicted by his experiences – he just couldn’t help but notice. In particular, he felt that much of what he’d been taught as a young man could be contradicted by reality and other meaning frameworks.

In one of his most famous essays – *Fear and Trembling* ([1843/1997a](#)) – Soren used the Biblical story of Abraham and Isaac to make his point. Do you know this one? Well, to make a long (Biblical) story short, Abraham was the leader of the ancient Israelites, and he had no heir. He was very old, and so was his wife. And yet, God granted them a son, Isaac, whom they were told was the future of the Israelites. Then God told Abraham to take Isaac to the top of a mountain and cut his throat. And without a peep of protest, Abraham tried to do it – before God stopped him at the last possible moment. Now, Soren thought that there were a couple of things that were a little odd. At the outset, what was Abraham thinking? It’s like he fully believed that God wanted him to kill his son, yet fully believed that God would stop him from doing it. How is that contradiction possible? And even stranger – how can middle-class Europeans use these stories as their guide for living? If some guy stumbled into church and admitted to killing his family – because “God told him to” – he wouldn’t be commended for his faithful obedience. He’d be thrown into a madhouse. And the Bible is full of stories that Soren thought were equally absurd (don’t even get him started on the Book of Job).

So do we actually acknowledge these contradictions, or are we just fooling ourselves and each other? And what other contradictions would *those* contradictions imply for how we lead our lives? By now, all of these contradictions were filling Soren with a very common emotion: *anxiety*. Camus wanted to get more specific. These contradictions weren’t making us feel just any kind of anxiety. They were making us feel a very special kind of anxiety, a “feeling of the absurd” (p. 5) that tells us that our experiences – *any* of our experiences – aren’t matching up with our meaning frameworks.

Martin Heidegger, a German existentialist theorist (who bucked the “early death” trend by dying at age 86), had another term for this special feeling. It’s a word often used by other existentialists and always used by people making fun of existentialism: *angst*. According to Heidegger ([1956/1996](#)), this is a very subtle feeling – more of a *mood* than an emotion – and we experience the same *angst* following any experience than threatens meaning. He called these experiences *non-relations* and argued that angst would follow from any *non-relational* experience, whether it was a trivial, unexpected mistake, or what he called “your own most non-relational potentiality of being, not to be bypassed” (p. 251) (It’s what you and I call *death*).

Existentialism’s New Idea #3: Meaninglessness Makes You Affirm Meaning

So how do we deal with the funny feeling that things aren’t making sense? Mostly by focusing on other things that do make sense. Whenever Soren got this feeling (after a typical day of contemplating the *gaps and fissures* of existence), he would repeat familiar behaviors (Kierkegaard [1843/1997b](#)). This might involve making a favorite trip to his favorite theater to see his favorite play. He would stop at the same restaurant along the way, stay at the same hotel, and sit in the same seat in the theater, mouthing along with the same dialogue and laughing at the same jokes. When Camus got this feeling, he threw himself into his work – he wrote novels and plays and resisted the Nazis in occupied France. When Heidegger got this feeling, he joined the Nazi party.

For better or worse, it’s often easier to affirm another meaning framework than it is to completely revise a threatened meaning framework. Sure, you can sit around contemplating the potential absurdity of ascribing value to a finite human existence – or you can affirm something else, *anything* else more strongly. Often, this instinctive response is a great strategy, especially if what you’re affirming enriches your life or the lives of those around you. (Heidegger dismissed these affirmation responses as *inauthentic* because they didn’t directly address the source of the meaning crisis – though this criticism may be most applicable to his own affirmation efforts.)

Part II Meaning Maintenance Model: Stealing What Soren Said

So let’s recap what Soren (and the existentialists, more generally) had to say: (1) meaning is what connects all of the ideas in our head. (2) When experiences violate meaning frameworks, this makes us feel a special kind of bad. (3) When we feel this way, we often respond by affirming other meaning frameworks.

A recap of the meaning maintenance model would go something like this: (1) meaning is what connects all of the ideas in our head. (2) When experiences violate

meaning frameworks, this makes us feel a special kind of bad. (3) When we feel this way, we often respond by affirming other meaning frameworks.

OK, in terms of existentialist theory, the meaning maintenance model isn't exactly novel. But in terms of existential social psychology, this perspective is oddly underrepresented in the current cannon (Greenberg et al. 2004). If it's going to have any appeal, it will be because these ideas have sort of occurred to most of us already, and indeed, the pieces of this perspective have long been in place, with overlapping and complementary findings in different literatures and fields in psychology, more generally. What we've tried to do with the meaning maintenance model, more than anything else, is simply *acknowledge* that these findings are overlapping and complementary. Like any theoretical framework, the meaning maintenance model begins as a *description* of a general phenomenon – in this case, the very reliable ways that people respond to experiences that violate mental representations of expected associations, whatever these associations happen to represent. Following from this description is a proposed *mechanism* – in this case, a belief that violations of expected associations, whatever they happen to represent, will lead to a common syndrome of physiological arousal and neurocognitive activation. In turn, some component of this syndrome provokes a common array of cognitive compensation efforts. These efforts often involve the affirmation of alternative expected associations – even if these meaning frameworks share no content whatsoever with the associations that were initially violated. Finally, this assumed mechanism allows us to make *predictions* that would not follow from (or be allowed by) other theoretical frameworks – namely, that the violation of any deeply held expectation will evoke a common, measurable syndrome of arousal and activation, which in turn will provoke the affirmation of any proposition we happen to be committed to.

Empirical support for this prediction, I believe, would be the ultimate verification of existentialist theory (and the meaning maintenance model). To date, evidence for the totality of this proposition does not exist (which is why it's still just a prediction). However, there's an awful lot of evidence that this prediction will eventually be born out. This evidence can be found in many different fields in psychology, where there is significant evidence for each element of the mechanism hypothesized to underlie the meaning maintenance model (and existentialist theory). Let's take a look at each of these elements, in turn.

Meaning Maintenance Model (Old) New Idea #1: Meaning Is Relationships

At the outset, I'll point out that most of us are sober scientists who don't have time for "existential this" or "non-relation that." Rather, we prefer unambiguous terminology that can be precisely operationalized. Take the word "meaning," for example. You'll seldom hear an experimental psychologist use the word "meaning" to describe a bunch a related ideas filling up people's heads.

When psychologists describe a bunch of related ideas filling up people's heads, we use a different word: schema.¹

In fact, we've been using the word schema for nearly a century now, to describe all of the expected relationships that fill up our heads. We talk about the social schema that we have for our personal relationships and the self schema we have for ourselves (obviously). We talk about the event schema we have for the things that go on around us every day and the perceptual schema we have for the things we hear and see. We also talk about all of the functions that a schema might serve. A given schema might help to organize our experiences and help us to predict and control future events. It can also help memorize experiences and call them back into our thoughts when they seem relevant. In fact, a good deal of what psychologists have been up to for the past 100 or so years has been about understanding one kind of schema or another. And when developmental, cognitive, and social psychologists all use the word schema, it's always to describe the same thing: mental representations of expected relationships. Relationships between *anything* that our minds can comprehend.

Of course, none of this is to say that the content of various schemas aren't importantly different or that the functions they serve don't differ in general importance. We all realize that there are important differences between a schema that organizes our understanding of what *is* (epistemic meaning) and what *should be* (teleological meaning). None of us will confuse a schema that organizes our perception of playing card features (Bruner and Postman 1949) with a schema that assigns a purpose to our life (McAdams and Olson 2010). None of us will imagine that failures of either schema will produce equivalent practical consequences – be it an inability to play Bridge or a sense that life isn't worth living. And none of us will confuse the kinds of experiences that violate either of these schemas – be it a reverse-colored playing card or a reminder of our unavoidable mortality (Pyszczynski et al. 1999). Yet while we all have a clear conception of how these schemas differ in terms of content and function, it may very well be the case that our brains *do not* – at least in terms of how our brains respond to experiences that violate these schemas. That's because our brains likely respond to the violation of any schema in pretty much the same way – a syndrome of activation and arousal and a limited palette of cognitive compensation efforts.

Meaning Maintenance Model (Old) New Idea #2: Meaninglessness Feels Bad

Once again, it may be worth pointing out that no self-respecting psychologist would use an expression like “feeling of the absurd” or “angst.” Instead, we tend to use “anxiety” – a lot. If we look to the clinical literature, Ronnie Janoff-Bulman (1992)

¹Also see script (Nelson 1981), narrative (McAdams and Olson 2010), paradigm (Bruner and Postman 1949), internal working model (Bowlby 1980), implicit theory (Murphy and Medin 1985), assumptive world (Janoff-Bulman 1992), and even (from time to time) meaning (Baumeister 1991; Peterson 1999).

describes our affective response to tragic events – a “double dose of anxiety” (p. 64). The first of these doses stems from the fear and loss that follows from a tragedy. The second dose follows from having a fundamental meaning framework violated—namely, our expectation that bad things don’t happen to good people or at least people who don’t deserve them. If we travel backwards in time, and across psychological domains, Jerome Bruner (1949) describes a common response to reverse-colored playing cards – “acute personal distress” (Kuhn 1962/1996, p. 63). At points in between, Jean Piaget (1985) describes our response to experience-schema mismatches as *disequilibrium*, and Leon Festinger (1957) coins *dissonance* as the feeling we get when our behaviors don’t match our beliefs. More recently, *uncertainty* (e.g., Van den Bos 2001) has become a catch-all term for the feeling that follows experiences that violate our understandings – an expression that comes full circle as *anxious uncertainty* (McGregor et al. 2010).

Given how ubiquitous this notion is across so many disciplines in psychology, you would think we’d have a pretty clear idea of what *dissanxiousuncertlibrium* actually is – we don’t. Part of the problem is that lab participants seldom report feeling much of anything following the kinds of experiences that we think should evoke this particular feeling (Baumeister et al. 2007) – and yet we all know what this feeling feels like in everyday life. And we can infer the presence of some kind of arousal following these sort of experiences, insofar as misattribution of arousal manipulations will extinguish the compensation efforts that we imagine are motivated by this feeling (e.g., Kay et al. 2010; Proulx and Heine 2008; Zanna and Cooper 1974). Apparently, having people attribute the feeling that follows from these experiences – a feeling that they don’t report feeling – to another likely culprit extinguishes the motivation to engage in other behaviors to make this feeling go away. But what *is* this feeling?

In recent years, we’ve gotten much better at measuring arousal – both conscious and unconscious – following a wide array of experiences that violate expected associations. For example, if you violate people’s self-conception, their heart rate will increase and their blood vessels will dilate – a physiological threat response (Blascovich et al. 2002). This shouldn’t be very surprising, given how important people’s self-conceptions are to their everyday lives. What may be surprising, however, is that people will demonstrate an identical threat response if the person they’re talking to is Chinese, but they have an Alabama accent (Weird!) (Mendes et al. 2007). Conversely, providing people with information that violates their expectations in a *positive* way will also evoke this response. For example, minorities who believe that social discrimination is rampant will demonstrate a threat response if they are *not* discriminated against (Major et al. 2007). These recent findings join examples of consciously reported anxiety following other positive experiences that violate people’s expectations. For example, people feel anxious after learning that their test scores have improved, if this knowledge violates their understanding of how people learn (Plaks and Stecher 2007).

We’re also learning a lot more about the cognitive neuroscience that likely underlies our common responses to meaning violations – whatever they happen to be about and whether they represent good news or bad. As it turns out, there are areas of our

brain that do nothing but detect mismatches between what we expect and what we experience (Montague et al. 1996). According to the reward prediction error hypothesis, areas of the anterior cingulated cortex, in particular, are associated with the detection of a wide variety of discrepancies and inconsistencies, from simple mistakes on an attention task to violations of linguistic syntax and conflicting motivations (Holroyd and Coles 2002; Ridderinkhof et al. 2004). It doesn't matter whether the experience is unexpectedly good or bad – the ACC responds by firing dopaminergic neurons. And remarkably, the ACC response to this kind of simple task-relevant error is diminished when people are reminded of their religious worldview (Inzlicht et al. 2009). Of course, you and I know there is a difference between regularities in an attention task and systems of religious conviction – our brains, however, *do not*. And this may go a long way in explaining why the same physiological arousal seems to follow from any violation of expected associations, whether it's mundane or profound. And why we'll affirm our moral worldview following reminders of our mortality (Rosenblatt et al. 1989) – or reverse-colored playing cards (Proulx and Major *in press*).

Meaning Maintenance Model (Old) New Idea #3: Meaninglessness Makes You Affirm Meaning

Speaking of reverse-colored playing cards – do you know what happens if you show someone a black four of hearts? Typically, people will reinterpret their perception of the card so that it agrees with their paradigm for playing cards – they'll see the four of hearts as a spade. Alternatively, of course, they can recognize that the card is anomalous and revise their playing card paradigm to account for it – they'll come to expect some anomalous cards from the deck the experimenter draws from (Bruner and Postman 1949). And how about an unexpected tragedy – like a fatal car accident? Well, people will typically reinterpret their perception of the event so that it agrees with their belief in a just world – they'll imagine that the deceased was speeding, or possibly drunk. Alternatively, they can acknowledge that tragedy often strikes those who don't deserve it and revise their belief in a just world accordingly – shit happens (Janoff-Bulman 1992). And I could just as easily describe these responses using the Piagetian (1985) terms, *assimilation* or *accommodation*. Or terms from the many different theoretical perspectives that describe these same compensation behaviors (e.g., Park and Folkman 1997; Thompson and Janigan 1988). From the outset, I think it's important to acknowledge that what's being described here, across these different fields and literatures and theories, is the same general psychological phenomenon – two common responses to *any* meaning violation, regardless of the content or practical importance.

More recently, a third response has taken over a significant portion of the social psychological literature – the compensatory (re)affirmation of alternative meaning frameworks. If you violate someone's sense of self-worth, they'll affirm their self-worth in other ways (Tesser 2000). Violate their sense of belongingness (Baumeister and Leary 1995), and they'll affirm belongingness in other ways.

Violate their sense of control (Kay et al. 2008) or their ideological worldview (Jost et al. 2004), and they'll affirm what's been violated in other ways. Or you can just violate everything at once by reminding people of their own mortality and watch them affirm whatever you put under their nose (Pyszczynski et al. 1999). This process is variously termed *compensatory conviction* (McGregor 2007), *compensatory control* (Kay et al. 2008), *worldview verification* (Major et al. 2007), *system justification* (Jost et al. 2004), *self-affirmation* (Steele and Liu 1983), and *cultural worldview defense* (Pyszczynski et al. 1999), although I think that giving this process a variety of names obscures what might be obvious to the outside observer – fundamentally, this is the same psychological process, manifesting regardless – and in spite of – the specific content of what is violated and what is affirmed. You could call this process *compensatory worldview system verification defense*. Or just *meaning maintenance*.

Most recently, we've directly demonstrated the fundamental nature of *compensatory worldview system verification defense*, er, *meaning maintenance*. Sure, you can reliably get people to affirm their moral worldview by reminding them of their own mortality (Pyszczynski et al. 1999) or violating their sense of self (Steele and Liu 1983). And you might be motivated to come up with reasons why *only* mortality reminders (Schimel et al. 2007) or self-threats more generally (Van den Bos 2009) should evoke this response. But if you do, you're going to have difficulty explaining why people will engage in moral affirmations after they've played blackjack with reverse-colored playing cards (Proulx and Major *in press*). Or after the person they're talking to secretly switched with a different person who's wearing the same clothes (Proulx and Heine 2008). Or after they've read an absurd joke (Proulx et al. 2010). Or after they've been flashed nonsensical word pairings at 32 ms (Randles et al. 2011).

Now, you could argue that subliminal presentations of “quickly blueberry” are wreaking havoc on people’s self-concept, provoking efforts to restore the self by affirming values closely integrated with one’s identity. Or you could suggest that a red ace of spades floods people’s minds with death-related thoughts, threatening people with potential terror and initiating anxiety buffers which evoke distal efforts to affirm a cultural worldview that provides a sense of symbolic immortality. But I think Occam’s Razor will dice these arguments pretty quickly. What’s likely happening is simply this: meaning frameworks are being violated, which makes people feel funny and want to affirm meaning elsewhere.

Part III Existential Social Psychology: Finally, What Soren Said?

With all the talk of “inconsistency” this and “discrepancy” that, it may have occurred to you that Soren’s ideas – and existentialism more generally – represent a kind of radical consistency theory. Radical in the sense that all of human experience is represented as meaning, and the violation of any meaning framework is understood to arouse the same feeling and lead to the same general array of compensation responses. This is because – unlike prior schools of Western thought – the

existentialists were unconcerned with the objective reality of what *exists*. Beginning with Soren, the focus shifted to our *subjective experience of existence*. Theorists became interested in how we mentally represent reality, how these structures can be created or altered, and the emotions associated with their dissolution and growth. Into the early twentieth century, psychology and philosophy were saturated with this perspective. Quine (1953/1980) understood knowledge as a web of beliefs, undergoing continual realignment and revision. Kuhn (1962/1996) described the history of science as the gradual coalescing of individual theories around common phenomena, until they integrate into a singular paradigm. He took the word “paradigm” from Bruner (Bruner and Postman 1949) and used anomalous playing cards as an example of how scientists respond to unexpected observations – they feel anxious and either reinterpret their observation or revise their understanding. Heider (1958), Piaget (1985), and Festinger (1957) described these same efforts as they were thought to follow from *imbalance*, *disequilibrium*, and *dissonance*. More recently, efforts to reaffirm a variety of violated understandings appear in an expanding “threat-compensation” literature in social psychology (Proulx 2012).

Following from Kuhn, one might have expected these different perspectives to themselves coalesce into a common paradigm in experimental psychology. Instead, something else has occurred. Rather than integrating our perspectives, we’ve been generating “new” theories for every manifestation of this process that we bring to light. Particularly in social psychology, we’ve come to understand progress as the continual introduction of more and more theories – different brands in an increasingly saturated marketplace. Can we show that violating beliefs about climate change will initiate efforts to affirm these beliefs in other ways? I bet we could – and we’d be launching *climate conviction theory* in the process. Have strong feelings about American jazz trumpeters? You’d likely reaffirm them if they were violated – and *Satchmo justification theory* could be a road to academic riches. Though in all seriousness, I think a consequence of our metastasizing micro-theories has been that the core mechanism underlying this general phenomenon has yet to be specified. And frankly, I don’t think it matters whether this work is framed as *meaning maintenance* (Proulx and Inzlicht 2012), *meaning making* (Park 2010), *neo-dissonance* (Harmon-Jones et al. 2009), or *compensatory worldview system verification defense* (YOUR NAME HERE?). Finally, specifying this mechanism will significantly expand the field of existential social psychology and generally enhance our understanding of a fundamental process that spans numerous fields in psychology. Most importantly, it will finally validate what Soren said, so long ago. And given all of the inconsistencies he brought to our attention, don’t we owe him some closure?

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Chapter 5

Trauma and Meaning Making: Converging Conceptualizations and Emerging Evidence

Crystal L. Park

Research focused on meaning has proliferated in recent years, both within psychology (e.g., Hayes et al. 2007; King et al. 2006; Mendoza-Denton and Hansen 2007; White 2004) and other disciplines as diverse as nursing (e.g., Coward and Kahn 2005), public policy (e.g., Christiansen 2006), urban planning (e.g., Gale 1986), medicine (e.g., Daaleman and Kaufman 2006), and communication (e.g., Kellas and Trees 2006). Meaning has been examined from myriad angles and vantage points; this volume alone includes cognitive, emotional, motivation, philosophical, social, and cultural perspectives. Collectively, these lines of inquiry highlight the centrality of meaning in human functioning and well-being.

Meaning is particularly important when individuals confront highly stressful and traumatic life experiences, and it is in this context that many researchers have been illuminating how meaning is brought to bear on the trials and sorrows of the human condition. This chapter provides an overview of current conceptual and empirical work on meaning in the context of trauma, concluding with suggestions for future research.

Converging Conceptualizations of Meaning Making

The model of meaning making framing this chapter is based on a body of research that has accumulated since the early 1980s, an era that brought increased research attention to meaning making in contexts such as serious illness (Taylor 1983), bereavement (Wortman and Silver 1987), sexual assault (Scheppele and Bart 1983),

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incest (Silver et al. 1983), and many other highly stressful events. Focusing on posttraumatic stress, Horowitz (1986) described how traumatic events disrupt beliefs about the self, the world, and the future. He suggested that trauma survivors' intrusive thoughts and avoidance behaviors reflected attempts to integrate information about events that were incompatible with their previously held beliefs. Janoff-Bulman (1989) further elaborated the role of trauma in violating or shattering individuals' fundamental, yet unarticulated, assumptions about the world and themselves (i.e., worldviews), such as beliefs in a just, benevolent, predictable world in which the individual possesses competence and worth. Because worldviews provide meaning, self-esteem, and the illusion of invulnerability, events that violate these benign worldviews can lead to posttraumatic stress symptoms and a need to integrate the occurrence of the events into one's worldviews.

Over the past 20 years, theorists and researchers have continued to advance notions regarding meaning making following stressful encounters (e.g., Davis et al. 1998, 2000; Bonanno and Kaltman 1999; Neimeyer 2001, 2002; Lepore and Helgeson 1998; Joseph and Linley 2005; Thompson and Janigian 1988). These various theoretical perspectives, although differing in emphasis and detail, converge on a set of essential propositions for which there is a surprisingly high degree of consensus (cf., Lepore et al. 1996). That is, these perspectives generally hold that (1) people possess orienting systems (termed here global meaning) that provide them with cognitive tools to interpret their experiences and motivate their functioning in the world; (2) people appraise the situations that they encounter, assigning a meaning to them; (3) the extent to which that appraised meaning violates or is discrepant with their global meaning determines the extent to which they experience distress; (4) this discrepancy creates distress that initiates a process of meaning making; (5) there are many ways to make meaning; (6) through meaning making, individuals reduce the discrepancy between appraised and global meaning and restore a sense of the world as meaningful and their own lives as worthwhile; and (7) meaning making, when successful in reducing discrepancy, leads to better adjustment to the stressful event (see Gillies and Neimeyer 2006; Skaggs and Barron 2006; Greenberg 1995; Collie and Long 2005; Lee et al. 2004; Park 2010a, for reviews).

These propositions form the basis for the meaning making model proposed by Park and her colleagues (Park 2010a, b; Park and Folkman 1997; Park et al. 2012). In the following sections, each of these seven propositions is discussed in detail.

Global Meaning

Global meaning refers to individuals' basic orienting systems (Pargament 1997); global meaning consists of beliefs, goals, and subjective feelings (Dittman-Kohli and Westerhof 1999; Reker and Wong 1988). Global beliefs are individuals' deeply held understandings of reality, such as justice, control, predictability, coherence, and identity (Janoff-Bulman 1989; Leary and Tangney 2003; Parkes 1993; see Koltko-Rivera 2004). Global beliefs comprise the core schemas through which

people interpret their experiences of the world (Janoff-Bulman and Frantz 1997; Mischel and Morf 2003). Global goals are internal representations of desired processes, events, or outcomes (Austin and Vancouver 1996). Goals can be states which one desires and pursues (Karoly 1999) or states already possessed that one seeks to maintain (e.g., health, family relationships; Klinger 1998). Relationships, work, religion, knowledge, and achievement are commonly reported global goals (Emmons 2003). Goals are organized hierarchically, from superordinate higher-level or ultimate goals to mid-level and lower-level goals and strivings (Vallacher and Wegner 1987). A subjective sense of meaning refers to feelings of “meaningfulness” (Klinger 1977), a sense that one has purpose or direction (Reker and Wong 1988), and is thought to derive from seeing one’s actions as oriented toward a desired future state or goal (cf. King et al. 2006; McGregor and Little 1998).

Appraised Meaning

Individuals appraise, or assign a particular and idiosyncratic meaning, to the situations that they encounter. Appraising the meaning of a potentially stressful event involves determining the extent to which it is threatening and controllable, attributions about why it occurred, and its implications for one’s future (see Aldwin 2007; Sweeney 2008, for reviews). There is copious evidence that individuals assign meanings to their traumatic events and that these appraised meanings are related to reactions to them. For example, many studies have demonstrated that people make attributions for their traumatic experiences (e.g., Littleton et al. 2007; Roesch and Weiner 2001) and appraise them as highly threatening (e.g., Kliewer and Sullivan 2008; Lequerica et al. 2010) and uncontrollable (e.g., Jin 2010; Park et al. 2001). Further, traumatic events are commonly appraised as having drastic, damaging implications for the victim’s selfhood and future (e.g., Foa et al. 1999, 2006).

The general transactional model of stress and coping posits that individuals’ understanding of stressors is directly related to their levels of distress (Aldwin 2007; Lazarus 1993). However, as discussed in the next section, the meaning making model posits an additional mediator in this linkage, that it is the discrepancy between global and appraised meaning that creates distress (Park 2010a).

Discrepancy Between Global Meaning and Appraised Situational Meaning Creates Distress

According to the meaning making model, following event appraisal, individuals determine the fit or discrepancy between that appraised meaning and their global meaning. Perceptions of discrepancy (e.g., with one’s sense of the controllability or comprehensibility of the world) create the distress which, in turn, drives meaning making efforts (Carver and Scheier 1998; Dalgleish 2004; Horowitz 1975;

Janoff-Bulman and Frieze 1983; Watkins 2008). Further, the *extent* of discrepancy between the appraised meaning of the event and the individual's global meaning determines the level of distress experienced. Traumas result from large discrepancies between appraised and global meaning (e.g., Everly and Lating 2004; Koss and Figueiredo 2004).

Although most meaning making theorists emphasize violations of global beliefs as the most potent aspect of discrepancy, the violation of goals (e.g., the extent to which the event is not what the person wants to have had happen or to which other goals are rendered less attainable) and concomitant loss of sense of purpose in life may be even more powerful in generating distress (Dalgleish 2004; Rasmussen et al. 2006).

Indirect support for the notion that discrepancy leads to distress comes from studies demonstrating that threat or loss appraisals, which essentially *imply* a violation of global meaning, consistently relate to distress (Aldwin 2007). More direct support comes from the few studies that have explicitly examined discrepancies. These studies have shown that people experiencing loss and trauma report high levels of discrepancies between their global meaning and their appraised meaning of the event (e.g., Koss and Figueiredo 2004), and further, that discrepancies are related to distress. For example, in studies of college students dealing with bereavement and other losses, higher levels of belief and goal violations were related to higher concurrent and subsequent levels of distress (Park 2005b, 2008). Other studies have demonstrated that perceived goal violation predicted distress in college students dealing with recent stressful events (Schroevers et al. 2007), in adults living with chronic illness (Kuijer and De Ridder 2003) and HIV (Van Der Veen et al. 2007), and in myocardial infarction patients (Boersma et al. 2005).

Meaning Making Constitutes Efforts to Reduce Discrepancy-Induced Distress

The meaning making model posits that recovering from traumatic events involves reducing the discrepancy between the appraised meaning of the trauma and one's global meaning (Park 2010a). *Meaning making* refers to the processes through which people reduce this discrepancy. Following a traumatic exposure, people often engage in problem-focused and emotion-focused coping (Aldwin 2007). However, by its nature, trauma involves a situation in which loss or damage has already taken place, and thus, problem-solving is less relevant. In the aftermath of trauma, meaning making, approach-oriented intrapsychic efforts to reduce discrepancies between appraised and global meaning, is particularly relevant and potentially more adaptive (Mikulincer and Florian 1996).

Through meaning making, individuals attempt to restore their global meaning when it has been disrupted or violated, or to resolve those violations by developing an acceptable understanding of the traumatic event consistent with their global meaning. Meaning making thus aims to reduce discrepancy by changing either the

very meaning of the stressor itself (appraised meaning) or by changing one's global meaning system. Meaning making involves coming to see or understand the situation in a different way and reviewing and reforming one's beliefs and goals in order to regain consistency among them (Davis et al. 2000). Following stressful events, people more commonly attempt to change their situational appraisals to incorporate them into their global meaning (i.e., assimilation), such as coming to see the event as less damaging or, perhaps, even in some ways fortuitous or beneficial.

When the appraisal of an event is so discrepant with global meaning that assimilation is very difficult, as in the case of trauma, meaning making may consist of efforts to change global meaning to accommodate the trauma. For example, severe trauma can severely disrupt people's global meaning by exposing them to the unpredictable and darker sides of life and humanity, including human vulnerability and evil (Gray et al. 2007; Janoff-Bulman 1989). Facing this darker side may necessitate changes in global meaning, such as in views of the balance of good and evil in the world or in beliefs about one's own power or control over one's life. Meaning making is essential to reduce discrepancies between global meaning and appraised meanings of traumatic events (Fillip 1999; Steger and Park 2012).

Some researchers have demonstrated that in laboratory situations, distress can be induced by relatively minor discrepancies that are of a nonpersonal nature (e.g., a black diamond playing card) or stimuli that are hard to interpret or understand (e.g., abstract art) (Proulx and Heine 2007). To ease their distress in such situations, people tend to shift their focus or opinions to maintain a sense of homeostasis in their sense of meaning. Termed the Meaning Maintenance Model, this tendency has been tested in a variety of clever experiments, consistently demonstrating that to maintain an overall sense of meaning, people can draw on sources of self-esteem, affiliation, certainty, and symbolic immortality, apparently interchangeably (Heine et al. 2006). While this model is consistent with the meaning making model described in this chapter, it remains to be seen how this "fluid compensation" (Randles et al. 2011, p. 246) may play out in the real world of stressful and traumatic situations.

Meaning Making Takes Many Forms

Making meaning following traumatic events typically involves cognitive processing or mentally reworking appraised and global meaning to change or reframe them and make them consistent (Davis et al. 2000; Greenberg 1995; Park and Folkman 1997). Meaning making processes have been conceptualized both as automatic and unconscious (e.g., Horowitz 1986; Creamer et al. 1992) and as effortful coping (e.g., Folkman 1997; Boehmer et al. 2007).

Automatic processes are often implicated in discrepancy reduction theories (Horowitz 1986; Greenberg 1995; McIntosh et al. 1993). Experiencing intrusive thoughts about one's traumatic event and avoidance of reminders of that event is a recursive process that may reduce discrepancy and help people integrate the

appraised meaning of the trauma with their global meaning (Hembree and Foa 2000; Lepore 2001). Other processes may also occur beyond deliberate efforts. For example, important life goals may shift through processes beyond intentionality, such as when previously ignored cognitions that undermine the attractiveness of unattainable goals become more available to consciousness (Brandtstädtter 2002).

Meaning making also involves deliberate efforts to deal with a traumatic event (e.g., Folkman 1997), such as searching for answers to questions like “Why me?” (Bulman and Wortman 1977) or looking for ways to understand the situation in more benign ways (Park 2010a). Intentional meaning making refers to a broad category of efforts to cope with a situation by deliberately changing either appraised or global meaning. Meaning making is distinguished from problem- or emotion-focused coping efforts by its motive, to decrease the global meaning-appraised meaning discrepancy (Folkman and Moskowitz 2007). Folkman (1997) identified meaning making coping as “(a) using positive reappraisal, (b) revising goals and planning goal-directed problem-focused coping, and (c) activating spiritual beliefs and experiences” (p. 1216). Other meaning making coping strategies include making downward comparisons with real or hypothetical others who are in relatively poorer straits (Buunk and Gibbons 2007; Taylor et al. 1983; White and Lehman 2005) or selectively focusing on positive attributes of an event and seeking to identify benefits or remind oneself of those benefits (Tennen and Affleck 2002).

Meaning Making Results in Meanings Made

Meaning making involves attempts to generate satisfactory meanings that reduce the discrepancy between situational and global meaning and restore a sense of the world as meaningful and one’s own life as worthwhile (Michael and Snyder 2005). Changes in situational or global meaning, or meanings made, then, are the outcomes of meaning making (Park 2010a). Many different meanings can be made; these include:

Perceptions of having “made sense.” This type of meaning made is widely assessed (see Park 2010a, for a review). Following a variety of traumatic events, feeling one has “made sense” of the experience is commonly reported (e.g., Updegraff et al. 2008) although the meaning of this item to those who answer it remains unclear (Wright et al. 2007; see Park 2010a). Feeling one has made sense of a traumatic event is inconsistently related to adjustment (e.g., Holland et al. 2010; Wu et al. 2008).

Acceptance. The extent to which individuals report having achieved a sense of acceptance or of “having come to terms with” their event has also been considered meaning made (Evers et al. 2001). Individuals’ open-ended responses regarding having “made sense” by bereaved family members (Davis et al. 1998) and people living with multiple sclerosis (Pakenham 2007) evinced a great deal of acceptance, suggesting that acceptance is a common type of made meaning, although few studies have directly examined this potentially relevant type of meaning made (Davis and Morgan 2008).

Causal understanding. An adaptive understanding of the reason for the occurrence of an event is an important type of meaning made (e.g., Janoff-Bulman and Frantz 1997; cf., Thompson and Janigian 1988). Initial attributions are assumed to be made instantaneously as part of the appraisal process (Lazarus 1991). However, researchers typically assess attributions long after the event has occurred; thus, so measured, these are products of meaning making (e.g., Dollinger 1986; Davis et al. 1998). Such attributions may more accurately be labeled *reattributions* given that they have likely been altered considerably through meaning making processes since the event occurred (Park 2013; Westphal and Bonanno 2007).

Perceptions of growth or positive life changes. In recent years, posttraumatic or stress-related growth has become the most commonly assessed type of meaning made, generating its own proliferating body of literature (e.g., Calhoun and Tedeschi 2006; Park et al. 2009). Reports of experiencing positive changes as a result of highly stressful experiences, such as improved relationships, enhanced personal resources and coping skills, greater appreciation for life, and improved health habits, are very common (e.g., Calhoun and Tedeschi 2006). By identifying positive changes resulting from the traumatic event, survivors can transform its appraised meaning to a more positive (and presumably less discrepant) one, regardless of whether the perceived changes are veridical (Park 2009). Reports of experiencing posttraumatic positive changes are often, but not always, related to posttraumatic adjustment (e.g., Sawyer et al. 2010) but also to higher levels of posttraumatic stress symptoms (Helgeson et al. 2006; Park et al. 2008a).

Changed identity/integration of the traumatic experience into identity. Another potentially important outcome of meaning making involves *identity reconstruction*, alterations of one's personal biographical narrative (Gillies and Neimeyer 2006). For example, following spousal bereavement, the loss of one's spouse and one's new status and identity as a widow/widower become important aspects of one's life story (e.g., Hyun et al. 2011). Although integrating a traumatic event into one's identity is critical in allowing the survivor to move forward (e.g., Cason et al. 2002), making the traumatic event central to one's identity is likely to be related to poorer adjustment (e.g., Park et al. 2011).

Reappraised meaning of the trauma. Individuals often transform the appraised meaning of a trauma, rendering it less noxious and more consistent with their preexisting global beliefs and desires. For example, individuals may come to see that the event is relatively benign compared to that experienced by others (Taylor et al. 1983) or that they are fortunate that the event was not worse (Thompson 1985). They may also reappraise the nature of the event, as in reconceptualizing their relationship with a deceased loved one in bereavement (Bonanno and Kaltman 1999) or reevaluating the implications of the event for their future in more positive ways (Resick et al. 2008). These more positive reappraisals are related to better adjustment to traumatic events (e.g., Park and Blumberg 2002).

Changed global beliefs. Through meaning making, people can also change their global meaning. For example, global beliefs may shift toward a view of life as less controllable or other people as less benevolent. One's view of God may shift toward a less powerful or benevolent deity (Cason et al. 2002; Park 2005a). Restoration of

positive but realistic global beliefs is often an important part of therapeutic recovery efforts following trauma.

Changed global goals. As a result of meaning making, people may come to see once sought-after global goals as no longer attainable and may abandon those goals or substitute alternatives (Brandtstädtér 2006). For example, with the loss of physical prowess that comes with aging, individuals may abandon notions of being athletic champions and shift their exercise routines toward maintaining health and functioning (Wrosch et al. 2006). Following traumatic events, some survivors develop new goals, such as advocating for stricter drunk driving laws or greater resources for victims of violent crime (Armour 2003; Grossman et al. 2006).

Restoration of a sense of meaning in life. Through meaning making, people may regain their global sense of meaning in life (Janoff-Bulman and Frantz 1997). Although few studies have focused on changes in or restoration of a sense of meaning in life as an outcome of meaning making, such restoration may be an important outcome of the meaning making process (Jim et al. 2006; Park et al. 2008c).

There is a fair amount of research demonstrating that meaning making leads to meanings made. Much of this work has been conducted specifically on post-traumatic growth (e.g., Frazier et al. 2004; Cann et al. 2011). Other studies have shown that some aspects of meaning making, such as religious coping and positive reinterpretation, predict meanings made, such as parents' feeling that they had "made sense" of their child's Asperger syndrome (Pakenham et al. 2004) or cancer survivors' sense of having "made meaning" (Fife 2005; see Park 2010a, for a review).

Better Adjustment to Traumatic Events Results from Discrepancy Reduction (Through Meanings Made)

According to the meaning making model, meaning making involves efforts to reduce the discrepancy between appraised situational meaning and global meaning. The extent to which this discrepancy is reduced should lead to better adjustment to traumatic events, while continued inability to integrate one's appraisal of the traumatic event into one's global meaning may lead to continued rumination, intrusive thoughts, and depression (for reviews, see Collie and Long 2005; Gillies and Neimeyer 2006; Park 2010a; Skaggs and Barron 2006). Thus, meaning making attempts are necessary but not sufficient for adaptive adjustment following trauma. Meaning making efforts simply signify ongoing discrepancy between an individual's global meaning and an event's appraised meaning. Until meaning making attempts result in some change that reduces the discrepancy between appraised and global meaning, these attempts are likely positively related to and driven by distress. Over time, meanings made (and concomitant decreases in discrepancies) should be related to better adjustment.

Unfortunately, few studies of meaning making have comprehensively examined the components of meaning making over time, so that results of research examining

the adaptive nature of meaning making are incomplete and inconclusive (see Park 2010a, for a review). Many studies have simply focused on meaning making efforts. These studies have demonstrated that searching for meaning is often related to better adjustment to the stressful encounters, such as for office workers who had experienced a shooting episode (Creamer et al. 1992) and for SIDS-bereaved parents (McIntosh et al. 1993). However, other studies have found meaning making attempts were related to doing worse following a traumatic experience. For example, for the recently spously bereaved, reports of “searching for meaning” predicted poorer subsequent adjustment to the loss (Bonanno et al. 2004). However, these studies failed to examine whether meanings were made that would facilitate integration of appraised meaning of the stressor with global meaning (for a review, see Park 2010a, Table 1).

Studies that have explicitly examined meanings made have often (e.g., Pakenham 2007; Russell et al. 2006) but not always (e.g., Wood and Conway 2006) found that a successful “search for meaning” (i.e., a meaning made that was presumably produced through meaning making) predicts better adjustment. For example, in a sample of bereaved students, feeling one had “made sense” of the loss was inversely related to complicated grief (Currier et al. 2006). Many of these studies, however, did not explicitly examine meaning making efforts per se (for a review, see Park 2010a, Table 2).

Studies that directly examined relations among meaning making attempts, meaning made, and adjustment are both rare and contradictory in their findings. These studies have sometimes found that people who reported searching for meaning experienced poorer adjustment. For example, in a nationally representative sample of US adults after the 9/11 terrorist attacks, searching for meaning shortly afterwards was related to subsequent increased posttraumatic stress symptoms, regardless of whether meaning was found (Updegraff et al. 2008), although finding meaning at 2 months exerted a positive effect on adjustment up to 2 years later, reflected in declining posttraumatic stress symptomatology (Updegraff et al. 2008). In a study of bereaved adults, finding meaning mitigated the negative impact of searching (e.g., Michael and Snyder 2005), and a study of bereaved HIV+men found that efforts to make meaning from bereavement that led to perceiving positive meaning of the loss predicted better physical health (less rapid declines in CD4 T cell levels and lower rates of AIDS-related mortality). However, those who searched for but did not find meaning did not differ from those who did not search (Bower et al. 1998).

Even scarcer are studies that examine the critical core of the meaning making model, discrepancy. That is, very few studies have directly examined whether meaning making following trauma helps the individual to make meaning in such a way that the discrepancy between global and appraised situational meaning is reduced. Some work has suggested that the reduction of discrepancy mediates the effects of meaning making and meanings made on adjustment (e.g., Park et al. 2008b; Park 2008), but much remains to be learned before the accuracy and utility of the meaning making model can be properly evaluated.

Conclusions and Directions for Future Research

As illustrated in this brief review, myriad conceptual approaches to meaning making have converged on a fairly complex model of how people make meaning following traumatic events. Concomitantly, empirical endeavors to examine meaning making have increased in their sophistication, increasingly illuminating this critical but as yet poorly understood human ability to adapt to tremendously difficult circumstances. Further advances in this line of research will come from studies that comprehensively assess the components of the meaning making model on multiple occasions as individuals adjust to traumatic events over time. Prospective research, assessing people prior to their traumatic encounters, is challenging, but only prospective approaches can truly document the interplay of global and situational meaning over time.

The increasing research interest in issues of meaning in human lives is heartening. The concomitant increasing interest in meaning making in the context of highly stressful events promises to bring important insights into an important aspect of human experience that has relevance for intervention and prevention efforts. For example, interventions might more directly focus on those meaning making efforts that produce the particular types of meanings that most effectively reduce discrepancy (Cason et al. 2002; Hayes et al. 2007). Prevention efforts might profitably address the establishment of global meaning that is less vulnerable to violation as well as the promotion of meaning making coping skills in the event that individuals encounter a future trauma (Park et al. 2008a). These intervention and prevention efforts await the better understanding of meaning making that future research will provide.

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Chapter 6

Subjective Well-Being and Meaning in Life in a Hostile World: Proposing a Configurative Perspective

Dov Shmotkin and Amit Shrira

In this chapter, we present subjective well-being (SWB) and meaning in life (MIL) as discrete, yet conjoint, systems that function to facilitate adaptation in the face of life adversity. We further claim that the adaptational functions of these systems are manifested by mutual configurations through which SWB and MIL combine some of their respective qualities into distinct modes of operation. More broadly, we convey the supposition that the adaptive value of SWB and MIL may better be captured through their multiple appearances and complementary functions rather than through the main, or net, effects of each system separately.

Some Basics About SWB and MIL

The long-standing philosophical controversies over the notion of happiness have yielded two traditions: One that typically derives from the Epicurean conception of hedonism, epitomized by the human disposition to maximize pleasure and minimize pain, and another one that typically derives from the Aristotelian conception of eudaimonia, epitomized by the human disposition to realize one's potentials and foster one's virtues. In the current scientific discourse, the former approximates the concept of SWB, referring to cognitive and affective evaluations that individuals make about their general life condition in terms grounded in a positive–negative continuum, whereas the latter approximates MIL, referring to a personal set of cognitive schemas by which individuals connect occurrences and time points in their

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lives in terms of consonant themes such as significance, purpose, and growth (Keyes et al. 2002; King and Napa 1998; Ryan and Deci 2001; Ryff 1989).

SWB is multidimensional, including long-term judgments of one's general satisfaction with life along with more immediate experiences of positive and negative affect. SWB has gained an enormous popularity as a heuristic and easily assessed indicator, or outcome, of psychological adjustment, quality of life, mental health, and successful aging (Diener et al. 1999; Eid and Larsen 2008; Kahneman et al. 1999).

The body of evidence on SWB provides encouraging news about the individual's life. For instance, most people sustain an above-medium, positive baseline of SWB (Diener and Diener 1996). Most people tend to adapt back to their SWB baseline following unfortunate conditions and even harsh adversity (Diener et al. 2006). A fair or high level of positive affect is maintained independently from that of negative affect (Cacioppo et al. 1999). Finally, SWB does not necessarily decrease with advancing age (Mroczek and Kolarz 1998).

Compared to SWB, the ingredients of MIL are more diffuse, encompassing beliefs, values, and goals that constitute a usually multidimensional sense of meaning (Baumeister 1991; Emmons 1999; Park 2010). In parallel to SWB, the body of evidence on MIL provides encouraging news about the individual's life. Most people formulate meaningful life through positive assumptions by which they conceive their world as benevolent and predictable, and themselves as worthy (Janoff-Bulman 1992). As explicated by Frankl's (1963) seminal conception of the will to meaning, MIL may be a vehicle for surviving and overcoming harsh traumas and life conditions. More broadly, MIL provides rationale, directedness, and comprehensibility to human functioning (Joseph and Linley 2005; Kreitler and Kreitler 1976; Steger 2009).

A Framework: The Model of the Pursuit of Happiness in a Hostile World

Integrating SWB and MIL into a larger conceptualization of adaptation, the model proposed by Shmotkin (2005, 2011) and by Shmotkin and Shrira (2012b) regards SWB and MIL as complementary systems designed to cope with the *hostile-world scenario* (HWS). Representing life adversity, the HWS is a personal image of actual or potential threats to one's life or, more broadly, to one's physical and mental integrity. Nourished by the individual's beliefs about catastrophes and inflictions (e.g., natural disaster, war, bereavement, violence, crime, family breakups, deprivation, oppression, accidents, illness, facing own death), the HWS functions as a system of appraisal that scans for any potential negative condition or for an even worse condition when a negative one already prevails. When activated adaptively, the HWS helps to keep vigilant and prudent in the struggle to remain safe and well, but an extreme HWS generates a continuous sense of survivorship in a disastrous world.

The model assumes that SWB and MIL distinctively engage with the HWS. SWB can make adversity more *manageable* by letting individuals evaluate their

lives positively even in negative conditions, whereas MIL can make such adversity more *interpretable* by letting individuals conceive their lives in comprehensible terms. Put otherwise, SWB *regulates* the activation of HWS whereas MIL *reconstructs* its contents. SWB and MIL promote each other by successfully engaging with the HWS. Thus, by regulating the HWS, SWB constitutes a favorable psychological environment that facilitates the generation and awareness of MIL (Fredrickson 2001; King et al. 2006). In parallel, a meaningful reconstruction of the HWS facilitates resilient self-perceptions and beneficial engagements that may summon a stronger SWB (Baumeister 1991; Steger 2009).

The presented model departs from the tradition that has treated SWB and MIL (the former in particular) as end results or outcomes of antecedent factors such as personality, life situations, and sociodemographics. Rather, the model conceives SWB and MIL as agentic systems and looks into the mechanisms by which they operate (for further details, see Shmotkin 2005, 2011; Shmotkin and Shrira 2012b). Briefly, SWB, similar to positive emotions at large, counteracts negative experiences through mechanisms reinforcing the positivity offset inherent to cognitive and emotional processes or possibly dismantling the negativity bias imposed in reacting to tangibly dangerous conditions (Cacioppo et al. 1999; Fredrickson 2001). MIL, on its part, revises beliefs, values, and goals through meaning-making mechanisms that align one's appraisals of threats with compelling schemas such as a guiding principle or a larger worldview (Baumeister 1991; Park 2010).

Interactive Patterns of SWB and MIL

Besides their unique operations, SWB and MIL act interactively. In this context, Shrira et al. (2011) suggested two complementarity modes: amplification and compensation. In the *amplification* mode, SWB and MIL were found more closely associated with each other as life adversity intensified in terms of a stronger HWS as well as of the actual occurrence of potentially traumatic events.

Several studies found some indirect support for this amplification mode. For example, King et al. (2006) found that SWB and MIL yielded correlations of 0.45–0.53 in a student sample, but higher correlations of 0.54–0.80 among people who had experienced various adversities. In another study, SWB and the belief that the world is benevolent were only marginally associated among people who did not experience bereavement, but strongly associated among those who did (Poulin and Silver 2008). Similarly, studies showed that the association between positive affect and MIL increased when loneliness was high and satisfaction from social relationships was low (Hicks et al. 2010) as well as when the perception of future time became limited (Hicks et al. 2012). A study which examined adjustment among people with HIV/AIDS suggested that the substantial association between meaning and well-being in time of adversity was not accounted for by other coping resources (e.g., social support, problem solving) vital to this situation (Farber et al. 2003). Hence, the amplification mode may be explained by the increasing need, while facing adversity,

to mobilize resources residing in the overlap between SWB and MIL. Also explanatory is Folkman's (2008) conception of "meaning-focused coping," standing for an appraisal-based strategy in which individuals draw on their beliefs, values, and goals (i.e., MIL) in ways sustaining well-being during difficult times.

The other complementarity mode of *compensation* follows the presumption that individuals may find redemption in the reestablishment of MIL when it is hard for them to rely on SWB vis-à-vis hostile-world attacks and vice versa (Shmotkin 2005). Accordingly, Shrira et al. (2011) found that when one construct (whether SWB or MIL) was low, the other construct (either MIL or SWB) served as a moderator of the effect of cumulative adversity on functioning, thus enhancing functioning to a greater extent when adversity was stronger.

Some indirect support for this mode was shown in Heisel and Flett's (2004) finding that MIL appeared most protective against suicide ideation at higher, rather than lower, depression. From the opposite viewpoint, when MIL is gravely undermined by adversity, SWB becomes more tightly associated with functioning, as even the smallest amount of satisfaction or happiness may be cardinal to replenish one's coping strengths (Fredrickson et al. 2003). In sum, under adverse circumstances SWB and MIL are linked more strongly and yet are more likely to compensate for each other.

Another intricate SWB-MIL relationship was revealed by Shmotkin and Shrira (2012a) who addressed the congruity between SWB representations (happiness and suffering attributed to one's past) and MIL structures (outstandingly meaningful, anchor periods in one's life story, such as "the happiest period" and "the most miserable period"). While happiness was congruently attributed to positive periods and suffering to negative ones, happiness could also be incongruently attributed to negative periods and suffering to positive ones. Expectedly, it was found that past happiness usually *weakened* the inverse relationship between past suffering and indicators of present SWB. Yet, past happiness *strengthened* the inverse relationship between past suffering and present SWB when both happiness and suffering were incongruent with their respective anchor periods. This study suggests that the SWB-MIL interface usually conveys a message of self-congruence and self-enhancement (happiness moderates suffering); however, when incongruence outweighs congruence, the message may be reversed into one of self-debilitating strain (happiness aggravates suffering).

A Person-Centered Approach: Combinations of SWB and MIL

The above findings were derived by a variable-centered approach, seeking to explain main or interactive variability of focal variables across their full distributions in a whole sample. Next, we turn into a person-centered approach, which classifies individuals into subgroups within the investigated sample according to their *differential* standing on the focal variables (Shmotkin et al. 2010). The latter approach, albeit

considerably less frequent in the research literature, may shed new light on the SWB-MIL relationships.

Any distinction between SWB and MIL, such as the one we have made so far, should be applied with caution because these two concepts are often not really separable: They share blurred boundaries and usually work in tandem (Kashdan et al. 2008). Typical correlations between various SWB and MIL indicators may range from the 0.20s to the 0.50s (Keyes et al. 2002; King et al. 2006; Shrira et al. 2011), suggesting that the two concepts have an inherent overlapping substance. In fact, the affinity between SWB and MIL within the realm of adaptation may reasonably lead to combinatory patterns of the two.

A simple check of such possible combinations would be to juxtapose high versus low levels of SWB with high versus low levels of MIL. This approach was adopted by Keyes et al. (2002), who cross-tabulated an SWB index (a composite of life satisfaction, positive affect, and negative affect) with an MIL index (a composite of Ryff's, 1989, dimensions of psychological well-being). The study found that the resultant combinatory types were contoured by both sociodemographic and personality characteristics. Thus, having low SWB with high MIL was typical of younger adults with higher education, whereas having high SWB with low MIL was typical of older adults with lower education. Also, having high levels of both SWB and MIL negatively related to neuroticism and positively to extraversion and conscientiousness, whereas having low levels of both SWB and MIL presented the opposite relations with those personality traits. Finally, having high MIL with low SWB positively related to openness to experience.

It seems easier to contrast the type of high SWB/high MIL with the type of low SWB/low MIL (Ring et al. 2007). While the former represents desirably functioning individuals, the latter represents a languishing state of mental health (Keyes 2007). When existing at equivalent levels, either high or low, SWB and MIL present self-congruent, and possibly self-perpetuating, types, whether adaptive or maladaptive. However, when existing at incongruent levels, SWB and MIL present a dialectical interplay, where the stronger dimension may compensate for the weaker one or otherwise the weaker may strain the stronger one. These dynamic aspects were suggested in previous analogous typologies of SWB (Busseri et al. 2009b; Shmotkin 1998; Shmotkin et al. 2006).

In fact, incongruous SWB-MIL types have become prototypical models in history and culture. The type of low SWB/high MIL has been a particular source for inspiration and admiration. Thus, religious traditions cherished suffering of people devoted to the faith in God and other meaningful themes of atonement, mercy, and self-sacrifice; happiness was considered embedded in the midst of suffering or otherwise was promised in the afterlife (Hudson 1996). In the scholarly literature, Frankl (1963) described the existential position of Holocaust survivors, who endured the agonizing suffering by rising above their dehumanization and embracing new meaning for living. Following Frankl, Wong (2008) suggested a model of *tragic optimism*, explicating that hope can be sustained in the midst of calamities by reaffirming the value of human life and fortifying the courage to face adversity. The option of *posttraumatic growth* (Calhoun and Tedeschi 2006)

similarly suggests that adhering to meaningful life may provide redemption even if SWB remains unrepairable. This option may be coupled with a bittersweet, more mature sense of happiness, which accounts for human complexity and fragility (King and Hicks 2007).

As depicted above, culture may esteem unhappy persons who lead noble lives, but would consider happy persons that fail to cultivate any MIL as negative role models. John Stuart Mill phrased it sharply: “It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied” (Mill 1863, p. 14). Ecclesiastes, the Biblical philosopher, questioned the worth of enjoyable, but meaningless life: “I said in my heart, ‘Come now, I will test you with mirth, therefore enjoy pleasure’; but surely, this also was vanity” (Ecclesiastes 2:1, New King James Version). While Ecclesiastes did recommend pleasure as a reasonable human choice, he considered it hardly advantageous in a meaningless world where “a man cannot find out the work that is done under the sun; for though a man labors to discover it, yet he will not find it” (ibid., 8:17). A classic literary example of the type of high SWB/low MIL is Oscar Wilde’s (1954) hero, Dorian Gray, whose hedonic and narcissistic nature drives him to live a life of immediate and short-lived happiness. Projecting his obsession of being ageless into his portrait, he cannot comprehend the meaning of time in life, and, eventually, his insatiable desire for physical beauty and pleasure leads to his self-destruction. Discussions in the scholarly literature suggest that the common appealing image of this high SWB/low MIL type is illusory and proves (sometimes in delay) to be void of positive psychological functioning, appreciation of complexity, and real maturity (King and Hicks 2007; Ryff 1989).

Further Combinatory Formats of SWB-MIL

The SWB by MIL combinations depicted above represent rudimentary attempts to *profile* SWB-MIL relationships. There is still a paucity of research that profiles, or clusters, individuals on a number of pertinent dimensions *across* SWB and MIL. Attempts to proceed in this direction may be guided by the few studies that analyzed profiles of dimensions within SWB (Busseri et al. 2009b) or delineated profiles of personal characteristics predictive of SWB (Gruenewald et al. 2008). As argued by Shmotkin (2005), profiles in the realm of well-being are clues to the dynamics underlying people’s pursuit of happiness in face of adversity. Thus, a conceptually important issue proposed for future study would be the profiling of incongruous SWB types along with their MIL standing. Incongruous types present apparently inconsistent ingredients of SWB within arrangements such as of both positive and negative affects being simultaneously high (Folkman 2008; Larsen et al. 2001); life satisfaction being low even though, simultaneously, positive affect is not low and negative affect is not high (Busseri et al. 2009b); and SWB being reported, at the declarative level, to be high even though it is internally felt, at the experiential level, to be low (Shmotkin 2005). Combined with *low* MIL, such incongruous types may indicate conflicting or ambivalent inclinations, which one cannot integrate into

consonant, meaningful themes (e.g., self-acceptance, self-directedness). In contrast, when combined with *high* MIL, such incongruous types may indicate the ability to harness one's inner complexity for a meaningful comprehension of the challenges to be tackled.

Although future research may address many possible combinations between components of SWB and MIL, certain combinations may be more pertinent than others when facing the HWS and its realizations. For example, positive affect, more than other SWB dimensions, was found as a strong buffer for the effects of adversity (Fredrickson et al. 2003). Purpose in life was associated with a decreased mortality risk while other MIL dimensions were not (Krause 2009). In this context, King et al. (2006) began to delineate the mutual associations of positive affect and purpose in life. Further research may explore whether these two dimensions, in conjunction, are particularly efficient in various HWS activations. Hence, led by both conceptual and empirical cues, we are currently in the midst of several investigations aimed to look more deeply into the effect of different SWB-MIL configurations.

Another vein of research on the SWB-MIL interface is the intriguing phenomenon whereby particular SWB combinations fuse into an MIL message. This fusion appears in *SWB trajectories*, involving a combination of SWB evaluations (e.g., ratings of satisfaction) that individuals attribute, on the same occasion, to different time points in the past, present, and future along their lifetime. These SWB trajectories heuristically bear a particular message, or motto, that accounts for one's perceived evolvement over time. Presenting an array of possible SWB trajectories, Shmotkin (2005) specified possible mottos such as "I am growing over time" (an ascending trajectory where the satisfaction evaluations gradually increase), "I am declining over time" (a descending trajectory), "I am recovering from a critical crisis" (a U-shape trajectory), or "I am ceaselessly struggling against evil fate" (a fluctuating trajectory). Studies show that the motto of growth over time dominates in perceived trajectories of young and midlife adults in both SWB (Busseri et al. 2009b) and MIL (Ryff 1991) indices. Among older adults, person-centered studies (Busseri et al. 2009a; Palgi and Shmotkin 2010; Röcke and Lachman 2008) differentiated between several SWB trajectories, showing that growth was mostly replaced by self-conceptions of stability and decline. It appears, then, that SWB trajectories convey a cardinal message as to how people acknowledge their aging and thus change conceptions regarding the course of their lives.

Advocating a Configurative Perspective on SWB and MIL

In the attempt to tackle the duality of SWB and MIL, the above review underscores the importance of employing variable-centered together with person-centered studies. We subsume the latter under a *configurative perspective*, which is still under-used despite its evident advantages. As our term "configurative" implies, analysis in this perspective is not conducted with people's scores on unitary variables, but, rather, on concurrent combinations of individuals' positions across different SWB

and MIL dimensions. Each SWB-MIL configuration, or profile, of dimensions represents a potentially viable subgroup, or type, of people who strive to optimize their perceived lives by giving salience to a specific configuration over the others. Together, the subgroups exhibit the potential variability that SWB and MIL involve, allowing for multi-way and nonlinear interactions. Notably, the delineation of multiple subgroups does not necessarily indicate fixed predispositions, but, rather, patterns of adjustment that may flexibly change when conditions so require. Methodologically, the configurative perspective in research may be implemented by an array of procedures, whether simple or sophisticated, designed to classify people. Typically, these procedures include a cross-tabulation of dimensional variables, cluster analysis, latent profile analysis, and recursive partitioning (for more details see Busseri et al. 2009b; Ryff 2008; Shmotkin et al. 2010).

Conclusion

SWB and MIL play unique as well as interrelated roles in the ongoing attempts to grasp the intricacies involved in the human arts of living (Veenhoven 2003). This chapter seeks to further refine past efforts to draw a useful distinction between SWB and MIL as well as to advance knowledge about their interface. According to our guiding model (Shmotkin 2005, 2011; Shmotkin and Shrira 2012b), SWB and MIL are agentic systems that acquire particularly vital roles when adverse conditions activate, or sometimes realize, the individual's HWS. When acting separately, SWB and MIL provide, respectively, regulatory and reconstructive functions so that life remains manageable and interpretable despite the adversity. However, SWB and MIL may also act together in more intricate interactions and combinations, thus offering individuals with a variety of adaptational modes vis-à-vis the HWS. Hence, the human pursuit of the good life is realized through the existential, often dialectical, task of living within a hostile world; further investigation should expose SWB and MIL as major keys to the understanding of this pursuit.

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Chapter 7

The Origins of Meaning: Objective Reality, the Unconscious Mind, and Awareness

Samantha J. Heintzelman and Laura A. King

Man's meaning hangs by a ludicrously fragile thread, such as a proper amount of silence.

Ernest Becker ([1971](#)), p. 108.

Meaning is a universally sought-after phenomenon (Frankl [1959](#); Steger et al. [2008](#)). In the midst of unexplainable and unexpected events, humans search to describe and explain; we ask “why?” This quest to make meaning when it is absent has become the focus of a great deal of meaning research (see Park [2010](#)). Meaning is searched for as an effort to reduce the distress caused when a situation is discrepant with an individual’s preconceived expectations and goals (Joseph and Linley [2005](#)). When such a disparity exists, efforts are needed to accommodate the new information into one’s future expectations in order to reconcile the conflict and to restore a sense of meaningfulness (Joseph and Linley [2005](#)). However, the literature is mixed regarding the benefits of meaning construction. Despite the assumed connection between finding meaning and positive outcomes, meaning-making does not consistently lead to improved health or well-being (Park [2010](#)). To some extent this quandary in the literature on meaning-making is a product of the fact that we have not fully appreciated what meaning feels like when it is present. We don’t know with any precision what a satisfying “created meaning” ought to include because research has not sufficiently examined the thing that the search for meaning is trying to locate, the feeling state of the presence of meaning.

In this chapter, we seek to deepen our understanding of the felt presence of meaning by exploring the origins of this much-sought-after state. Drawing on

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James J. Gibson's ecological approach to perception, we will argue that the experience of meaning has, at its foundation, the encounter between a lawful physical world and unconscious primitive mechanisms that are capable of detecting the invariants of that world. We begin with a potentially provocative assumption that the world *makes sense* and that human beings (like all other animals) are equipped to detect that sense. The subjective feeling of this sense, when noticed by awareness, is the experience of meaning. For our purposes, then, *meaning* is a fundamental aspect of awareness, a "feeling of rightness" (James 1893), associated with the detection of lawfulness, regularity, and pattern. We posit that, although unconscious processes have the capacity to detect the presence of sense, the experience of *meaning* is a phenomenological state that necessarily implicates awareness (if subtly so). Throughout this chapter, we refer to "sense" as lawfulness, pattern, and regularity and reserve the term "meaning" for the awareness of that sense. Thinking of meaning in this way, we hope, opens the door to considering the construction of meaning (or meaning-making) as only a small subset of the effortless and ubiquitous experience of meaning that characterizes human life (King 2012). Understanding the feeling of meaning when it is present is vital to understanding the outcome of meaning-making. It allows us a richer sense of the goal of that construction, the experience it is struggling to approximate.

Sense as an Affordance of Objective Reality

Drawing the distinction between sense as a property of the world and meaning as a property of human consciousness is analogous to Gibson's rejection of perception as necessarily mediated through construction. Among the many radical notions suggested by Gibson (e.g., 1973, 1977) was the idea that because the perceptual systems of all creatures evolved in a particular world, those systems ought to be shaped by that world and its *invariances*. Gibson boldly embraced the existence of objective reality and asserted that characteristics of that reality are directly available to the active organism. In arguing for the notion of direct perception, Gibson maintained that stimuli exist and possess invariances, independent of the perceiver: "If the specifying invariances are normally available an active observer can extract them and does not have to construct them" (Gibson 1973, p. 396).

Likewise, to begin a discussion of the origins of meaning, we make a crucial and quite Gibsonian assumption: We live in a lawful physical world that exists independent of human interpretation. Like other animals, humans evolved in this systematic world that is, at least locally, not essentially chaotic. Our proximal, immediate environment conforms to pattern and regularity. Leaves fall down (not up) in the Fall, which is regularly preceded by Summer and routinely followed by Winter. Objects in motion stay in motion until they are met by a resisting force. Causes precede their effects. The 12 o'clock train *usually* leaves the station at noon.

In this sense, the world around us makes sense, independent of effortful construction or "sense making." Following Gibson, we might assert that sense

is an affordance of the environment with which human beings actively engage. To paraphrase Gibson, if sense is normally available, the active organism can extract it and does not have to construct it. Psychologists and lay people alike would seem to have endorsed the notion that the meaning of any experience is whatever one construes it to be (e.g., Lazarus 1984). We claim, instead, that sense exists in the world and that our subjective feeling of that sense is essentially the presence of meaning, a feeling that can emerge in awareness without the need for effortful construction.

Certainly, extracting the invariants from experience does not require conscious reflection. For all animals, the ability to detect the invariants of existence is a crucial adaptation (Geary 2004). Locating reliable sources of food, monitoring the predictable behavior of predators and prey, and understanding the local terrain of one's existence can all be essential to survival. A key demonstration of the capacity to extract such invariants is associative learning. Such learning requires not awareness or intentionality but simply the capacity to detect the patterns that characterize the contingencies between experiences and behavior. The simple fact of animal learning indicates that such a capacity is sufficient for life in a world that makes sense.

Although a very basic capacity, the remarkable skill that is represented in this common process ought not to be underestimated. The natural world, after all, is not wholly systematic: Random events do occur. Thus, the system that detects invariants must have the ability to (at least sometimes) separate the systematic variance from the noise of random variation. The capacity to detect the invariants of existence would seem to be especially critical to survival in environments far less orderly than the one we humans currently occupy. We can assume that our ancestral environments were quite difficult, and thus our ancestors should have been very strongly motivated to identify the invariants surrounding them.

The urgency of this motivation for the active organism is illustrated in Skinner's (1948) famous superstitious pigeons. Left to their own devices and a noncontingent reinforcement schedule, those hungry pigeons developed a number of bizarre tics, based on whatever action tended to be associated with reward early on. In a truly random (and artificial) environment, sense is, nevertheless, assumed. In other words, this superstitious behavior reveals a (wholly unconscious) *presumption of a lawful world*. The extraction of sense, even when it is not reflected in reality, is a powerful motivator, as well it should be given its role in survival. Of course, the principles of associative learning apply to human behavior and even the superstitious behavior of pigeons has its analogue in human beings (Whitson and Galinsky 2008).

Bargh and Morsella (2010) note that prior to the advent of consciousness, the behavior of intelligent organisms was controlled by unconscious processes and that, even in humans, such "unconscious fauna" continue to play a role in human life. Human information processing models represent this unconscious fauna in what is often called implicit (Evans 2002; Geary 2004), intuitive (Epstein 1994), or System 1 processing (Stanovich and West 2000). We suggest that, in humans, this old system is primarily responsible for the detection of sense and as such lays the foundation for the experience of meaning.

The Unconscious Detection of Sense

Models of human information processing often posit two systems (Epstein 1994; Evans 2002; Lieberman 2000; for thorough reviews, Chaiken and Trope 1999; Evans and Over 1996; Stanovich and West 2000), one (System 1) that is unconscious (or implicit), intuitive, rapid, and associative and another (System 2) that is conscious (or explicit), analytic, and deliberative. The unconscious system is thought to be shared by all intelligent organisms, while the conscious system may be unique to humans (Evans 2002). Given that consciousness is a relatively recent adaptation and that extracting invariants from the environment is crucial to survival, it is clear that the unconscious system is likely responsible for the task of detecting sense in the world. Geary (2004) specifically noted the role of System 1 (or the implicit system) in processing information about environmental invariants. Aside from associative learning, evidence for the unconscious detection of sense in humans is provided by research from two quite different branches of scholarship. Research on infant cognition and the Meaning Maintenance Model suggest that the detection of expectancy violation (or the absence of sense) operates at an unconscious level in babies and adults. We review these in turn.

The Birth (and Infancy) of Meaning

A large body of research on infant cognitive development suggests that by 6 months of age infants are able to demonstrate a rich set of expectancies about the physical world (e.g., Luo et al. 2009). This physical reasoning system (e.g., Baillargeon 2008; Gelman 1990) is theorized to contain a skeletal version of elementary physics. Infants expect objects to fall down (not up), to have a persistent physical existence, and to have characteristics that possess constancy. They also expect self-propelled objects to have qualities that differ from other objects (e.g., Luo et al. 2009; Wang and Baillargeon 2008). Research drawing on the violation-of-expectancies paradigm demonstrates that when objects violate these laws of physics, infants show a heightened state of attention (e.g., Hespos and Baillargeon 2008; Luo and Baillargeon 2005; Wang and Baillargeon 2008) or *stupefaction* (Scherer et al. 2004).

Clearly, in infants this physical reasoning system operates in the absence of explicit awareness (Luo et al. 2009). Thus, it can be inferred that the human capacity to detect sense (and its violations) is present at a very young age, with a number of features of the physical reasoning system existing independent of experience or learning (Baillargeon 2008). From here, one could posit that although sense can be detected by beings with poorly developed conscious capacities, this tendency is overrun once the ability to *make meaning* is mastered. However, empirical evidence suggests that the capacity to detect sense continues into adulthood, coexisting with the ability to make meaning, as we now consider.

Meaning Maintenance Model

The Meaning Maintenance Model (MMM, Heine et al. 2006) asserts that humans share a chronic need for meaning and that violations of expectancy foster meaning reinstatement. As an intriguing analogue to the infant cognition research reviewed above, studies on the MMM support the notion that unconscious expectancy violation can lead to systematic differences in subsequent behaviors. For example, participants in research by Proulx and Heine (2008) began an experiment with the assistance of a female experimenter. After the experiment was underway, the experimenter walked behind a file cabinet, and in the experimental condition, was replaced by a different female experimenter. Excluding the handful of participants who noticed the change, differences on the dependent measure (setting bail for a prostitute) emerged between those who experienced the “transmogrifying experimenter” versus participants in the control condition. “Meaning” violations were detected without conscious processing. (We note that although this manipulation was considered a violation of meaning, the absence of awareness would suggest that participants detected a violation of *sense*, as we have used these terms here.) Thus, research shows that expectancy violations can register unconsciously. We might surmise that prior to these violations, *the world* was making sense, for infants and college students alike.

From Sense to Meaning

Thus far, we have considered how the detection of sense emerges from the interaction of an active but unconscious processing system with a lawful world. Clearly, awareness is not necessary for the detection of sense or its violations. Nevertheless, it is a far cry from pigeons learning an association between a particular response and reward or even from infants noticing expectancy violations to the conscious human experience of meaning. How is sense transformed into a phenomenological experience, the felt presence of meaning?

We suggest that, at least in part, the conscious experience of meaning involves the reflection of perception of lawfulness in the natural world in the internal mental life of the individual. While sense is a property of objective reality, the experience of meaning is highly subjective. As defined by Klinger (1977, p. 10), “Meaningfulness is something very subjective, a pervasive quality of a person’s inner life. It is experienced both as ideas and as emotions. It is clear, then, that when we ask about the meaningfulness of someone’s life we are asking about the qualities of his or her inner experience.”

Certainly, “meaning” has come to take on a variety of meanings (e.g., a sense of significance or mattering, a sense of purpose, or a sense of coherence). The most unadorned version of meaning is, perhaps, the definition we proposed at the beginning of this chapter: the feeling state that accompanies the presence of sense. This subjective *feeling of meaning* may or may not routinely track the detection of sense

in the external world. However, understanding this feeling when it does covary with objective sense may provide a foothold onto the elusive construct of meaning in its most elementary form.

It is safe to say that the presence of sense, if it is *felt* at all, feels mildly pleasant. For instance, when experience fits with expectations (Winkielman and Cacioppo 2001), or is easily processed (Harmon-Jones and Allen 2001), or when stimuli possess an underlying coherence (Topolinski et al. 2009), subtle changes in facial musculature activity suggestive of positive affect occur. Topolinski and Strack (2009) proposed a model of intuitive judgments of coherence that illuminates the very intersection of the detection of sense and the feeling of meaning.

Intuitive Judgments of Coherence

Research on semantic coherence suggests that rapid intuitive judgments are surprisingly accurate in discriminating sense from nonsense. In this research, participants are often given linguistic triads and are asked to guess as quickly as possible whether or not the triad has a fourth word that unites the other three. For these rapid, intuitive judgments, participants are not asked to produce the common associate but only whether they *feel like* one exists. For example, the triad “snow,” “base,” and “dance” is coherent (common associate, “ball”), while the triad “mouth,” “lines,” and “sixteen” is incoherent (there is no common associate). Interestingly, relying on intuitive hunches, people are generally better than chance at accurately discriminating between coherent and incoherent triads (Topolinski and Strack 2009; also, Reber et al. 2004).

Topolinski and Strack (2009) developed a model to account for the accuracy of intuitive judgments on such tasks. They propose that coherent stimuli are processed more fluently than incoherent stimuli, leading to facial muscle changes denoting an increase in core positive affect. In turn, that affect is experienced, phenomenologically, as a vague gut feeling that guides intuitive judgments.

Interestingly, research has shown that these facial changes play a causal role in judgments of coherence, such that manipulated facial expressions can disrupt the accuracy of these judgments (Topolinski and Strack 2009). These results are intriguing because they challenge previous notions of the relation of sense to affect. Tellingly, Winkielman and Cacioppo (2001) titled their article “Mind at ease puts a smile on the face,” suggesting that these facial expressions are an outcome of expectancy confirmation. Topolinski and Strack’s results suggest that a smile on the face may put the mind at ease.

In addition, when incoherent linguistic triads contain positively valenced words, they are more likely to be misidentified as coherent (i.e., as representing sense). Thus, the detection of sense would appear to involve a potentially visceral system that equates positive affective cues with the presence of sense. This system operates without the need for conscious awareness, but its operations may ultimately impinge on awareness, however amorphously, in gut feelings.

This amorphous feeling was described by William James (1893) as the feeling of “rightness of the direction of thought” or “the subjective rationality” of experience, a central aspect of the fringe of consciousness (Mangan 2001). Such feelings provide consciousness with continuity and a sense of the relations among elements of sensory experience. This feeling of rightness is responsible for our perception that experiences make sense. Indeed, Mangan (2001) equated the feeling of right direction with “the feeling of meaning” (p.13). This feeling is subject to awareness even if it is ill-defined. Thus, people can report on the meaningfulness of various experiences and stimuli and on the meaningfulness of their own lives.

As the model proposed by Topolinski and Strack (2009) would predict, evidence suggests that positive affect is a likely concomitant of the presence of meaning. King et al. (2006) found a strong and causal role for positive affect in judgments of meaning in life. In addition, the association between positive feelings and the presence of meaning is supported by a series of studies by King and Hicks (2009).

These researchers examined the experience of meaning in positive and negative life events. They asked participants to describe (or rate) the underlying processes that might lead to the experience of meaning in a variety of events. “Detected meaning” was defined as experiencing meaning as a function of experiences fitting with preexisting expectations or conforming with one’s knowledge about life and the world. “Constructed meaning” was defined as experiencing meaning as a result of effortful sense-making. Results showed that detected meaning was most likely for positive life events, while constructed meaning was most commonly associated with negative events (King and Hicks 2009). Further, these meaning-related processes related to the overall experience of meaning in the events. Positive events were experienced as more meaningful when meaning was detected, and negative events were experienced as more meaningful when meaning was constructed. Incidentally, on the whole, negative events were rated as more meaningful than similarly significant positive events (King and Hicks 2009), which might be taken to indicate that positive events are less (not more) meaningful. However, note that constructed meanings are likely more vividly present in memory and that they likely benefit from a healthy dose of cognitive dissonance. Effortless detected meaning may be a cognitively quieter experience.

From the literature reviewed here, we might say that when experiences feel good they also feel meaningful. Other research shows that meaning is felt to be present in a variety of ambiguous stimuli and experiences when positive affect activates the unconscious system (e.g., Hicks et al. 2010). King et al. (2007) suggest that positive affect may be necessary to head off effortful processing to allow the automatic detection of sense, unfettered by rational second-guessing.

This hypothesized role of positive affect in essentially turning off effortful processing provides a first glimpse of the rather complex relationship between consciousness and meaning. The desire to feel the presence of meaning in one’s inner life is clearly strong, but for a variety of reasons, consciousness, the very context in which meaning occurs, would seem to share a somewhat ambivalent relationship with meaning.

Consciousness and Meaning

Philosophers and psychologists have long puzzled over the purposes of consciousness. Candidate functions of this hallmark of human existence include its capacity to solve problems that require effortful thought, mental time travel, and simulation (Bargh and Morsella 2008; Baumeister and Masicampo 2010), to cope with a world of great variation (Geary 2004), and the integration of multiple behavioral outputs (Morsella 2005). These tremendous gifts come with a burden as well. Because we have the capacity to think ourselves into the future and to remember our pasts, we have the ability to recognize the reality of our own deaths as well as the potential meaninglessness of existence (Becker 1971). As noted by Klinger, meaning is about the quality of one's inner experience, and yet the capacity to have an inner life is often used to reason away meaning. Becker (1971) posited that "for any animal, meaning dies when action bogs down; for man, it suffices that *verbal* action bog down in order for meaning to die" (p. 98). When human beings stop to think, the feeling of meaning is vulnerable. Why might this be so?

Essential Functions of Consciousness and Their Relation to Meaning

The potentially adversarial relationship between meaning and conscious thought may lie in the functional properties of the capacity for consciousness. For instance, a key function of awareness is to override unconscious impulses when heuristics or overlearned associations are likely to produce errors (e.g., Epstein 1994; Geary 2004). An implication of this function is the deconstruction of extant meaning (and even sense) that was likely contained in those heuristics and overlearned associations. Indeed, conscious reflection has led to the discovery that the lawfulness of local environments may be embedded in a wider and potentially chaotic reality. (Nevertheless, human beings appear wired for a classical, not quantum physics.)

Similarly, one of the abilities of the conscious system is the use of logic to produce verifiable knowledge. Intuitive knowledge is self-evidently valid. System 1 "just knows" without knowing why (e.g., Epstein 1994). Meaning is not a problem for the unconscious system because it doesn't ask why. In contrast, System 2 knows and knows why it knows. Knowing why (and asking why) is clearly enormously important for many aspects of human life. They are crucial for scientific discovery, for social progress, and for a multitude of important human endeavors. But the demand for reasons, the need to "know why," is particularly problematic for the experience of meaning.

In the meaning-making literature, a key distinguishing feature among participants who have experienced a traumatic event is the extent to which individuals have asked the question, "Why did this happen to me?" (Park 2010). This is the question that separates meaning-makers from others. In the absence of the

question, “Why?” meaning-making is unnecessary. Thus, we might say that the problem of meaning is rooted in the conscious processing system and its need to know why.

Thinking Away Meaning

A variety of literatures attest to the notion that thinking, rather than creating or facilitating meaning, in fact impedes its natural and automatic flow. For example, thinking carefully about the semantic coherence judgments described previously leads to *poorer* performance (Topolinski and Strack 2008). Applying effortful analysis to a stimulus that is laden with meaning can lead to a deleterious stripping away of meaning. Consider the phenomenon of semantic satiation, the loss of meaning of a word following inspection and repetition (Smith and Klein 1990). Upon close and repetitive introspection, even a stimulus that feels indubitably right (a word that one has written down a 1,000 times) can begin to look strange and strangely wrong. Research has also demonstrated that thinking can interfere with optimal decision making (e.g., Dijksterhuis and Aarts 2010), automatic behaviors (Baumeister 1984), and preferences (Wilson and Schooler 1991).

The growing literature on embodied cognition (for review, see Landau et al. 2010) suggests that symbolic metaphors, conveyed in bodily movements, can influence thoughts and behaviors and that such effects are not mediated through awareness. For example, holding one’s hands palms up and alternatively moving them up and down (in a symbolic gesture indicating weighing two options) led individuals to endorse more balance in life goals (Schwarz and Lee 2011). Men induced to form a fist rated ambiguously acting targets as more powerful (Schubert 2004) and rated *themselves* as more assertive (Schubert and Koole 2009). Participants judged an issue as more important when recording responses on a survey attached to a heavy clipboard than when completing the same survey on a lighter clipboard, an effect aligning with the metaphor for “heavy topics” and “weighty issues” (Jostmann et al. 2009). This burgeoning literature suggests that metaphoric meanings operate without awareness. Most interestingly, for our purposes, researchers take great pains to keep the participants from thinking about the actual metaphors employed in their manipulations because such *awareness wipes out* the effects (Schwarz and Lee 2011). Automatic meaning structures are toppled when consciously processed.

Finally, consider the effects of analytical processing on positive life events. Dwelling on the meaning already present in these events renders them ordinary, robbing them of a sense of thrill, surprise, and positive emotions, and replaces these feelings with a mundane perception of the event (Wilson and Gilbert 2003). These many varied effects would seem to indicate that deep and structured analysis is not particularly useful and may even hinder a sense of meaning.

The dilemma of meaning for the conscious organism cannot be underestimated. Although consciousness gives us the capacity to fully experience meaning, it also holds the potential to sap inherently meaningful situations of their meaning.

Consciousness is a mixed blessing creating the problem of meaning (leading us to ask “Why?”), solving the problem of meaning (allowing us the awareness of the experience of meaning), and tearing this meaning apart again (explaining away any significance of events with alternate explanations) in a potentially unending cycle.

If consciousness robs situations of meaning, would life be more meaningful without it? Our answer to this question is a resounding “No.” Despite the ability of consciousness to strip meaning, without awareness, the experience of meaning would not exist: Because we have awareness, we not only “sense sense” but also get to know that we are experiencing it. Without consciousness, one would be able to taste the dessert while it was on the tongue, but savoring that experience later would be impossible. Without the capacity to mentally travel in time, we wouldn’t be fraught with anxiety over our inevitable deaths, but we would not be able to look towards tomorrow with excitement and hope. With regard to meaning, then, perhaps the goal for the conscious system ought to be to use the tool of awareness in a nuanced fashion: Awareness is a mighty, awesome hammer, but meaning is not always (or even often) a nail.

Lessons About Meaning from the Detection of Sense

As we come to the end of this chapter, we consider just a few of the implications of this analysis of the origins of meaning for our understanding of this fascinating construct. We believe that this examination offers potential, if tentative, answers to some of the great mysteries of meaning. First, why is meaning, as a concept, so ineffable? Scholars struggle to define the term and measures of meaning often simply default to asking people how meaningful their lives are. Whatever meaning is, human beings seem to “know it when they feel it” (Hicks and King 2009). Our analysis of the origins of meaning would expect that this experience should possess just such a quality, as it is rooted in an unconscious inarticulate experience: It is a word that reflects an experience for which consciousness has no exact referent.

Second, despite this difficulty in defining what meaning is, the need for meaning is widely regarded as a central human motivation. Why is meaning such a strong motivator? We would suggest that the motivation for meaning may represent the *exaptation* of the urgent need to detect regularity that is deeply ingrained in the unconscious system. The oft-noted human need for meaning can be located in this primal drive for detecting the regularities of existence.

Third, why are created meanings not always effective? Here we would note that although created meanings are likely “coauthored” by the unconscious system and the more effortful conscious system, the system that evaluates whether that meaning “feels right” is the one that detects sense in the natural world. Thus, the extent to which a constructed meaning will bring solace to the meaning-maker is a result of its “feeling of rightness” to the individual. We would suggest that the human longing for meaning is a kind of nostalgia for a world where things make sense (and we don’t have to). “Self-reflexivity gives us a much greater depth of experience, but we

lose the animal directness of it” (Becker 1971, p. 25). Our examination of the detection of sense would suggest that this animal directness is very much a part of the object of our search when we search for meaning. Further, this analysis would suggest that affect may play a vital role in the ultimate success of meaning-making. As noted at the opening of this chapter, meaning-making is often viewed as motivated by the need to reduce distress. Research on the feeling of meaning would indicate that affective recovery *may precede and foster* the reinstatement of meaning. Whatever a constructed meaning contains, it may fair a better chance of feeling right in the context of positive affect.

Concluding Thoughts

We close this chapter by acknowledging that we have made some potentially audacious claims here. We may well have erred audaciously along the way. Nevertheless, we maintain that the question that motivated this work, understanding the feeling of the presence of meaning, is one that must be addressed if we are to understand the role of meaning in human life and functioning. We cannot fully understand meaning (or any other human experience) by focusing only on its absence. Effortful construction of meaning is the exception not the rule of human life. Thinking about meaning as an active construction creates an unnecessary burden for consciousness and far overestimates the role of effortful reflection in the experience of meaning. *Not all meaning is constructed.* Clearly, confronting the question of the presence of meaning opens up a host of issues that may seem outside the purview of psychology. Such an inquiry, to quote Gibson (1973, p. 396), “raises deep questions having to do with what philosophers call ontology and epistemology,” and we agree with him as well as he continued, “but psychologists neglect them at their peril.”

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Part II

**Cognition, Decision Making,
and Motivational Processes**

Chapter 8

Destiny Is in the Details: Action Identification in the Construction and Destruction of Meaning

Jay L. Michaels, Steven S. Parkin, and Robin R. Vallacher

Imagine the following sequence of events. The alarm clock clamors, you throw back the blanket, stretch your limbs, adjust your position in the bed, step on the floor, proceed to the bathroom, take a shower, brush your teeth, slide clothes on, scramble some eggs, sit at the breakfast table, use eating utensils, put dishes in the sink, pack your briefcase, exit the house, get into the car, step on the pedals and turn the steering wheel for 30 minutes, pull into a parking space, exit the car, walk into your office, sit down, turn on the computer, push keys on the keyboard for several hours, shut down the computer, reverse the sequence of acts that got you to your office from home, enter your house, and engage in a series of acts that terminate several hours later with your getting into bed and falling asleep. Was this a meaningful day, and if so, why?

We cannot escape the objective nature of everyday experience. Yet we live in a phenomenal world that is decidedly different. People go beyond the detailed physicality of their interaction with the world to derive understanding and personal meaning, and it is this subjective state that defines their personal and interpersonal experience. What is less clear is how they do so. What principles are at work that enable people to transcend the objective aspects of their moment-to-moment actions and life experiences and to do so routinely, even automatically? Our aim in this chapter is to provide insight into this issue by focusing on the link between the world of movement and the world of meaning. The vehicle for this endeavor is action identification theory (Vallacher and Wegner 1985, 1987, 2012; Wegner and Vallacher 1986), a perspective on the representation and control of behavior with clear implications for how people find meaning in life. Central to the theory is the assumption that the minutia of everyday life are not transcended, but rather are fundamental to the construction—and destruction—of personal meaning.

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The Canonical Views of Meaning

Speculations and formal theories concerning the meaning of life are not new nor are they in short supply. Philosophers have approached the issue over the centuries from a wide variety of perspectives (cf. Baggini 2004; Nozick 1981; Westphal 1998), and in recent years psychologists, social scientists, and even neuroscientists have taken on the topic (cf. Baumeister 1991; Churchland 1989; Csíkszentmihályi 1990; Seligman 2002). For a topic that is so central to personal experience, it is odd that no one point of view has prevailed. Lay people, scientists, and philosophers have yet to agree on much of anything concerning the factors that provide meaning in everyday life.

If definitive answers are not forthcoming, the question has at least been parsed into more manageable issues. When addressing meanings in life, theorists and researchers have narrowed their focus to consider ideas that are amenable to empirical investigation. These include the following: Is the meaning of life open to conscious representation? How important are goals to the experience of meaning? Is the uniquely human capacity for self-awareness basic to the quest for, and attainment of, personal meaning? Do people achieve meaning through their connections with others? Does meaning derive from coherence in people's personal understanding of the world and their place in it? We discuss each of these ideas briefly, then suggest how the issue of meaning can be reframed in a different manner altogether.

Conscious Versus Unconscious Meaning

Social scientists commonly assume that meaning is consciously constructed. Blumer (1969), for example, suggested that meaning results from the interactions among thoughts, emotions, and behaviors specific to a given circumstance or situation and that people act on the basis of these meanings. This quite reasonable idea is embraced by many psychologists (e.g., Weber 1964). Cooley (1902) extended the relation between meaning and conscious representation of action by proposing that people come to understand their actions and form meaning through the "looking-glass self," an imaginary reflection of how one appears to others. The idea of a looking-glass self was further developed by Mead (1934), who theorized that meaning emerges from an individual's internal self-directed dialogues that guide the individual in imagining how other people perceive his or her actions. Collectively, these perspectives consider meaning as something consciously emergent from a person's actions and interactions with others or with his or her environment.

Some social scientists and psychologists, however, have postulated that the fundamental meaning in life is not open to conscious representation. Most famously, Freud (1998/1900) suggested that people were often unaware of the real meanings of their goals and behaviors. In this view, the true meaning associated with action was locked away in the unconscious, accessible only through the interpretation of

people's dreams. Similarly, Jung (1959) proposed that people consciously engage their world while draped in a persona that masks the real identities and meanings people possess. More recently, evolutionary psychologists have argued that the meaning of action resides in distal causes that are opaque to people as they respond to the proximate influences in their moment-to-moment and day-to-day lives (e.g., Buss 2005). People ascribe personal meanings to romantic attachment, for example, although the ultimate meaning of this realm of experience is the potential for gene propagation.

Meaning Through Goals

Theorists clearly disagree regarding the conscious versus unconscious *sources* of meaning, but there is general agreement that the *experience* of meaning is linked to objective action—what people actually do in their daily lives. Action, however, is a tricky concept that has been framed in myriad ways by philosophers and psychologists. So depending on how action is conceptualized, any number of perspectives could be advanced regarding the link between what people do and their subjective experience of meaning.

A common perspective on action centers on the concept of *goal*. As an action or set of actions evolve, the individual presumably updates his or her reflection of what was accomplished and considers what is expected or desired to come about from the activity. Goals, in turn, typically reflect values in that they organize and direct behavior towards the pursuit of desired, pleasurable future states. Frankl (1959/2009), an existentialist philosopher, implicates the commitment to a cause or goal beyond oneself as a source of purpose and meaning. In a similar vein, McGregor and Little (1998) merge a sense of identity with goal pursuit and accomplishment as an explanation for sense of meaningfulness. The idea that people are goal directed is widely embraced in contemporary psychology (cf. Carver and Scheier 2002; Higgins 1998; Miller et al. 1960; White 1959), and it is reasonable to assume that this feature of action is central to the experience of meaning in life. Some theories specify the content of goals that give meaning to action. Thus, people are said to be motivated by concerns ranging from achievement and power to affiliation and intimacy (e.g., Murray 1938).

The link between goals and personal meaning, however, is mediated by the affect associated with one's judgment of success or failure in goal attainment. In this view, meaning is the result of an iterative process in which people continuously update the content and understanding of their goals in service of affective responses to perceived progress towards those goals (e.g., Carver and Scheier 2002; Higgins 1998). This process can evoke the construction of meaning when goal pursuit is fluid and successful, leading to greater coherence in what is judged as meaningful. Alternatively, this same process can yield deconstruction of meaning when goal pursuit fails and an individual must shift focus to understand the source of the failure or abandon the goal and reorganize his or her sense of self.

Meaning Through Self-Concept Fulfillment

Other perspectives maintain that meaning is formed from behavior that is in accordance with one's true or authentic self rather than based on goal pursuit in particular (Kernis and Goldman 2006; Schlegel et al. 2009). There are many variations on this theme. Weber (1964), for example, posited that people ascribe meaning to their actions and those of others based on subjective perceptions of the self and others. Baumeister (1991) argues that meaningfulness may be satisfied by the fulfillment of four fundamental needs: having a sense of purpose and ability to accomplish that purpose, harboring a sense of life legitimacy and value, possessing self-efficacy, and having and maintaining a sense of self-worth. Wong (1998) lists nine factors contributing to the ideal meaningful life: achievement striving, religion, relationship, fulfillment, fairness-respect, self-confidence, self-integration, self-transcendence, and self-acceptance. Ryff (1989, 1995) lists self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth as central ingredients for psychological well-being. Heine et al. (2006) list self-esteem, cognitive closure and certainty, affiliation, and symbolic immortality as the criteria for experiencing meaning in life.

Meaning Through Social Connections

The need for meaningful, stable, lasting, and caring relationships is a fundamental motivation (Baumeister and Leary 1995). Relationships provide contexts for both the development and expression of the self. Feedback from "significant others" (e.g., close friends, relationship partners) has potentially significant implications for self-meaning and subjective well-being. Negative feedback and the possibility of social rejection signify a threat to social bonds, motivating people to reevaluate their own actions. Prolonged disruption to social relationships leading to social exclusion and ostracism reflects quite poorly on a person's self-concept and can conjure a loss of meaning in life (cf. Williams 2001).

The importance of social connections to a feeling of personal meaning has been demonstrated in social psychological research (cf. Baumeister and Leary 1995; Twenge et al. 2003; Williams 2001). Twenge et al. (2003), for example, induced some participants to feel socially rejected and others to feel accepted. This manipulation had a profound effect on participants' experience of personal meaning. When asked if they agreed with the statement "Life is meaninglessness," 21 % of the rejected participants answered in the affirmative, whereas none of the participants in the accepted condition did so. If merely feeling rejected can undercut a person's sense of meaning, one can imagine how intense the loss of meaning is when a person is actually cut off from social ties (Williams 2001).

Meaning Through Coherence

Yet another perspective emphasizes the importance of *coherence* in the experience of meaning. Coherence is widely implicated as a core component of personality and behavior (e.g., Cattell 1950; Cervone and Shoda 1999; Pervin 1989; Swann et al. 2003), the attainment of which is often treated as a dynamic process involving multiple reciprocal interactions that give rise to organization (e.g., Allport 1961; Bandura 1989). People are agents that actively organize their beliefs about the self, the world, and the relationship between the self and the world (Vallacher and Nowak 2007; Heine et al. 2006). This active press for coherence is postulated to underlie the emergence of meaning. From this perspective, the progressive mastery of skills and the coordination of action with respect to higher-order goals, values, and self-defining attributes provide personal bases for meaning.

Reframing the Issue

We do not quibble with any of the many accounts of what drives motivation and provides meaning in life. Each contender for the elusive “master motive” may well provide an important basis for meaning in people’s lives. The issue is not which goals, values, or self-views provide personal meanings, but rather *how* these meanings are forged. What processes are at work in the personal construction of meaning from the conduct of action in everyday life? We suggest that the highest and most abstract meanings in people’s lives do not transcend the concrete and seemingly trivial aspects of everyday behavior, but instead are intimately connected to these features of experience.

Action Identification Theory

At a fine-grained perspective, daily life is composed of countless details—a successive series of discrete actions, reactions, habits, behaviors, and thoughts. Action identification theory (Vallacher and Wegner 1985, 1987, 2012) is a set of principles that specifies the links between the granular nature of experience and the higher-order subjective nature of experience that provides meaning and purpose. The theory is based, somewhat ironically, on the inherently uncertain and ambiguous meaning of discrete actions. Indeed, the more concrete and movement based an action, the greater its potential for forging personal meaning. But this very uncertainty also means that the meaning derived from action can take on a wide variety of different representations with respect to content and valence. Two people doing exactly the

same thing may forge mutually contradictory meanings, and the same person can derive wholly different meanings from the same actions at different times or in different contexts.

Levels of Action Identification

Action identification theory begins with the recognition that any action can be described in many different ways. The act of typing, for example, may be identified as “expressing an idea,” “composing a manuscript,” “furthering one’s academic career,” or “striking computer keys.” The set of identities for an action can be structured within a hierarchy, ranging from *low-level* identities indicating *how* an action is performed to increasingly higher-level identities referring to *why* an action is done. Lower-level identities commonly reflect the movement-defined and concrete aspects of an action, whereas higher-level identities are superordinate and commonly more abstract and subjective. It is important to note, however, that identification level is a relative concept. Because act identities exist in relation to each other, whether a particular identity is low or high level depends on the identity with which is compared. Thus, the identity “typing words” is high level with respect to “moving one’s fingers,” but low level with respect to “composing a manuscript.” The task of action identification theory is to specify the factors that make one act identity in the identity hierarchy prepotent to the exclusion of the others and thereby reduce the uncertainty of action.

Principles of Action Identification

Despite the range of potential identities for an action, people experience little hesitancy in identifying what they are doing, have done, or intend to do. The interplay of three principles allows for this constraint on the open-ended nature of action identification.

The first principle holds action is maintained with respect to a single prepotent identity. The prepotent identity provides a frame of reference for initiating and carrying out an action and for reflecting on the action’s performance. The framing of one’s actions in terms of a single identity is central to models of self-regulation and in a broader sense to any theory that posits a link between mind and action (e.g., Carver and Scheier 2002; Higgins 1998; James 1890; Miller et al. 1960). In some instance, the prepotent identity is relatively high level, centered on the action’s purpose, goal, consequences, or implications for self-evaluation. But the prepotent identity in other instances may be relatively low level, reflecting the action’s molecular features. The second and third principles of the theory dictate the level of the action’s prepotent identity.

The second principle holds that when both a low-level and a high-level act identity are available, there is a tendency for the higher-level identity to become prepotent. In essence, people prefer to frame their actions in higher-level rather than lower-level terms (e.g., Wegner et al. 1984). People are concerned with whether their behavior facilitates progress towards goals, nurtures skills, maintains values and standards, and supports their self-concepts. As actions become well learned and effectively maintained over time, they typically become identified in higher-level, superordinate terms. For instance, “chopping vegetables” transforms to “cooking a meal” and later may be identified as “displaying one’s culinary prowess” and perhaps serving an even broader, more abstract goal of “impressing a date.” Once established, higher-level purpose and goal-oriented identities persist as long as the performance of an action is fluid, effective, or proceeds undisrupted. From this principle, once a set of actions becomes learned and routine, people take meaning from their goals and values rather than the details of their actions.

If the second principle were the only basis for identifying what one is doing, our minds would be populated with increasing abstract goals, implications, and consequences. Clearly this is not the case. Sometimes we are highly focused on the mechanical features of our behavior, despite the press for comprehensive understanding of what we are doing. This constraint follows from the theory’s third principle, which holds that when an action cannot be effectively maintained with respect to its prepotent identity, there is a tendency for a lower-level identity to become prepotent. This principle is engaged when a difficult action is attempted for the first time or when a well-learned or personally easy action is somehow disrupted. The person may wish to maintain the action with its effects and goals in mind, but a lower-level identity may be necessary to perform the action effectively (e.g., Vallacher et al. 1989). Returning to the culinary example, if the expert chef suddenly encountered a grease fire, his or her action identity may suddenly transition from “impressing a date” and “displaying one’s culinary skill” to a lower-level “operating the fire extinguisher” identity (resulting as well in a duly unimpressed date). The unexpected circumstance forces a shift from rehearsed actions that yield a higher-level identity to immediate attention to the details of one’s actions, corresponding to a focus on lower levels. Thus, the meaning behind an action is influenced by disruptions and novelty with these leading to a change in action meaning from something high level to something low level.

Meaning Through Action Identification

Action identification has straightforward implications for people’s experience of meaning in life. But rather than emphasizing the *content* of meaning, it depicts the *process* by which meaning of any kind is forged. Thus, the issue is not whether people find meaning through goals, the expression of values and self-defining personality traits, or a supportive social network that includes close relations. What gives life meaning is the construction of higher-level identities for one’s actions,

regardless of what aspect of experience—task performance, self-expression, or social relations—these actions represent. High-level identities provide coherence for the specific lower-level acts that define our daily experience. Without the lower-level acts, high-level identification would be an empty concept, devoid of firmly anchored meaning. By the same token, the experience of meaning can be undermined by the same principles that generated meaning in the first place. Below we discuss both the construction and deconstruction of meaning through action identification.

Emergence and the Construction of Meaning

Taken together, the three principles of action identification theory impart a dynamic interplay to the connection between mind and action. Low-level identities are adopted out of necessity rather than preference and thus are relatively unstable. The movement to a lower-level identity specified in the third principle thus provides the precondition for the adoption of a stable higher-level identity specified in the second principle. This tendency to embrace a higher-level identity when one is in a lower-level state is referred to as the *emergence process*.

Sometimes this process simply amounts to a temporary disruption to one's ongoing goals and concerns. After a brief detour to regain control of an action, the person is back on track to implement the original higher-level identity. If this were always the case, though, people would never develop insights into their actions or chart new courses of action. But research on action identification has shown that when a higher-level meaning has been abandoned in order to regain control of an action at a lower level, the person becomes sensitive to cues to higher-level meaning in the action context, and these may provide an avenue of emergence to a new way of understanding the action (e.g., Wegner et al. 1984). Without the experience of a lower-level identity, the change from one high-level identity to a different one would not occur.

Emergence can also be observed on a longer time scale. As a person becomes increasingly competent at an action, for example, he or she will tend to identify the action in terms of its consequences, self-evaluative implications, and other forms of meaning, rather than in terms of its lower-level details. This “sealing off” of lower-level act identities is consistent with research on skill acquisition and has been demonstrated for a variety of actions, including piano playing, essay writing, tennis, karate, and video games (Vallacher and Wegner 1985). People initiate each of these acts with a relatively high-level identity in mind, move to lower-level identities as they learn the action, and then move to a higher-level act identity as the action becomes mastered. The emergent identity, however, is rarely the same high-level identity that motivated the people to engage the action in the first place. Playing the piano, for example, may be identified initially as “impressing my friends,” but after a sustained period of low-level maintenance, a proficient piano player may identify piano playing as “relaxing myself.” The tendency for an emergent act identity to differ

from the action's antecedent identity provides a scenario by which people develop new motives, interests, concerns, and insights into their mental makeup.

The emergence process can also promote the prepotence of negative high-level identities. A person can deflect an undesirable characterization of his or behavior, for example, as long as he or she has a more flattering depiction available at the same identification level. Someone informed that he or she has demonstrated insensitivity, for example, may be unperturbed by this feedback if he or she looks upon the action in question as offering constructive feedback. But if the person is induced to focus on the action's lower-level details, he or she is primed for emergence and thus is more likely to accept the unflattering higher-level characterization (e.g., Wegner et al. 1986). Because of the emergence process, people are capable of accepting responsibility for actions with negative consequences and implications and are open to new insights into their motives and personality dispositions.

When conceptualized in terms of the emergence process, meaning ceases to be something static, inflexible, and universal, but instead becomes an element of the dynamic mind-action system. This dynamic process-oriented view of meaning formation allows for a wide range of application and provides insight into why meaning can be experienced in very different ways, from adherence to cultural norms to the attainment of personal fulfillment. In each case, a higher-level identity provides a coherent understanding of one's behavior, whether the specific lower-level acts enacted in a local context or the pattern of one's lower-level acts enacted across diverse contexts and time frames.

Knowing the nature of the lower-level acts, however, is not necessarily informative of the higher-level meaning that emerges. In fact, the greater the novelty, difficulty, or complexity of such action, the greater the range of potential meanings that may emerge over time (Vallacher and Wegner 2012). The lower-level act of "pushing a button," for example, takes on a host of diverse meanings, depending on the context surrounding the act, the implications and unintended consequences of the act, or the person's past history or current concerns. Moreover, the higher-level meaning associated with an activity early on may be quite different from the meaning linked to the action as it becomes fully mastered and integrated into one's life (Vallacher and Wegner 1985). An act such as "running an experiment," for example, may be identified as "establishing one's reputation" early on in a scientist's career, only later to be supplanted by other meanings, such as "contributing to science" or "developing a new theory."

Deconstruction and the Collapse of Meaning

Despite the coherence and stability in understanding provided by high-level identification, an action identified in this way can lose its meaning. The deconstruction of meaning can be manifest in various ways. An action identified in relatively high-level terms can be disrupted, for example, with a concomitant shift to lower-level identities in accordance with the theory's third principle. Conditions of cognitive load such as

stress, exhaustion, time pressure, or the influence of drugs and alcohol interrupt a person's ability to carry out an action at its accustomed level of identification (Baumeister et al. 2000). A well-learned, more or less automatic behavior such as driving, for example, is disrupted under conditions of cognitive load. When exhausted, "going to the store" suddenly becomes "keeping the car between the lines" after a lapse in attention and near miss with oncoming traffic. A good night's rest is usually enough to alleviate the detrimental effects of such exhaustion, thereby reinstating proficiency in driving enough that a high-level identity can once again emerge as the optimal level for action maintenance. Temporary disruptions to well-learned actions are common, reflecting typical variability in people's effectiveness as they carry out activities. Transient disruptions to one's identification and associated meanings do not tend to signify serious threats to a person's sense of self or long-term goals.

Other threats to higher-level meaning can prove more problematic and enduring. A personal goal may become unattainable, a self-defining value may prove impossible to express, a cultural norm may lose its relevance, and meaningful social ties and close relationships can be ruptured. In such instances, the person may experience doubt about the meaning of his or her actions, even to the point of existential crisis and despair. A person whose values are threatened, for example, may question his or her identity and connection to the culture in which he or she lives. In like manner, someone who fails to achieve an important goal in some sphere of life (e.g., career, self-fulfillment, mastery of skilled action) may reconsider the time and effort he or she has spent engaging the lower-level acts subsumed by the goal.

The deconstruction of higher-level identities centered on social relations can prove especially troubling. A person who loses his or her connection to a social network or an intimate partner may ruminate on his or her personal worth, questioning long-standing assumptions about self-perceived attributes and strengths. Attempting to block the negative implications of loss or exclusion from self-awareness does not solve the problem. Such attempts instead lead to a deconstructed cognitive state characterized by a present-oriented focus on concrete immediately available stimuli (Twenge et al. 2003).

The deconstruction of meaning through relationship rupture or social exclusion does not always end poorly, however. The unpleasantness associated with the loss of meaning as one shifts from higher-level to lower-level identities is a precondition for emergent understanding and renewed attempts to achieve a meaningful understanding of one's social behavior. As with the disruption of skilled action, social rejection can alert the person to a problem that requires attention, motivating him or her to select different lower-level acts that hold potential for reinstating harmonious social relations.

The How and Why of Meaning in Life

One of the fundamental questions beguiling philosophers and scholars since the beginning of civilization is "what is the meaning in life?" This question may have eluded a clear answer for so many millennia because it is the wrong question.

The better question might be “*how and why* is there meaning in life?” According to action identification theory, meaning is an emergent result of how one identifies his or her actions. Meaning does not stem from abstraction, but rather is rooted in the real world and in day-to-day experiences. Ambiguous situations, difficult tasks, or novel encounters force the individual to engage the world with greater focus upon the details of his or her actions. Meaning, in such circumstances, becomes inexorably linked with action details so that more abstract formulations of what is meaningful are cast out of the conscious. Comparatively, simple, rehearsed, and well-learned tasks allow the individual meanings of each movement and action to coalesce into an emergent coherence. The coherence between multiple separate actions facilitates a shift in perspective from lower-level to higher-level identities. Meaning then emerges in conjunction with higher-level identifications, which are manifest as a wide variety of higher-order psychological constructs, ranging from idiosyncratic goals to socially shared norms, values, and beliefs.

Meaning does not remain fixed in either a low-level or high-level action frame. Instead, as a person progresses through his or her daily life, shifts in identifications translate to shifts in the perception of meaning and what is meaningful. Meaning is therefore something as rich and dynamic as anything in life; it continually evolves, becomes constructed, and falls into deconstruction, only to give way to other, new meanings. Much as James (1890) famously conceptualized consciousness as a stream of thought, the same could be said of the stream of meaning.

The course of meaning in a person’s life may come to settle upon important goals, beliefs, and values, but postulating that such lofty things are the source of meaning loses sight of how and why these higher-level states are meaningful to begin with. Consider if every impulse, desire, or goal were gratified immediately upon its occurrence in consciousness, such that no attention to details, motivation to overcome obstacles, or challenge to build one’s skills was required. Would the immediate and effortless satisfaction of meaningful goals be meaningful? Considering that great wealth allows a person to purchase the objects of his or her goals on a whim, the classic and empirically accurate adage that money cannot buy happiness suggests that things obtained without the details and without some element of personal effort are often meaningless.

Action identification provides a systematic way to understand the generation of meaning in life. Destiny is in the details—meaning emerges from the journey and progression towards an end state. It is sourced in the coherence among the individual detailed elements that combine to bring goals, beliefs, and values into a reality linked with one’s actions. The identification and understanding of one’s actions is how meaning is constructed and deconstructed and how it evolves throughout a person’s life. Meaning is not a tangible, static thing. Rather, meaning is dynamic and evolves according to the connections people have with others, the world, and the reality of their experiences. Identifying *what* is meaningful in life is as futile as chasing one’s own shadow. The *how* that identifies one’s actions gives rise to the *why* behind one’s pursuits, generating a coherent yet dynamic meaning in life that, although an undeniable force, nevertheless remains as translucent as the wind.

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Chapter 9

Emotions and Meaning in Life: A Motivational Perspective

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Research on meaning in life (MIL) has flourished in the past decade. Much of this research is influenced by the ideas of Viktor Frankl. In his seminal essay, Frankl (1963/1984) cogently argued that MIL is a central human motivation. He conceptualized MIL as a motivational action tendency aimed at behaving in a way consonant with one's deepest held values. Indeed, most conceptions of meaning often place motivation at the heart of this elusive construct (Crumbaugh and Maholick 1964; Emmons 2003; Klinger 1977; Ryff and Singer 1998). The goal of this chapter is to explore how discrete emotional experiences, and their inherent links to motivational tendencies, contribute to the experience of meaning. We will focus specifically on how emotions associated with varying degrees of motivational intensity (e.g., anger, sadness) amplify or detract from one's sense that life is meaningful. Before describing these ideas, we will first briefly review the limited research examining the relationship between emotional experiences and MIL.

Affect and the Experience of Meaning

While research has largely neglected the relationship between specific emotional experiences and meaning, studies have examined the contribution of global affect on reports of MIL (e.g., Hicks and King 2007, 2008; King et al. 2006). Overall, this research has shown that global positive affect (PA) is strongly associated with self-reports of MIL even after controlling for such variables as self-esteem, religious

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commitment, autonomy, competence, and relatedness (King et al. 2006; Lambert et al. 2010). Furthermore, state positive affect, either measured or manipulated, predicts enhanced MIL even above the level of average PA (Hicks and King 2008, 2009; Hicks and Schlegel 2010; King et al. 2006). Personality traits associated with PA such as extraversion (King et al. 2006) are also linked to MIL, suggesting that even chronic sources of PA may bear on judgments of meaning. Although it is unclear whether these individuals are consciously using their current feelings as a source of information or they are just using their mood as a heuristic, it is clear that PA contributes to judgments of MIL.

Unlike research on PA, the relationship between global negative affect (NA) and MIL is less clear. For example, Schlegel et al. (2009; see also Steger et al. 2009) found that global NA correlates negatively with MIL (studies 2, 4, and 5), but other studies have shown that NA is not a unique predictor of MIL when other variables were accounted for in the model (e.g., PA, self-esteem; Schlegel et al. 2011).

Though research has broadly examined the role of emotions in MIL, research has yet to examine how discrete emotional experiences contribute to the experience of meaning. In hopes of stimulating future research, the rest of this chapter will explore how the underlying motivational direction and intensity of emotions influences MIL. By thinking of discrete emotions not just in terms of their valence but also by their ability to facilitate behavior of an approach-related or avoidance-related nature, novel hypotheses can be generated for how emotions may influence MIL.

Motivational Intensity

Many theoretical models of emotion exist. One of the earliest models, the James-Lange theory (1884/1922), described emotion in terms of physiological arousal. Russell's (1980) circumplex model built upon the James-Lange theory suggests that emotion is the product of arousal and valence. In this model, emotions are thought of as either positive or negative in valence, broadly indicating their pleasantness and unpleasantness, respectively, and then further differentiated in terms of arousal level or the intensity. In this two-factor model, emotions are classified as positive-high arousal, positive-low arousal, negative-high arousal, or negative-low arousal. While this model allows researchers to classify most discrete emotions, it groups together some emotions which differ vastly in their experience and separates others which have surprisingly similar properties. For instance, despite its negative valence, anger influences attention, cognition, and physiological responses in the same way as high-arousal positive emotions (see Gable and Harmon-Jones 2010 for a review) and in ways often opposite to fear (see Carver and Harmon-Jones 2009, for a review). Two-factor models of emotion like the circumplex model are unable to account for these results, and thus a third factor is required to more accurately classify dimensions that may underlie discrete emotions: motivational intensity.

Broadly, emotions tend to facilitate behavior. For our purposes, the broad range of human behavior can be grouped into two types: approach-related and

avoidance-related behavior. Approach-related behavior involves moving toward a desired stimulus or goal. Running toward the bright yellow tape of a finish line, reaching for a slice of cake, and throwing a punch are all approach-related behaviors. Avoidance-related behaviors, on the other hand, involve moving away from a stimulus. These behaviors can range from wincing and pulling away from something painful to an adrenaline-fueled sprint from a predator. Hence, emotions that strongly facilitate these types of behaviors are thought to be high in motivational intensity. Importantly, not all emotions fuel instant goal-directed behavior; indeed, many emotions exist that are low in motivational intensity (e.g., contentment, sadness).

One distinguishing quality that separates motivationally weak from motivationally intense emotions is their relationship to goal striving. Emotions high in motivational intensity (e.g., desire, determination) generally occur during the pursuit of a goal, regardless of whether the goal is to acquire something desired (approach motivation) or to escape something aversive (avoidance motivation). This motivation gets stronger as an individual gets closer to the goal or as the object of desire/aversion becomes more salient. Emotions low in motivational intensity often occur after an attempt has been made to attain a goal, whether it resulted in success or failure. These emotions may occur after the acquisition of a preferred stimulus (e.g., happiness), disengagement from an unavailable goal (e.g., sadness), or the successful avoidance of a noxious stimulus (e.g., relief).

Acting on a goal presupposes the presence of pre-goal motivationally intense emotion. This motivational intensity lessens after goal-relevant actions have taken place, often resulting in a completely different emotional experience. Though motivational intensity and sometimes direction may change following the actions, valence is not necessarily affected. For example, a man running from a wild animal would experience fear. Upon successful evasion of the predator, his emotional state will decrease in motivational intensity, and he will likely experience relief. This emotion can be conceptualized as a positive emotion low in motivational intensity but most likely related to the avoidance motivational system (Carver 2009). Similarly, an individual in a competition may feel determination, a motivationally intense positive emotion, which focuses the individual on the goal of winning (Harmon-Jones et al. 2011). Upon winning the competition, the motivational intensity of the experienced emotion will decrease, transforming the pre-goal positive affect (determination) into some sort of post-goal positive affect (e.g., joy).

Goals themselves can also be conceptualized in terms of motivational direction. For example, in a competition, one could desire to “win the race,” visualizing the competition as something to approach. On the other hand, one could sprint with full effort, yet be thinking along the lines of “don’t lose the race”; this avoidance goal would likely yield a totally different motivational mindset, despite the identical behavior.

Overall, how a person conceptualizes their goal may influence their emotional state before and after the goal attempt. That is, the more they formulate their goal in terms of approach or avoidance, the more likely they will place themselves into such a mindset, potentially affecting the motivational intensity and direction of their emotional state. Clearly, the motivational component of emotion is relevant

to goal pursuit, and goal attainment (or failure at such) temporally marks an emotional transition.

While MIL is an abstract concept, it may be useful to conceptualize it in terms of goals. With this perspective, it is no surprise that the MIL literature has consistently shown the presence of MIL to relate to low motivationally intense, post-goal types of affect (e.g., joy, sadness), as they relate to the attainment and loss of potential sources of meaning. This distinction may also help resolve some of the inconsistencies in the emotion-MIL literature. First, we will examine emotions low in approach motivational intensity.

Low-Approach Motivational Intensity and Meaning

Positive Affect and Meaning

As cited above, positive affect predicts judgments of MIL over and above many other related factors. This is true whether PA is measured or created in the laboratory. Overall, it seems that when people are asked to judge the amount of meaning they have in their life, they automatically use their PA as a gauge to make the judgment. From a goal-pursuit perspective, emotions low in motivational intensity occur following the successful or failed goal pursuit. Hence, they may be easily accessible indicators of acquired (happiness) and, as explained next, lost (sadness) sources of meaning.

Sadness and Meaning

Motivational models of emotion (e.g., Carver 2004; Carver and Scheier 1998) suggest that sadness is a low-approach emotion that facilitates detachment from a failed goal or goal pursuit. The relationship between depression, a condition characterized by chronic sadness, and MIL has been examined extensively. A review of this work is beyond the scope of this chapter, but generally speaking, this research has found that depression is negatively related to the presence of MIL (Steger et al. 2006).

Considering that the presence of meaning relates to PA, it stands to reason that sadness should be negatively correlated with the presence of meaning. It is possible that sadness reflects the amount of meaning the individual desires, yet lacks. For example, sadness may serve as information related to one's progress toward a desired source of meaning (Higgins 1987). To illustrate, an individual may expect to derive a high amount of meaning in life from his/her romantic relationship. If the individual then fails to attain this sense of meaning, sadness may result. From this perspective, sadness may function to resolve the discrepancy between what one has and what one desires by acting as a transitory emotional state between goal failure

and goal disengagement. This is consistent with Baumeister's (1994) notion of crystallization of discontents, wherein the alignment of negative features of a relationship, role, or other association facilitates disengagement.

Some research supports the idea that one function of sadness may be goal disengagement (Gut 1989; Klinger 1977). When a specific source of meaning is lost, sadness may lead individuals to devalue that meaning source or disengage it from their global sense of meaning, thus resolving the discrepancy between felt and desired meaning from a given source. This is in contrast with emotions higher in approach motivational intensity, which may relate to meaning that is not yet lost or not yet acquired (e.g., anger, desire, determination). In these contexts, threatened meaning would likely lead to stronger defense of the specific meaning source under threat. By facilitating disengagement from threatened sources of meaning, sadness may indirectly lead to the search for new sources of meaning, perhaps via the broadening of cognition that occurs with sadness (Gable and Harmon-Jones 2010). When a meaning source is removed, an individual may be motivated (indirectly as a result of the sadness) to acquire new sources of meaning or more favorably evaluate existing meaning sources.

High-Approach Motivational Intensity and Meaning

Conceptualizing meaning in terms of goal attainment also allows us to speculate on how emotions (both positive and negative) higher in approach motivational intensity may relate to MIL. Pre-goal PAs (e.g., determination, desire) and anger (a type of pre-goal negative affect) are both high in approach motivational intensity. Considering our discussion above, we would expect these emotions to facilitate actions that feel meaningful, and the emotions themselves would contribute to the feeling of meaning. More specifically, these emotions should relate to goal pursuit and the protection of threatened sources of meaning (i.e., goal defense).¹

Anger and Meaning

Although anger facilitates actions relating to pursuit of meaning in some sense, measurements of anger have been found to relate negatively with the presence of meaning (Steger et al. 2006). However, it is likely that due to the high-approach

¹The actions of an angry/determined individual likely feel “meaningful” to the person at the moment. However, it is difficult to assess this perception of meaning in a laboratory on existing questionnaires, which measure global perceptions of meaning. If a more “local” sense of meaning could be measured, then individuals in a state of heightened motivational intensity would likely score high on this measure.

motivational properties of anger, it relates to the search for meaning, as frustration and goal blocking are common sources of anger (Frijda 1993; Kuppens et al. 2007; Silvia 2009; Silvia and Brown 2007; Smith and Lazarus 1993). Consistent with this idea, Baumeister (1991) and Klinger (1998) have suggested that the search for meaning only occurs among individuals whose needs have been frustrated.²

Despite evidence suggesting that anger should facilitate the search for meaning, laboratory manipulations of anger that test this hypothesis do not currently exist. However, much of the research on the anger-aggression relationship can be reconceptualized as defense of threatened meaning. For example, in studies using insulting feedback on self-relevant issues, anger may lead to aggression because the insult threatened an important source of meaning. The aggressive action then can be seen as a means of reestablishing the threatened meaning.³ Anger may only affect the perception of meaning in life to the extent that the antecedent of the angry episode relates to the blocking of a goal related to personal perceptions of meaning. Logically following this idea, anger episodes that are not caused by the blocking of a goal important to the individual's sense of meaning should not impact their ratings of meaning. Though most anger-inducing events involve some sort of frustration, anger induced through pain or defensive aggression should affect MIL less. Though it may be difficult to produce anger without affecting meaning in the slightest (after all, most people place their own physical well-being high on the priority list of meaningful things), laboratory procedures exist which produce defensive reactions toward unpleasant or unexpected stimuli, such as pain or a puff of air on the back of the neck (e.g., Knapp and Pohreky 1995). Anger induced in such a fashion should not relate to MIL in any capacity.

While the effects of situational anger on the components of meaning in life can be fleeting depending on the length and intensity of the anger-inducing experience, trait anger may play a pivotal role in augmenting the effects of state anger on the MIL. Since individuals high in trait anger experience anger-inducing events as more intense (e.g., Deffenbacher et al. 1996), it stands to reason that those high in trait anger should experience anger-inducing events as more threatening to MIL. Individuals high in trait anger have also been shown to rate neutral or ambiguous social information as more threatening (Barazzzone and Davey 2008; Wingrove and Bond 2003). This pattern also holds for laboratory manipulations of anger (Barazzzone and Davey 2008). Extrapolating from this idea, it is plausible that those high in trait anger may come to view neutral events or events with ambiguous intent

²This idea is also consistent with the concept of concrete and abstract goals. Though the causes of anger vary, once it is elicited, anger may facilitate behavior that is instrumental to a specific goal. This should result in goals being framed in a more concrete fashion. Indeed, anger like other emotions high in motivational intensity should narrow attention and cognition. Again, as it is an approach-related emotion and likely relates to narrowed, concrete thinking, it follows that anger may relate to less perceived meaning, but a higher sense of search for it.

³Anger does not always need to produce aggression for this statement to be true. Anger can lead to action that may benefit self/others and not be aggressive, such as signing a petition to prevent an unjust event from occurring (Harmon-Jones et al. 2003).

as more threatening to MIL. That is, they may be more likely to perceive events as threatening to their personal sense of meaning (e.g., they might find others' jokes personally insulting rather than humorous) and may quickly become defensive. In addition to the defense of existing sources of meaning, those high in trait anger may also be more intense and persistent in the search for meaning.

Determination/Desire and Meaning

Like anger, determination and desire have high-intensity approach-related motivational qualities. However, they are also positive emotions. Despite their difference in valence, determination and desire should have similar effects on MIL as anger. Both of these emotions focus an individual on a salient goal and facilitate behavior that is instrumental toward the acquisition of that goal. They also narrow attention (Gable and Harmon-Jones 2010) and should also cause the formation of more concrete, approach-related goals.

Of course, it should be possible to differentiate the effects of these emotions on MIL from those of anger. From a goal-pursuit perspective, anger occurs when the pathway to a goal, or a goal already acquired, has been blocked or taken away. This could be perceived as a loss of meaning. While anger, determination, and desire are all emotions that facilitate approach-related goal pursuit and should all relate to elevated feelings of the search for meaning, angry individuals may be starting from a theoretically lower point of total meaning, as they had some of their sources of meaning taken away or blocked. The determined people, on the other hand, merely want to pursue their goal; they started from a “neutral” position. Hence, determination may result in a higher overall feeling of meaning than anger, as determined individuals theoretically have both existing meaning sources to draw from and potential new ones to obtain.

Broadly, emotions high in approach-related motivational intensity facilitate instrumental, goal-directed behavior. When areas of the frontal cortex associated with approach motivation are directly manipulated, it is not simply the case that people are angrier. Rather, in this work anger was more likely to lead to aggression when the appropriate brain area related to approach motivation was activated (Hortensius et al. 2011). In an analogous fashion, increasing approach motivational intensity (i.e., eliciting anger, determination, or desire) may not simply lead to an increased or more fervent search for meaning per se. Alternatively, it may strengthen the relationship between the search for and presence of meaning. Stated another way, when emotions high in approach motivational intensity are elicited, the search for meaning should be more likely to lead to the presence of meaning. This is consistent with the *search-to-presence model* (Steger et al. 2008) which suggests that searching for meaning yields more meaning. Within this model, basic motivational tendencies are thought to influence how search relates to presence. It is hypothesized that search and presence are strongly positively related in approach-oriented people whereas they are more negatively related in avoidance-oriented people.

Whether this is because approach-related goals are more likely to result in a successful acquisition of meaning sources or the act of searching itself becomes a source of meaning is unclear. Despite the large difference in motivational direction, avoidance motivation also has a profound impact on MIL.

Avoidance Motivation and Meaning

Emotions that elicit a strong avoidance response include fear, disgust, and anxiety. From an evolutionary perspective, these emotions were designed by natural selection to coordinate cognitive, physiological, and attentional systems toward the goal of self-preservation (Cosmides and Tooby 2000). To put it simply, in order for life to be meaningful or for you to strive toward sources of meaning, you need to be alive. The drive for self-preservation is a super ordinate goal to which other psychological processes are oriented toward fulfilling (Pyszczynski et al. 1999). From this perspective, the drive for self-preservation can be considered a source of MIL. Stimuli that elicit a strong avoidance response (e.g., predators) can be thought of as threats to self-preservation. Successful avoidance of a fearful stimulus, a disgusting stimulus, or an anxiety-provoking stimulus elicits the low-approach positive affective state of relief. The by-product of a successful avoidance response, relief, may increase MIL for two reasons. First, it may make the value of life itself salient, which may result in a greater sense of meaning (King et al. 2009). Second, it may bring to mind broad and long-term goals that have not been fulfilled (one of which, assumedly, is living to a moderately old age) and lead to a heightened sense of meaning through the introduction of an abstract approach-related goal.

Fear and Meaning

Seligman and Maier's (1967) work on learned helplessness provides a means of thinking about the fear-MIL relationships. In their work, dogs were electrically shocked in a cage that had a lever that could be pressed to alleviate the shock (or not). Seven days later, when placed in this presumably fear-inducing environment, those dogs that learned to press the lever to stop the electrical shock demonstrated normal avoidance behaviors, whereas the dogs that did not learn the lever press did not. Instead, these dogs that did not learn the lever press seemed to give up. Self-preservation is a goal in any organism and can be interpreted as a source of MIL. As a result, the dog's lever pressing can be interpreted as behavior directed at retaining MIL by means of self-preservation. From this example, it seems to be the case that action possibility is a key component to the fear-MIL relationship. When confronted with a fearful situation and action is possible, fear may lead to strivings toward meaning. In contrast, when faced with a seemingly inescapable fearful situation (or chronic exposure to a fearful stimulus), significantly less strivings toward meaning should be observed. Indeed, this latter case of helplessness likely

evokes sadness and depression, which are associated with low strivings toward meaning. This idea, albeit speculative, is consistent with Frankl's existential vacuum which can be defined as an emotional state characterized by boredom and apathy where there is no particular activity the individual wishes to participate in (see also Yalom 1980). Like Seligman's dogs, humans in this existential vacuum are in an aversive state without the motivation or behavioral inclinations aimed at alleviating the aversive state.

Anxiety and Meaning

Anxiety and fear are difficult to distinguish physiologically and through self-report measures, though recent work strongly suggests they are distinct discrete emotions (e.g., Sylvers et al. 2010). In addition, successful avoidance of either a fearful or anxiety-inducing stimulus elicits relief. As a result, the predictions made above for fear should hold for anxiety as well. As an individual difference, anxiety is inversely related to the presence of MIL (e.g., Debats et al. 1993). If highly anxious individuals experience less meaning in life, they may be more sensitive to threats to meaning. In turn they may mount a more rapid or intense defense response to meaning threats.

Disgust and Meaning

Disgust is an avoidance-oriented emotion that can be conceptualized as a mechanism for coordinating cognitive, physiological, and attentional systems in a manner that repels threats to the self. Disgust sensitivity has been correlated with discomfort at the thought of various self-related boundary threats. Recent research has shown that disgust sensitivity moderates mortality salience, such that those highest in disgust sensitivity are the most sensitive to mortality salience effects (Kelley et al. 2012). Since MIL is a fundamental part of the self (Schlegel et al. 2009, 2011), it can then be argued that those individuals who are most sensitive to disgust would more quickly mobilize a defensive response toward threats to MIL. Moreover, as another means of defending against meaning threat, those higher in disgust sensitivity may also search for meaning quicker or more intensely than those lower in disgust sensitivity.

Conclusion

Emotions cannot be adequately described with only valence and arousal. Motivational intensity is a critical third dimension that allows for more precise descriptions of emotional responses. Similarly, MIL is more complex than presence versus absence. The search for MIL and defense against threatened meaning

are critical concepts that are understudied. In past research, the relationship between emotion and MIL has focused primarily on global PA. The goal of this chapter was to speculate on how discrete emotions varying on three dimensions of valence, arousal, and motivation related to three components of MIL – presence, search, and absence. By looking at the interaction between emotions and MIL from this novel theoretical perspective, it is our hope that this chapter will be provocative and instrumental to researchers in constructing testable and generative hypotheses.

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Chapter 10

Meaning and the Horizon of Interpretation: How Goals Structure Our Experience of the World

Jacob B. Hirsh

Existential Hermeneutics

No objective meaning exists in the world; meaning is always contingent on the relationship between the world and the subjectivity of the observer. This simple notion of “existential relativity” is one of the most important contributions of existentialist philosophy to contemporary thought. Rather than viewing the world as a landscape of predetermined and objective meanings, existentialists emphasize the role of subjectivity in human experience. It is not the world itself that generates meaning; it is an individual’s being in the world (Heidegger 1927/1962).

A number of thinkers have concluded that if the experience of value and meaning is always contingent on our own subjectivity, the meanings that we ascribe to the world are ultimately arbitrary and inconsequential (Camus 1955). A religious artifact, for example, is imbued with a sense of power and mystery to the faithful, but might be viewed as a useless trinket by a nonbeliever. Recognition that the artifact has no inherent meaning other than that ascribed to it by the devotees may undermine the subjective value of the object and thus result in disillusion. More generally, disillusion with traditional belief systems has been one of the historical legacies of existentialist ideas.

An alternative school of thought takes the notion of contingent meaning as the foundation for a brand of humanism focused on the personal freedom and responsibility to create a sense of meaning for one’s self (Nietzsche 1887/1967; Sartre 1946/2007). Rather than being constrained to the meanings that we inherit from tradition and cultural authorities, these schools of existentialism celebrate the

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creative striving for self-definition and authenticity. Kierkegaard even famously suggested that awareness of meaning's contingency can inspire *greater* religious devotion by allowing "a leap of faith," in which spiritual meanings are endorsed despite their lack of objective verification (Kierkegaard 1846/1944).

Given the awareness that subjectivity plays an important role in the creation of meaning, it becomes clear that questions of meaning are fundamentally related to questions of interpretation. The emergence of existentialist philosophy was in fact heavily influenced by the study of interpretation, as carried out in the field of hermeneutics. Hermeneutics was traditionally concerned with interpreting the meaning of written texts (including biblical scriptures) and understanding the rules that govern this interpretation. In the nineteenth century, the field of hermeneutics expanded from the study of written texts to the study of any communicative act (Schleiermacher 1838/1998) or understanding of the world more broadly (Dilthey 1883/1991). It was Martin Heidegger and his student Hans-Georg Gadamer who most clearly launched the "ontological turn" in twentieth-century hermeneutics by applying hermeneutic ideas to the study of being (Gadamer 1960/1994; Heidegger 1927/1962). The critical insight that was proposed by these thinkers is that the nature and meaning of one's existence requires interpretation, and this interpretation is situated within a variety of physical and temporal constraints.

Heidegger and the other existentialists were able to generate profound insights into the nature of human experience. However, they were writing in a time when very little scientific data was available about the human mind. Consequently, their ideas were rooted much more strongly in philosophical tradition than scientific discourse. Heidegger even explicitly argued that the nature of human experience could not be studied from a scientific perspective. As evidenced by the current volume, however, the scientific study of meaning is a flourishing topic. This renewed interest in meaning owes a great deal to the emergence of cognitive science during the second half of the twentieth century. This chapter focuses specifically on grounding existential ideas of hermeneutic dynamics within the frameworks of contemporary psychology and cognitive science.

Possible Meanings and the Horizon of Interpretation

An important idea proposed by Heidegger and elaborated by Gadamer is the notion of the "horizon of interpretation," sometimes referred to as the horizon of understanding or horizon of possibility. This term refers to all of the possible meanings that can emerge from an individual's experience of a phenomenal event. This possibility space is defined as a function not only of the objective physical characteristics of the situation but also of the knowledge structures and interpretive frameworks within the observer. Any meanings that are experienced by the individual must first exist within this horizon of interpretation. Potential meanings that lay outside of the horizon cannot be experienced because (a) the individual is incapable of apprehending such

meanings or (b) the situation does not feature any physical characteristics that are associated with these meanings. Heidegger suggested that each individual inhabits a unique subjective landscape defined by the way in which that person's idiosyncratic interpretive knowledge base interacts with a narrow and limited part of the world. The realm of possible meanings, or the space of being ("*dasein*"), thus varies enormously from one individual to the next, depending on their conceptual structures and the phenomena to which they are exposed.

Heidegger, and later Gadamer and Sartre, also emphasized the situated nature of this horizon of interpretation. An individual's interpretive structures do not exist in some abstract metaphysical plane; instead, they are inextricably linked to the embodied experience of being in the world. Accordingly, these interpretive structures can be influenced by a number of factors including an individual's physical characteristics, social environment, cultural background, and previous experience. All of these factors define the experiences of meaning that the individual is capable of producing. Even "fundamental categories" of experience such as space and time can be experienced very differently in distinct cultural and linguistic contexts (Boroditsky 2001; Levinson et al. 2002).

How then can we understand the horizon of interpretation within the context of contemporary cognitive science? A useful starting point is the principle of parallel constraint satisfaction described in connectionist neural network models (Bishop 2006). These models attempt to provide biologically plausible explanations for how different patterns of neural connectivity and activation can support cognitive functions such as perception and the extraction of meaning (Rogers and McClelland 2004). As an example, suppose that an individual encounters a phenomenal event and is tasked with determining its meaning. A connectionist model would include descriptions of the event's sensory characteristics, along with a model of the individual's conceptual structure (instantiated as the strength of association between various sensory characteristics and a number of possible meanings). The conceptual structure can be relatively simple, with fewer categories of meaning, or more complex, with a larger number of possibilities. In either case, the model attempts to settle into an interpretation of the event through a process of pattern recognition and neural competition between potential outcomes (Desimone and Duncan 1995; Rogers and McClelland 2004).

A probability distribution of possible meanings emerges out of this process, weighted by the strength of activation of each of the different possibilities. This probability distribution defines the horizon of interpretation, cast in the language of cognitive science and probabilistic categorization. The weighted activation of any potential interpretive frame is affected by the current state of the world (e.g., the presence of associated physical characteristics) and the cognitive system (e.g., the activation of associated sensory information, episodic memories, and somatic experiences). In some situations, the horizon of interpretation will be relatively narrow, indicating that only a few potential meanings are likely to be engaged. These situations tend to involve the automated extraction of meaning in familiar contexts, requiring minimal thought and producing minimal conflict. Such situations

are those in which the meaning of an event is likely to be taken for granted, as there are virtually no competing interpretations vying for control. A visit to the dentist, for example, is a well-scripted situation in which there are clear cultural norms for interpreting the situation.

In other situations, however, the horizon of interpretation will be relatively broad, with a large number of potential meanings receiving simultaneous activation. This is more likely to occur in ambiguous situations with open-ended possibilities, such as during an unscripted encounter with an unfamiliar social group. In situations such as these, the appropriate interpretive framework is not immediately clear, and there are multiple ways of construing the same event. The uncertainty and indeterminacy that result from this ambiguity in meaning is often experienced as aversive (Hirsh and Inzlicht 2008; Hirsh et al. 2012; Peterson 1999) and appear to be akin to what existentialist philosophers describe as “*angst*” (Kierkegaard 1844/1957).

When the horizon of interpretation is conceptualized as a probability distribution, an interesting parallel can be drawn to the wave function as described in quantum physics (Von Neumann 1935/1996). The defining characteristic of quantum physics is that it describes the world in terms of quantum potential, or what *could* be observed prior to actual measurement. In the classic example, light can be observed as either a particle or wave, depending on the measurement apparatus that is employed. Prior to measurement, the light is said to be in a state of “superposition,” in which all possibilities are simultaneously true (e.g., it exists as both a particle and a wave). Erwin Schrödinger formalized the probability distribution of the potential states of a quantum system in his equation for the wave function. As soon as the quantum system interacts with an observer through measurement, the wave function is said to “collapse” into a particular reality and all other possibilities are immediately eliminated.

Understanding the horizon of interpretation as a probability distribution of potential meanings allows for an analogous “quantum” perspective of meaning. Prior to engaging with a given phenomenon, there exists a probability distribution of meanings that can be extracted from it as defined by the joint characteristics of the observer and the phenomenon itself. At this point, there is only a distribution of potential meanings, with no particular meaning actually being experienced. As soon as the individual encounters the event, however, the process of parallel constraint satisfaction begins to collapse the distribution into a single dominant meaning that gives form and structure to the experience. Where the analogy falls short, however, is that we sometimes encounter phenomena that do not collapse so easily into a single meaning. Some events may in fact be extremely ambiguous, requiring longer periods of examination before a stable interpretive frame can emerge.

While the basic structure and operational outlines of the interpretive system can be understood within a cognitive framework, the question remains of how such a system can be employed to flexibly respond to life’s challenges. What adaptive constraints guide the spread of possible meanings, allowing us to function in the world without getting lost in the infinite possibilities of a flexible meaning system? To address this question, it is useful to consider the insights into human psychology provided by evolutionary theory.

Evolutionary Perspectives on Meaning

Like other organisms, humans are fundamentally goal-directed creatures. From an evolutionary perspective, the primary task of a nervous system is to facilitate the pursuit of adaptive goals that promote survival and propagation of the species (Swanson 2003). A critical component of this task is the ability to discern the significance of incoming sensory information. In the most general sense, the “significance” of this information refers to its implications for action, a notion captured in pragmatic approaches to perception (Gibson 1979) and language (Wittgenstein 1953/2001). At a fundamental level, the brain is thus a meaning-making organ, tasked with identifying the behavioral significance of sensory input. It is critically important, for example, that an organism can differentiate the meaning of a cue signaling potential threat from one that signals potential reward. Nervous systems that fail to support this adaptive meaning-making will be unable to respond appropriately to environmental signals and will ultimately be eliminated by natural selection.

It is important to note, however, that the range of potential meanings differs greatly between species. For simpler nervous systems, the task of identifying the behavioral significance of incoming sensory information is limited to a selection from a small number of fixed response categories. An amoeba, for instance, has only two basic responses to tactile stimulation: it can withdraw from the stimulation or it can move to engulf the source of the stimulation. In this extreme example, the amoeba’s “horizon of interpretation” is limited to two possibilities. As a result, the task of meaning-making is vastly simplified. Nonetheless, a faulty interpretation can still result in catastrophe if, for example, the amoeba attempted to engulf a larger organism.

As nervous systems became more complex throughout the evolutionary process, the selection between competing interpretations of sensory stimuli also became more complex. Inhabiting a greater range of environments and being capable of producing a greater range of responses necessitated the development of more complex interpretive structures. Humans are recognized for their ability to flexibly adapt to environmental circumstances, as well as the ability to flexibly define conceptual categories (Barsalou 1983). Consequently, we have a tremendously expanded horizon of interpretation when compared to other animals, with an enormous range of possible meanings that can be brought to bear on an experience. Given the flexibility and productivity of human language, there are potentially an infinite number of meanings that we can ascribe to any single experience.

Given the immense range of meanings that can be derived from an experience, how are we able to settle on an adaptively appropriate interpretation? If, as some existentialists have argued, the meanings that we settle upon are truly arbitrary, how have we managed to survive for so long? The very fact of our existence suggests that humans are on the whole capable of generating interpretations that produce adequate responses to environmental challenges. This suggests that we have inherited certain predispositions that help to adaptively constrain the spread of possible interpretations. A likely source of these adaptive constraints can be found in the motivational systems that govern goal-directed behavior.

Motivational Systems as Fundamental Constraints

Darwin was the first to note that humans have evolved a number of distinct emotional systems that help to organize the appropriate response to common adaptive challenges (Darwin 1872). Disgust, for instance, appears to facilitate the identification and avoidance of potential contaminants (Rozin and Fallon 1987). Whenever a disgust-triggering situation is encountered, the brain's disgust networks engage a stereotyped pattern of cognitive, behavioral, and physiological responses that promote this contamination avoidance. Similar parallels can be drawn for other motivational systems, including those related to feeding, social bonding, self-defense, and reproduction. Each of these motivational systems is associated with a distinct brain network, which when activated helps to organize the appropriate response to the triggering events (Panksepp 1998). As for which stimuli activate these systems, there appear to be a number of evolved predispositions to associate certain sensory characteristics (e.g., snakes or brightly colored fruit) with an appropriate motivational response (Isbell 2009; Öhman and Mineka 2003).

A critical function for these systems is to ensure that people are able to appropriately recognize and respond to information that has adaptive significance. From an evolutionary perspective, these systems constitute the fundamental categories of meaning by which events in the world can be interpreted. The most important task for any meaning-making organism is thus to successfully categorize environmental input into one of these motivational categories so that an appropriate response can be generated. The fact that the same basic motivational architecture is shared by everyone thus provides a common constraint for the creation of shared meaning. An important implication of this fact is that the meanings which we extract from a given experience are not completely arbitrary; they are deeply constrained by our evolved predispositions to categorize events by their motivational significance.

Our inherited motivational architecture thus provides the key constraint on the horizon of interpretation, allowing our experience of meaning to operate within certain adaptive limits. It should be recognized, however, that the space of possible meanings is not set in stone. In fact, the interpretive flexibility of the human mind allows for large shifts in meaning to occur. In many cases, these shifts result from the gradual acquisition of new information and experience, which alter the knowledge base of the individual and therefore change the distribution of potential meanings that can be apprehended. In other cases, however, the shift in meaning can appear sudden and dramatic. Such dramatic shifts can be usefully understood by considering the effects of an individual's current goals on the horizon of interpretation.

Goal Activation and the Dynamics of Interpretation

Goals help to organize behavior around desired outcomes (Austin and Vancouver 1996; Carver and Scheier 1998). While some goals may seem to be relatively abstract or symbolic, they are ultimately instantiated by the same basic motivational systems described above, with the aim of providing the individual with valued

resources or experiences. As the attainment of these basic social and biological needs becomes more complex, nervous systems must develop into more highly differentiated networks of goal-directed activity.

Importantly, the goals that are adopted by an individual serve to bias both perception and action in line with goal-relevant information and behavioral options (Aarts 2007; Bargh and Chartrand 1999; Bargh et al. 2001). From a neural perspective, goal-related biases on information flow are instantiated by top-down attentional control mechanisms in the dorsolateral prefrontal cortex (DLPFC). These DLPFC mechanisms constrain the activation of perceptual and motor schemas in the rest of the brain (Miller 2000). As an individual's goals change, so does the distribution of possible meanings that can be derived from the same experience. The horizon of interpretation can thus change rapidly as an individual adopts a different goal, altering the existential substrate from which meanings emerge (Hirsh 2010).

An individual's personality characteristics can similarly influence the meanings which he is likely to derive from his experiences. Variation in personality in part reflects dispositional variation in the relative strengths of the basic motivational systems described above (DeYoung and Gray 2009). For example, extraversion appears to reflect the dispositional sensitivity to reward, while neuroticism reflects the dispositional sensitivity to threat (Corr 2004; Elliot and Thrash 2002). An implication of these differing motivational sensitivities is that the chronic goals an individual is likely to adopt will be heavily influenced by his personality characteristics (Roberts and Robins 2000). A highly agreeable individual, for example, is more likely to have a chronically active motive for promoting intergroup harmony and belongingness (Graziano and Eisenberg 1997). As a consequence, these goals and motivational systems will have a stronger activation during any encounter with the world and are more likely to influence the interpretation of an event. The horizon of interpretation will thus be curved around an individual's chronically active goals, such that they will become the dominant framework by which meaning is created.

In extreme cases, an individual may be characterized by a powerful concern with a single motivational dimension. A narcissist, for example, is obsessed with concerns of status and social prominence, such that experiences tend to be interpreted from the perspective of whether or not their grandiose self-image was maintained (McCullough et al. 2003). Similarly, an individual with social anxiety is more likely to interpret an ambiguous situation as an indication of social rejection (Downey et al. 1998), and an individual with antisocial personality disorder is more likely to perceive aggression in others (Crick and Dodge 1994). Each of these examples suggests that an important component of psychopathology may be a narrowed horizon of interpretation, such that a single motivational category comes to dominate an individual's experience of the world. An excessively narrowed horizon of interpretation could therefore hinder the flexible deployment of adaptive responses to changing circumstances.

Individuals with relatively high standing on various personality dimensions may also find it difficult to relate to those with different personality profiles. If the personality differences are sufficiently large, there may be very little overlap in the horizons of interpretation. Consequently, two individuals with completely different personality profiles are likely to derive very different interpretations

of the same experience. One example of this appears in the domain of political polarization, in which people are often categorized into liberal or conservative groups. Each of these political orientations is associated with a distinct personality profile, such that conservatives tend to be more concerned with order and tradition while liberals are more concerned with compassion (Hirsh et al. 2010). As a result, communication between these different groups is sometimes difficult, with very different interpretive structures being employed by the different camps (Lakoff 2002). More generally, the extent to which individuals have a shared horizon and are likely to produce similar interpretations of the same event depends upon the similarity of their goals, motives, and knowledge bases.

Expanding the Horizon: Strategies for Creating Meaning

As described above, the experience of meaninglessness is considered one of the challenges of adopting existentialist ideas. Authors such as Viktor Frankl have emphasized the search for meaning as one of the most important human struggles (Frankl 1971). Postmodern thinkers have similarly expressed concern over the effects that interpretive instability can have on people as traditional authorities lose their capacity to bind people within a common meaning system (Lyotard 1984). How then can reliable meaning frameworks be created in a postmodern world, where objective value is indeterminate?

An interesting implication of the relationship between an individual's goals and the experience of meaning is that a sense of meaninglessness is most likely to afflict people without clear goal structures. Goals serve to structure the interpretation and prioritization of environmental information (Peterson 1999). If an individual does not have any personal goals, there will be fewer constraints on the horizon of interpretation that help to give a well-defined sense of meaning and importance to any given experience. Adopting personal goals is in fact associated with a greater sense of meaning and purpose in life (Emmons 1986; McGregor and Little 1998). One of the most effective strategies for creating a sense of meaning in one's life thus appears to be the clarification of one's most valued goals.

For some people, however, the experience of meaninglessness may in fact be due to the overreliance on a single goal structure. As an example, an individual with the narrowly defined goal of "making money" has limited the realm of important events to those relating to personal finance. Any experience that does not relate to money would in turn be discarded as personally irrelevant. Such a goal might decrease the experience of personal meaning, because the range of potentially relevant events is vastly constricted (Kasser and Ryan 1993). Expanding such an individual's capacity to experience meaning may involve loosening the grasp of the dominant goal so that alternative goals can shape the process of meaning creation.

A related strategy for meaning creation involves actively seeking out new experiences, as instantiated by encounters with new physical, social, and cultural environments. If only a single environment is explored, the range of encountered

phenomena will be relatively narrow. The meanings that can be derived from such experiences will likewise be narrowed in range. As the range of phenomena to which we are exposed expands, so too does the range of meanings that we can experience. It is no surprise that immersive travel to new locations is often accompanied by an experience of self-transformation (Noy 2004).

Finally, the horizon of interpretation can be expanded by altering the structure of the interpretive system itself. One of the most common strategies for accomplishing this goal is engaging with aesthetic domains such as visual art, music, literature, and drama. Aesthetic experiences are capable of altering the manner in which an individual perceives and experiences the world. For example, engaging with fictional narratives allows us to simulate social environments that in turn can affect our perception of meaning in real-life social situations (Mar and Oatley 2008). More generally, engaging with the arts can result in transformative experiences that alter the perception of one's self and the world (Djikic et al. 2009). Even encounters with the knowledge structures provided by philosophy, mathematics, or scientific inquiry can alter our horizon of possibility by changing the categories that we use to interpret our experiences. With every piece of information that we acquire, the range of possible meanings is altered.

Summary

Existentialism has had a profound impact on contemporary thought. In particular, we now recognize the critical importance of human subjectivity in shaping the experience of meaning. In this chapter, the principles of cognitive science and evolutionary psychology were applied to Heidegger's existential hermeneutics. Two core ideas from this approach are that the horizon of interpretation can be understood as a probability distribution of potential meanings and that evolved motives provide adaptive constraints on the process of interpretation. A key implication of this model is that an individual's currently active goals heavily influence the meanings that are experienced in any given moment.

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Chapter 11

The Meaning of Hope and Vice Versa: Goal-Directed Thinking and the Construction of a Meaningful Life

David B. Feldman

This chapter concerns two constructs with deep histories. Scholars of all sorts—theologians, philosophers, psychologists—have attempted to “figure out” the meaning of life for millennia. Likewise, early references to hope appear in ancient Greek mythology. Moreover, both concepts come with a lot of baggage. There are probably as many definitions of meaning and hope as there are scholars of the topics. Both are weighted with religious and cultural significance that is impossible to fully honor. This is, of course, a major challenge of studying any psychological topic empirically: at some point, it is necessary to operationally define one’s terms. This means doing the very unromantic work of taking beautiful concepts and putting them into boxes. Of course, this process isn’t undertaken for its own sake but to set the stage for further exploration.

In this chapter, I will offer definitions of both hope and meaning in life that have allowed for fruitful empirical investigation in recent decades and discuss how these two constructs are empirically and theoretically related to one another. Throughout the chapter, I will emphasize how an exploration of hope can further our understanding of the process of establishing a meaningful life. Last, I will discuss the implications of these issues for therapeutic endeavors.

Hope Theory

The model of hope used throughout this chapter is based on C. R. Snyder’s “Hope Theory” (Snyder et al. 1991; Snyder 1994, 2002), probably the most researched conceptualization of hope during the past 20 years. Accordingly, hope is the cognitive

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process that allows individuals to plan for and execute the pursuit of goals. Within this model, researchers (Snyder 1994, 2000; Snyder et al. 1999) have defined goals as the targets of mental action sequences that serve as anchors for purposive behavior. They consist of anything that an individual desires to get, do, be, experience, or create. Some people may spend their lives pursuing career goals by meeting monthly sales quotas or climbing corporate ladders, whereas others may be more interested in pursuing social and even spiritual ends. Thus, goals range widely in terms of size and content. Moreover, our success or failure in goal pursuits is theorized to be one of the major determinates of affect (Snyder 2002). We experience positive emotions when we achieve our goals or believe we are progressing toward achieving them but experience negative emotions when we fail to achieve our goals or believe that we are in the process of failing.

Hope is theorized to be the thinking process guiding the pursuit of all such goals. More specifically, Snyder et al. (1991) define hope as “a cognitive set that is based on a reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)” (p. 571). Thus, hope is composed of two interrelated components: pathways thinking and agency thinking. A pathway is a plan or strategy (Snyder 1994), and individuals engage in pathways thinking whenever they consider how to reach goals. It is important to emphasize, however, that the subjective experience of hope does not depend upon the existence of real, concrete pathways to goals but rather upon a *perception* that such effective pathways exist (Snyder et al. 1991).

The second component of hope, agency, is composed of “the thoughts that people have regarding their ability to begin and continue movement on selected pathways toward those goals” (Snyder et al. 1999, p. 180). As in Watty Piper’s *The Little Engine That Could*, agency thoughts, such as “I think I can,” are the fuel that powers the goal-pursuit engine (for empirical support, see Snyder et al. 1998). It is through such mobilizing thoughts that people are motivated to do the hard work of pursuing goals.

Although pathways and agency thinking are distinct components of hope, they are theorized to influence one another, such that a change in one will correspondingly alter the other (Snyder 2002). If one begins pursuing a goal with high agency but cannot develop effective pathways, that agency will likely soon diminish. Similarly, if one initially has generated a number of possible pathways to a goal but is unable to conjure sufficient agentic thought, he or she will likely begin rejecting these pathways, believing that they are not workable. This “downward spiral” is the origin of hopelessness and is explained in greater detail by Gum and Snyder (2002) as well as Feldman et al. (2008). Fortunately, this reciprocal relationship between the components of hope is theorized to function in the opposite direction as well. Namely, increases in either component of the model should likewise increase the other. In short, hope cannot fully exist without both of these components.

Various Hope Theory measures have been developed over the past two decades. Most researchers use the Hope Scale (Snyder et al. 1991). This 12-item measure contains four items measuring agency thinking (e.g., “I energetically pursue my goals”),

four items measuring pathways thinking (e.g., “There are lots of ways around any problem”), and four items serving as distracters. Because this instrument measures hope in a trait-like manner, the State Hope Scale (Snyder et al. 1996), which involves a slight rewording of most of the Hope Scale’s items, was developed to capture fluctuations in hope over time. Other instruments include the Goal-Specific Hope Scale (Feldman et al. 2009), which taps hope regarding a particular goal, and the Children’s Hope Scale (Snyder et al. 1997), which has been validated for use with children ages 8–16.

Hope and Meaning in Life: Empirical Connections

A substantial research literature documents the empirical relationships between higher hope (as conceptualized above) and a number of indicators of adjustment, functioning, and well-being, including success in athletics, better academic performance, better mental and physical health, superior psychotherapy outcomes, and more adaptive coping (see Snyder 2002; Snyder et al. 2000, 2002 for reviews). Moreover, individuals with greater hope appear to experience greater success in accomplishing their goals, whatever they may be, than their low-hope counterparts (Feldman et al. 2009).

Notwithstanding these important empirical relationships, the variable with which hope boasts the strongest empirical relationship is meaning in life. No matter how meaning has been measured, it manifests robust correlations with hope in cross-sectional studies (Cheavens et al. 2006; Feldman and Snyder 2005; Mascaro and Rosen 2005, 2006; Kim et al. 2005), with an impressive average correlation of .67. Moreover, in the only longitudinal test of this relationship, Mascaro and Rosen (2005) assessed college students at two time points spaced 3 months apart. They measured meaning in two ways. First, they used a revised version of the Life Regard Index (LRI-R; Debats 1998) to tap “explicit meaning”—the subjective evaluation that one’s life has significance. Second, they used the Personal Meaning Profile (PMP; Wong 1998) to tap “implicit meaning”—one’s exemplification of the set of characteristics that, from the outside, would lead someone to say that one’s life has meaning. For both of these measures, the relationship between life meaning at Time 1 and state hope at Time 2 remained significant even when statistically controlling for Time 1 meaning, the “Big Five” personality traits, and social desirability.

Hope and meaning in life also account for a large amount of shared variance in symptoms of depression and anxiety. In one study (Feldman and Snyder 2005), depending on the measure of meaning used, hope and meaning redundantly accounted for 33–34 % of the variance in scores on the Beck Depression Inventory (Beck et al. 1961) and 41–42 % of the variance in trait anxiety scores on the State-Trait Anxiety Inventory (Spielberger et al. 1970). Likewise, hope and meaning account for substantial overlapping variance in positive indicators of mental health such as self-esteem and life satisfaction (Halama 2003; Halama and Dedova 2007).

These impressive relationships may be driven by an important theoretical commonality between Hope Theory and virtually all conceptualizations of meaning—the pursuit of goals. In the next section, I discuss this commonality in detail.

Hope and Meaning in Life: Theoretical Connections

Upon examining the research demonstrating strong relationships between measures of hope and meaning in life, empirically minded individuals may be tempted to conclude, “With correlations this large, meaning and hope must be the same thing.” For reasons explained subsequently, I believe this assertion is too strong. Rather, hope can be conceptualized as one of two broad processes involved in establishing a meaningful life. In order to establish this theoretical case, it may be helpful to begin with a brief review of three major perspectives on life meaning. These perspectives do not, by any means, summarize the multiplicity of views expressed in the literature regarding meaning in life; however, they provide a starting point for a discussion of an important commonality among these perspectives.

Viktor Frankl (1972, 1992) was one of the most influential scholars with regard to translating concepts from existential philosophy to a psychological theory of meaning. Painting with a broad brush, Frankl (1965, 1966) asserted that people establish meaning in life through actualizing “values,” of which there are three general varieties—creative, experiential, and attitudinal. Creative values are actualized through the act of creating or producing something; experiential values are actualized when someone sees, touches, tastes, smells, hears, or in any other way experiences something; and attitudinal values are actualized through the attitude one chooses to take toward one’s fate (Frankl 1965, 1966).

A second perspective, Terror Management Theory (Greenberg et al. 1986), has become one of the most widely researched theories of life meaning in the psychological literature. Based on the work of Ernest Becker (1962, 1964, 1973, 1975), this theory begins with the familiar existential observation that we human beings comprehend that we will ultimately die, a fact that potentially could engender abject terror. Fortunately, we are heirs to an important asset—culture—that promises the possibility of symbolic (and in some cases actual) immortality. Secular culture offers symbolic immortality in such forms as accomplishments, accolades, and stories that last beyond our physical demise, and many religious cultures promise believers the possibility of actual everlasting life. Such immortality is only offered, however, provided that individuals live up to the standards of the particular culture and fulfill valued roles. Thus, when we believe that we have done so, we are buffered from the terror associated with mortality. In particular, terror management theorists believe that the psychological mechanism serving in this buffering role is self-esteem, which is bolstered when people fulfill culturally valued roles.

In a third perspective, Antonovsky (1979, 1987) posited a personality construct called the “sense of coherence” (SOC), which also is theorized to serve in a “buffering” role. More specifically, the SOC is believed to buffer against stress, helping to

preserve psychological and physical well-being. It consists of three distinct components: meaningfulness, comprehensibility, and manageability. First, people are theorized to enjoy greater well-being to the extent that they are pursuing personally *meaningful* activities. Second, in order to effectively pursue those activities, people must be able to *comprehend* their environments, providing a sense of predictability. Last, they must believe that they can effectively *manage* or exercise control over their environments so as to engage in the aforementioned meaningful activities.

Although these three theories superficially are quite different, they share an important commonality—an emphasis on goals. Frankl's (1992) three categories of values are essentially abstract goals, the accomplishment of which brings meaning into individuals' lives. Put differently, it is through goals that people create, experience, and suffer with dignity. Frankl (1992) has asserted that building a meaningful life requires "responsibility." Such responsibility can be conceptualized in part as the active pursuit of goals through the creation of pathways and generation of agency. Becker and the terror management theorists also make use of goal concepts through asserting that self-esteem is bolstered and death anxiety is reduced when individuals believe they are satisfying cultural standards. In other words, self-esteem is strengthened to the extent that one endorses a cultural framework through which to derive culturally consonant goals and then meets those goals (Pyszczynski et al. 1991, 1997). In fact, Snyder (1997), the originator of Hope Theory, argued that "as people behave so as to 'live up to [cultural] standards,' . . . they are controlling themselves and are experiencing higher self-esteem. It is the perceived sense of control . . . that precedes the experience of self-esteem" (p. 48). Finally, Antonovsky's perspective makes the most direct use of goals. Accordingly, life meaning arises when people perceive that they can effectively comprehend and manage their environments so as to achieve desired goals.

Implications for Establishing Meaning in Life

Because hope is the cognitive process through which individuals pursue goals, it is at the heart of all of these conceptualizations of meaning in life. This is not to say that hope is synonymous with meaning. Although Hope Theory details a process through which goals are pursued, it is relatively silent regarding how those goals are adopted in the first place. Perhaps a metaphor would be helpful here. If we equate seeking life meaning with the process of building a house, then goals would be the bricks. The final shape of that meaning comes into view as we begin cementing these bricks into place. But they don't assemble themselves; this process requires planning and motivation. In short, it requires hope. Hope Theory offers a coherent account of the assembly process, but does not explain how the goals are selected in the first place. It does not explain how we choose between red brick and limestone.

Research is clear, however, that not all goals are created equal—goal content matters. Work by Sheldon and colleagues (Sheldon 2001; Sheldon and Elliot 1999),

for instance, has shown that values-concordant goals appear to be more motivating and lead to greater increases in well-being than non-concordant goals. Moreover, progress on pursuing intrinsic goals (e.g., self-acceptance, community feeling, and affiliation) appears to increase subjective well-being, whereas similar progress on pursuing extrinsic goals (e.g., financial success, attractive appearance, and social recognition) does not (Sheldon et al. 2010).

The pursuit of meaning in life can thus be reasonably divided into two processes: (1) the selection of personally meaningful goals and (2) the pursuit of those goals. The second process is governed by the tenets of Hope Theory (Snyder 2002) or similar theories of goal-directed cognition (e.g., Carver and Sheier 2001; Bandura 1997). But such goal-directed thinking may be utilized to pursue both personally meaningful goals—*intrinsic objectives* that flow from our personal values—as well as goals that are extrinsic and unrelated (or even opposed) to our values. This is one way of understanding Sartre’s (1943/1993) distinction between living an authentic existence and living in bad faith. Authenticity involves the use of both processes in tandem, whereas inauthentic existence or bad faith involves only the second process in isolation.

Carl Rogers suggested that people naturally have an Organismic Valuing Process (OVP), a sort of internal compass that provides hunches regarding the most valued or meaningful course of action. In Rogers’ (1964) words, each option we face “is somehow weighed, and selected or rejected, depending on whether, at this moment, it tends to actualize the organism or not” (p. 161). Rogers (1961) also has asserted that there is a “directional trend which is present in all organic and human life—the urge to expand, extend, develop, and mature” (p. 351). In other words, fully functioning human beings tend to choose goals that lead toward greater self-actualization or life meaning. Although the presence of the OVP is difficult to demonstrate empirically, research by Sheldon et al. (2003) provides general support. In particular, they offered three studies demonstrating that, over time, individuals tend to increase the degree to which they value intrinsic goals. For instance, they asked 196 college students to endorse the personal importance of four general goals—two of them extrinsic (e.g., “be admired by many others”) and two of them intrinsic (e.g., “have people I feel very close to”). Six weeks later, when asked to re-rate the importance of these goals, participants accorded significantly increased importance to intrinsic goals and significantly decreased importance to extrinsic goals. Provided one assumes (as aforementioned research demonstrates) that intrinsic goals are associated with greater subjective well-being, this research seems to demonstrate a tendency for individuals to endorse goals that lead in a positive direction.

Endorsing a goal as important, however, is not the same as achieving that goal or even actively pursuing it. In a 3-month longitudinal study of goal pursuit in college students, we (Feldman et al. 2009) asked 162 college students to nominate seven goals at the beginning of the academic semester that they would like to accomplish within the next few months and rate both the importance and the level of hope (i.e., agency and pathways) associated with each goal. At the end of the same semester, students indicated the degree of progress they had made toward each goal. Seven structural equation models were constructed, one for each goal. In the majority

of these models, importance did not directly predict goal progress. Instead, importance predicted hope's agency component, which, in turn, predicted goal progress. In other words, the effect of importance upon goal progress largely appears to be mediated through agency thinking. Of note, importance also predicted hope's pathways component. However, pathways did not appear to, in turn, predict goal progress.

Therapeutic Implications

The aforementioned studies provide general support for the notion that meaning in life is established through the separate but interrelated processes of selecting meaningful, values-concordant goals and then engaging in an active goal-pursuit process. The strong empirical relationships between hope and meaning-in-life constructs are likely driven by the latter rather than the former. I do not mean to imply that these two processes always occur neatly, one after the other; nor do I wish to imply that these processes may not influence one another. Nonetheless, some individuals may have particular difficulty with one versus the other. This brings us to the topic of therapeutic interventions. Although it may be intuitive to refer someone who believes that "life has no meaning" to existential therapy, some people with this dilemma may be better suited for hope-based therapy. Although individuals with no meaningful goals could benefit from existential or humanistic interventions to activate the OVP, for those who already have identified a set of values-concordant goals, therapy focused on concrete, goal-directed thinking skills may be more important.

Indeed, therapeutic interventions targeting hope appear to increase sense of life meaning. We (Cheavens et al. 2006) offered a community sample of adults with a variety of Axis I diagnoses an eight-session group intervention based on Hope Theory. Each 2-h session consisted of two broad segments. In the first segment, the therapists provided a psychoeducational lesson focused on a skill related to one of the components of Hope Theory, including goal setting, goal framing, pathways mapping, and high-agency self-talk, among others. The second half of each session consisted of a less structured segment in which participants were encouraged to help one another to apply these hope-based skills to their particular life difficulties. The therapists then concluded each session by providing a homework assignment designed to aid participants in generalizing the skills to daily life. Compared to a wait-list control, the intervention significantly increased scores on a measure of meaning in life (the Purpose in Life Test; Crumbaugh and Maholick 1964) from pre- to posttest, in addition to significant increases in self-esteem, significant decreases in anxiety, and marginally significant decreases in depression.

Additional studies are consistent with these results. Lapierre et al. (2007) report the results of a similar 12-week group goal skills intervention in newly retired individuals with suicidal ideation. In addition to increasing scores on the State Hope Scale relative to a control group, the purpose-in-life score of Ryff's (1989) Psychological Well-Being Scales also improved. Moreover, we (Feldman and Dreher 2012) recently offered college students a single-session 90-min intervention designed

to increase hope and goal attainment. In this brief intervention, group leaders first provided psychoeducation regarding the hope model. Next, they guided participants in creating a “pathways map” on which they wrote out three steps that they must take in order to reach a goal of their choosing, three obstacles that could stand in the way of each of these steps, and possible ways around these obstacles as well as ways to maintain agency. Last, participants were guided through a hope-based mental rehearsal exercise in which they vividly imagine themselves taking each of these steps, coping with each of the obstacles, and, finally, achieving their chosen goal. Following this session, participants reported immediate increases in measures of meaning in life, hope, and vocational calling (i.e., meaning in one’s work or studies) as well as greater progress on a self-nominated goal at 1-month follow-up relative to both a no-treatment control condition and a relaxation-training comparison condition.

Future Directions and Conclusions

In this chapter, I have advocated a two-process model of the establishment of a meaningful life. These processes include (1) the identification of a set of meaningful, values-concordant goals and (2) the cognition and behavior necessary to actively pursue those goals. One implication of this two-process approach is that any effect of the second process upon one’s global evaluation of meaning in life should be moderated by the first process. In other words, if one has not yet identified meaningful goals, the goal-pursuit process should not yield a greater sense of life meaning. Anecdotally, in delivering some of the aforementioned hope-based therapeutic interventions (Cheavens et al. 2006; Feldman and Dreher 2012), there were occasional participants who reported an inability to identify personally meaningful goals despite citing a variety of goals they “had to accomplish” for their parents, children, partners, employers, or others. While the interventions functioned well on average, it appeared to the group leaders that these particular individuals benefited substantially less. Future research could tease apart these two processes by distinguishing between individuals who have and have not identified meaningful goals. For those who have been unable to identify meaningful goals, measures of hope should not be as strongly related to measures of life meaning as for individuals with a greater repertoire of meaningful goals. Likewise, hope-based interventions should not be as effective in increasing meaning in life for these individuals as for people with one or more goals they feel are meaningful.

In summary, I have detailed a practical, goals-based approach to life meaning on the bases of empirical studies demonstrating strong relationships between a cognitive, goal-directed model of hope and various measures of meaning in life. I do not wish to imply, however, that establishing a meaningful life is easy. For some, it seems extraordinarily difficult to discover goals and aspirations that are meaningful to them. For others, despite having a sense of what is meaningful, they lack hope that these goals could ever be accomplished. It is my hope that, with continued investigation, we can better aid both of these groups of people in leading meaningful lives.

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Chapter 12

Any Second Could Be *the* Second: How Thinking About What Might Have Been Affects the Emergence of Meaning and Commitment Across the Adult Life Span

Hal E. Hershfield, Courtney E. Brown, and Laura J. Kray

When major decisions arise, people make choices that immediately set them on particular life paths and trajectories. Such pivotal moments have been dramatized in literature (e.g., Frost's (1969) famous poem, "The Road Not Taken"), film (e.g., *Sliding Doors*), and even in a recent series of AT&T commercials that portray this phenomenon as it relates to modern day life. In one such commercial, the narrative moves backward in time from a president being inaugurated, to his early childhood, to his parents buying their first home, and to their first date at a movie theater. The commercial ends with a younger version of the president's father waiting idly for a train as he suddenly notices a gorgeous woman sitting in the passenger car across the platform. When he instantly changes his ticket (wirelessly, on his AT&T phone of course) so that he can have the opportunity to meet her, the tagline "Any second could be the second" plays across the screen. Naturally, we are left to wonder: What if he hadn't been able to change his train ticket? Would the course of his life have played out differently? Would another opportunity have arisen to unite him with his wife and mother of his child (the future president, no less)? In this chapter, we propose that how people think about past events and decisions – whether and how they consider those seemingly chance events and alternative realities that might have been – fosters an appreciation for both those defining moments from the past, as well as the present reality that these moments helped to construct.

Counterfactual thinking is the pondering of "what might have been" (Roese 1997). This cognitive process often plays a crucial role in the creation of meaning across the life span. The passage of a lifetime is marked by defining moments, including new beginnings, endings, and unforeseen twists of fate when life suddenly changes

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direction. A personal conceptualization of the significance of these key experiences gives us a sense of who we are, fortifies our most cherished relationships, and enforces our most deeply felt values. In addition to providing raw material for dramatic storytelling, as in the phone commercial referenced above, counterfactual reflection plays a central role in the construction of personal meaning. By highlighting the significance of these pivotal moments in time, counterfactual thinking spawns a greater sense of appreciation and commitment toward important people or entities in our lives.

Although there is a burgeoning body of work devoted to the study of counterfactual reflection and its impact on meaning in life (Ersner-Hershfield et al. 2010; Kray et al. 2010), relatively little research has focused on the ways that such thoughts might change as people grow older and navigate their way through old age. Yet, as the twilight of life approaches, individuals are increasingly prone to making sense of and understanding the life that has unfolded before them (Erikson 1968). In this chapter, we explore the relationship between counterfactuals, the creation of meaning, and the sense of commitment that arises from such reflection across the adult life span. To do so, we have organized our thoughts into four sections. First, we briefly review previous research on the role of counterfactual mindsets, or cognitive orientations, in establishing causal relationships. Second, we explore the implications of the deliberate construction of counterfactuals for the emergence of personal meaning. Third, we review the different ways in which counterfactual reflection promotes commitment to a variety of entities. Finally, drawing on research and theory from the study of aging and emotion, we identify unanswered questions and possible future directions regarding the role that counterfactual thought might play in old age.

Counterfactual Mindsets: Understanding Relationships and Problem Solving

Imagine being at a rock concert of one of your favorite bands. Seating is on a first come, first serve basis. The announcer indicates that a trip to Hawaii will be given to a lucky fan based on a random drawing of seat numbers. Now imagine that just prior to this announcement you had switched seats because your view of the stage was partially blocked. It turns out that the winning seat was the seat you *had just moved to*. If you are like the many of participants who have participated in experiments using the above scenario, you would instantly and spontaneously conjure up thoughts such as “if only I had not moved, I would not have won” (Kahneman and Miller 1986).

Counterfactual thought is activated by such near misses and unusual paths – what researchers call *almost* and *abnormal* counterfactuals (Sanna and Turley 1996). For example, missing a plane flight by 5 min generates more counterfactual “what ifs” than missing a flight by 45 min (Kahneman and Miller 1986). Unusual or abnormal components within a sequence of events, such as taking a new route to the airport (and subsequently missing the flight), can also produce counterfactual thinking.

Constructing a counterfactual thought implicitly involves laying out an if-then causal chain of events and mutating one step in the process to construct an alternate reality. For example, while standing at the gate looking at one's barely missed departing flight, one might reflect on the sequences of actions that led up to this point: running into friends and grabbing a cup of coffee with them, then encountering traffic en route to the airport and a long wait at the security checkpoint. Reviewing the sequence, an alternate, unrealized outcome arises by changing only one single step of the process: "If only I had not packed the extra liquids and had avoided the delay through security." When a mutation undoes the outcome, that mutated event is seen as the causal force behind what happened later (Wells et al. 1987).

Engaging in counterfactual thought is critical for proper mental functioning. For example, both schizophrenia patients (Hooker et al. 2000) and Parkinson's patients (McNamara et al. 2003) have difficulty in articulating counterfactual thoughts. Considering counterfactuals helps people prepare more effectively for what is to come – engaging in counterfactual thinking helps people both capitalize on their successes and avoid their past failures (Roese 1994; Galinsky et al. 2002). Taken together, research on the counterfactual mind-set over the last 10 years (e.g., Galinsky and Kray 2004; Kray and Galinsky 2003; Kray et al. 2006, 2009) suggests that counterfactual thinking fundamentally alters how we approach the future. Recent work, however, has begun to shed light on the ways in which reflecting counterfactually on the past can also affect how we understand, make sense of, and find meaning in past events as well as significance in the present.

Counterfactual Reflection and the Construction of Meaning

Namely, in a series of studies examining how people make sense of their closest relationships, significant choices, and defining moments, counterfactual reflection has proven to be a powerful tool for extracting meaning. Because counterfactual thinking helps to establish relationships and connections between variables, when applied to one's own life it can help to connect the dots among life experiences. Even negative events involving the loss of loved ones can be appreciated for the benefits that came about as a result. It simply requires considering a counterfactual world in which a particular loss had not occurred. For example, losing a parent at a young age can help an individual to appreciate each moment in life and to be more compassionate toward others' suffering. Whereas directly reflecting on the meaning of the loss may fall short of its intent by highlighting the ensuing grief and despair, counterfactual reflection may provide an end run around the grief, instead of clarifying the ways in which the parentless individual has grown as a result of the experience and become the person that they are today. Another mechanism through which counterfactual reflection creates meaning is by increasing a sense of fate in one's life. When considering alternate paths that life might have taken but did not, the path that life actually took may appear meant to be. Taken together, counterfactual reflection emphasizes

the benefits derived from pivotal life experiences and fosters an appreciation for the running narrative of one's life as captured by the concept of fate.

Promoting Commitment Through Counterfactual Reflection

In our research, we have explored the stories that people tell about the origins of an important entity's existence and how counterfactual thought bolsters their commitment to that entity. Commitment is an important variable for understanding the strength of social connections (Sprecher 2001). To illustrate, consider the origin stories of both FedEx and the United States. Fred Smith, the founder of FedEx, flew one night in 1973 to a Las Vegas casino in a desperate attempt to help his then-floundering company meet payroll. He won \$27,000 at the blackjack table and was able to keep his company afloat. Almost 200 years earlier, on April 18, 1775, Paul Revere took a fateful midnight ride to alert his fellow colonists of the impending march by the British Army, a ride that produced a sizable militia that stood down the superior British fighting force. FedEx and the United States are both marked by strong commitment of their various constituents and an almost fanatical devotion to their missions. FedEx is regularly listed in *Fortune* magazine's list of top companies to work for (Levering and Moskowitz 2009), and Americans express more national pride than citizens from any other country (Smith and Kim 2003). Not only do FedEx and America inspire patriotism and commitment, but both also possess origins that easily produce counterfactual reflection. It is easy, for example, to imagine how democracy might not have flourished without Revere's ride or how FedEx might not exist today if Smith had not made his blackjack bet.

As noted above, Kray et al. (2010) showed that if a particular turning point was thought about in counterfactual terms, then that turning point became a more meaningful part of one's history. Similarly, Koo et al. (2008) found that individuals expressed greater satisfaction with positive life events when they imagined how these events might not have happened. In recent research, we explored an even broader phenomenon by examining whether counterfactual reflection about origins could affect subsequent behavior indicative of commitment (Ersner-Hershfield et al. 2010). We reasoned that if thinking about what might have been can produce a heightened sense of meaningfulness, then counterfactual reflection should also strengthen the bond that one feels to the targets of such thoughts.

In one study, for example, participants in a counterfactual reflection condition were asked to think about what the world would be like if their country of origin, and all the relevant people and events that led to its creation, had never existed. In a control condition (i.e., the "factual reflection condition"), participants simply reflected on what the world is like now *because* their country of origin existed. Those participants who had reflected counterfactually about their country's origins expressed higher levels of patriotism (a measure of commitment) on a subsequent task.

Counterfactual Reflection and Thoughts About the Future

But how exactly does counterfactual reflection boost commitment to a given entity or group? Although counterfactuals are by definition about the past (counter to the facts of what actually happened) and the stories people tell about their own lives are by definition works in progress, counterfactual thought also influences how anticipated endings are experienced. Previous work has found that when individuals face meaningful endings in their lives, a mixed emotional experience known as *poignancy* occurs (Ersner-Hershfield et al. 2008). Graduation day, for example, is marked by poignancy because while it is a happy occasion due to the progress and accomplishments that it marks, it is also sad: Graduating seniors realize that many cherished aspects of their life will not be with them anymore. Similarly, thinking counterfactually about important people or entities evokes this same “near-loss” mindset. In other words, when pondering what might have been, thoughts inevitably arise about what it would have been like to live in a world without the targets of our counterfactual reflection.

In a follow-up study, we explored the ways in which thinking about imminent endings (real or perceived) might underlie the relationship between counterfactual reflection and commitment. We hypothesized that the poignant feelings arising from counterfactual reflection would make people more attached to the target in question. Thinking about losing something cherished makes individuals want to hold on to that thing more and more (King et al. 2009; Kurtz 2008). Behaviorally and attitudinally, these feelings are expressed as commitment. Indeed, we found that feelings of poignancy mediated the relationship between counterfactual reflection about one’s company or firm and commitment to that entity (Ersner-Hershfield et al. 2010).

Not only can counterfactual reflection alter commitment through feelings of poignancy, but it can also change the perceived trajectories of an organization of which one is a part. Participants in the study above were asked to select a drawing that most closely captured their expectations of the future of an organization to which they belonged. The drawings were of arrows that either ascended, descended, or remained straight. Participants who had just engaged in counterfactual reflection about the origins of their chosen organization were more likely to select an upward sloping trajectory compared to baseline conditions. Just like the tendency to recognize the benefits derived from past life experiences (in other words to appreciate how we are better off today than we were yesterday), counterfactual reflection also appears to instill an optimistic belief that tomorrow will be better than today.

In follow-up work, we asked research participants to imagine working for a hypothetical company whose origin story either highlighted counterfactual themes or did not (Ersner-Hershfield et al. 2010). We demonstrated that participants in the counterfactual condition expressed a greater willingness to work for and be committed to this company, compared to participants in a control condition. Importantly, we also asked participants to report the extent to which they felt that their involvement in the hypothetical company would be “meant to be” or “fated.” Participants in the counterfactual condition not only felt that working for the hypothetical company was more meant to be, but this sense of fate also mediated the relationship between counterfactual reflection and commitment to that company.

Counterfactual Reflection and Behavioral Change

Such effects, however, are not just confined to attitudes and intentions, as they also can be seen in the domain of relationships. In one study we conducted, for example, participants either reflected counterfactually or factually about the origins of a significant business relationship (Ersner-Hershfield et al. 2010). Approximately 2 weeks later, we surveyed these participants and asked them to report how often they had contacted a host of different people in their lives. Strikingly, participants in our experimental condition were significantly more likely to demonstrate behavioral commitment by reaching out to the targets of their reflection (i.e., the important business contact) than participants in the control condition. This finding suggests that the power of counterfactual reflection is not confined merely to how our lives are understood but also influences how our lives are shaped by action.

Counterfactual Reflection Across the Life Span

Although the literature on counterfactual reflection and its effects on meaning and commitment has advanced significantly in recent years, research in this sphere has been largely confined to college undergraduates and younger adults. Understanding the extent to which such relationships apply to adults across the life span – particularly older adults – is not only an interesting question for the sake of generalizability but also for the light that it may shed on the ways in which humans approach the end of life. Why, however, might counterfactual reflection impact older adults differently than it would their younger counterparts? At its core, counterfactual reflection is concerned with the ways that people view the past and conceive of the future (especially with regard to the construction of meaning and further commitment to important entities). Yet, recent work has shown that younger and older adults approach the passage of time in very different ways (Carstensen 2006). On a fundamental level, older adults have experienced more twists and turns along their life path than individuals for whom their life stories are largely ahead of them. The mere fact that age determines where one is at on the life journey may influence how hypothetical lives are experienced. Below, we review relevant work and suggest questions for possible future research.

The Passage of Time and Meaningfulness

In efforts to tap a sample with a wider age range, we administered a survey to business school alumni who had graduated from business school between 1967 and 2010. We found that the passage of time brought a greater sense that individuals' careers had been meaningful. Older alumni were more likely to idealize their career and to believe that they had obtained the important parts of what they wanted out of

their career. After reflecting counterfactually on their lives, older adults were less likely to say that they spent time thinking about how they might have done things differently or to think about the good things they might have missed out on in their career. Yet, older alumni did report greater surprise at their decision to attend business school. In combination, these findings suggest that, as life unfolds, the positive experiences along the way are better appreciated and regrets dissipate. As specific events fade further into the past, it seems people begin to see their lives through a broader scope rather than focusing on specific details.

These results fit well into the framework of Socioemotional Selectivity Theory (SST), in which Carstensen and colleagues have posited that as time passes and people grow older, activities that are devoid of meaning are less interesting and desirable. Interest in novel information – because it is closely linked to future needs – declines. Instead, the increasing awareness of time constraints focuses attention on the present, and this temporal shift increases the value that people place on the most important, and hence meaningful, aspects of life. When the future is seen as expansive and endings are not acutely anticipated – a perception that occurs for most healthy younger people – greater focus is placed on knowledge-related goals and information seeking. By contrast, when individuals approach endings, they are motivated to pursue emotionally meaningful goals and focus more on the here and now (Carstensen et al. 1999; Ersner-Hershfield et al. 2008). This increased focus on pursuing emotionally meaningful goals in the present leads to an intensified desire for and ultimate experience of more positive emotion and less negative emotion over time. Indeed, although most aspects of emotional functioning, such as physiological reactivity, subjective intensity, and facial expression, are quite stable (e.g., Levenson 2000), everyday emotional experience does change with age. Most notably, relative to their younger counterparts, older adults report fewer negative emotional experiences (Carstensen et al. 2000, 2011; Gross et al. 1997; Mroczek and Kolarz 1998), especially reductions in anger (Lawton et al. 1993; Magai 1999), coupled with increases in positive affect (Mroczek and Kolarz 1998) or sustained levels of positive emotions (Carstensen et al. 2000, 2011). One recent study, for example, surveyed 340,000 American adults and found that global well-being (Stone et al. 2010) increased significantly with age.

These positive changes in emotional experience, however, should not be misinterpreted to suggest that older adults are simply leading more hedonistic, care-free lives than their younger counterparts are. On the contrary, the types of emotional changes that occur with age point toward a more eudaimonic sense of meaningfulness and well-being in life (i.e., one that is focused on creating a full, meaningful life, rather than one that is simply consumed by the pursuit of pleasure (Ryan and Deci 2000)). Peterson et al. (2005), for example, have shown that as people move through the life span, the focus on pleasure-seeking decreases. And contrary to a hedonistic account of unidirectional positive emotional experiences, recent work has demonstrated that older adults experience more complex emotional states than younger adults do. For instance, positive and negative emotions co-occur more frequently as people grow older (Carstensen et al. 2000, 2011; Ong and Bergeman 2004), and written descriptions of emotion tend to be more complex (Labouvie-Vief et al. 1989).

Socioemotional selectivity theory holds that these changes in emotional experience arise as a function of differing views of the future. Older adults, for whom the future is relatively limited, are more motivated to focus on the here and now. Younger adults, by contrast, have lengthy horizons ahead of them and thus focus on knowledge and information that might benefit them in the future. Yet, there is another major difference related to time that characterizes the lives of the young and old. Namely, older adults have a much longer past and therefore a greater number of previous life events on which to reflect. Relating the findings to counterfactual thought, it is interesting to consider work on the impact of time on regret experienced by acts of commission versus omission. Regret can be conceived of in terms of both action and inaction. Both types function differently depending on the temporal distance from the event in question. In the short term, people experience more pain over regrettable actions such as choosing to go to a concert instead of studying and consequently earning a poor grade on a midterm. However, over the long term, people experience more pain over inactions, like choosing to forgo the concert experience entirely to stay at home studying (Gilovich and Medvec 1995). Because regret over inaction can promote learning and creativity (Markman et al. 2007), it is likely that the wisdom typically associated with older adults is derived via the accumulation of regretted inactions.

Do Age Differences in Spontaneous Counterfactual Reflection Exist?

The way in which older adults ponder and consider past events, however, is relatively unknown. Recall that previous research has demonstrated that considering counterfactuals helps people both capitalize on previous successes and avoid past failures (Roese 1994; Galinsky et al. 2002). Healthy psychological adjustment leads to more frequent generation of such counterfactuals (Hooker et al. 2000) – presumably because over time, an individual gradually learns the benefits of engaging in such reflections. But when the future is seen as short, and one is more oriented toward the present – as is the case with older adults – could these inherent benefits of counterfactual reflection somehow lose their appeal? Without a long future in which to reap the benefits of counterfactual reflection, in other words, an individual may be less likely to generate “what ifs.” This line of reasoning would suggest that older adults, compared to younger adults, might engage in *less* spontaneous counterfactual reflection.

Yet, a more compelling pattern may also be possible. Given that counterfactual reflection produces perceptions of meaningfulness in life (Kray et al. 2010) and older adults as a group seem to experience a deeper sense of well-being than younger adults, it is possible that older adults spontaneously engage in counterfactual reflection about origins of events and people in their lives more than younger people do. This spontaneous counterfactual reflection about past events could in turn lead to higher levels of well-being and perceptions of meaning in life. Indeed, an examination of reminiscence

in aging suggested that when older adults looked back on the past, the ones who did so in a way that led to a more integrative and coherent story of past life events showed higher than average ratings in mental and physical health (Wong and Watt 1991). Future work thus needs to examine whether older adults differ from younger adults in their natural inclination to engage in counterfactual reflection and whether such thoughts can enhance meaningfulness. (For a different, but related perspective on mixed emotions and reflection on the past, see Routledge et al.'s (2011) work on nostalgia and perceptions of meaningfulness.)

How Might Directed Counterfactual Reflection Affect Older Adults?

Ultimately, the exact relationship between “what-if” thinking, age, and perceptions of meaning can only be reconciled through empirical work that directly manipulates counterfactual reflection. We know from Maslow (1968), Erikson (1968), and Ryff and Singer (1996) that acceptance and reconciliation of one’s life story is a key component of healthy aging. To the extent that an individual accepts and comes to grips with the events of his or her past (regardless of whether that past is construed as mostly positive or mostly negative), a greater sense of well-being and meaningfulness will ensue. For example, King and colleagues have shown that while a drive for happiness may compel people to avoid thinking about their past, the ability to explore both lost possible selves and present possible selves is an important sign of healthy development and maturity (King and Hicks 2007). Without acceptance of one’s past, however, a given individual is likely to experience frequent regret and rumination (Torges et al. 2008). One way to prevent such feelings from occurring would be to promote acceptance of the fact that what has occurred in the past will forever be a part of that unchanging past. Theoretically, older adults have a stronger motivation to accept the past than do their younger counterparts. It is conceivable, then, that the closer an individual is to the end of his or her life, the more he or she would *want* to believe that the path life took was to some extent fated. Thus, it is possible that through this fate mechanism, counterfactual reflection could actually produce a greater sense of meaning for older adults than for younger adults. Age, in other words, could moderate the relationship between counterfactual reflection and increased meaningfulness.

Age, Counterfactual Reflection, and Commitment

Previous work has demonstrated the relationship between counterfactual reflection and commitment (Ersner-Hershfield et al. 2010), but to what extent are such relationships present for older adults? By definition, older individuals have a shorter future in front of them, so it is possible that the notion of being committed to a given entity (e.g., one's

country) – especially one that will undoubtedly outlast oneself – may not hold great appeal. Why, in other words, would I be inclined to demonstrate commitment toward an entity whose future existence will not affect me? Counterfactual reflection on important entities, then, may actually *lessen* an older adult's commitment to those entities.

Conversely, as one grows older, demonstrating commitment to important entities and groups may actually be psychologically beneficial insomuch as doing so fosters a sense of control. An elderly person may fear that, after death, her alma mater will not continue to espouse the values and activities that it has during her lifetime. If so, this alumnus might be more inclined to make a donation now so that her former college continues to operate (in the future) in accordance with her values. Future work, thus, should examine how prefactual reflection about what might be may lead to greater – or less – commitment to important groups as people grow older.

Conclusion

An accumulating body of literature has demonstrated that counterfactual reflection is a psychologically healthy process that facilitates meaning-making and a sense of commitment. But understanding the extent to which such processes apply to adults across the life span is still in need of examination. In this chapter, we have offered a number of promising directions for future research. Future work will hopefully shed greater light on how considering life's consequential moments – and the paths that they helped create – might affect younger and older adults differently.

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Chapter 13

Judgments of Meaning in Life Following an Existential Crisis

William E. Davis and Joshua A. Hicks

As evidenced by this volume, research on meaning in life has flourished in the past decade. One will surmise from a quick glance at the table of contents that many variables influence one's sense that his or her life is meaningful (e.g., social relationships, religion, thoughts about the past or future). Clearly, there are a potentially infinite number of sources people can use to make sense of their lives. These sources represent the type of information individuals draw on when judging the extent to which their lives are meaningful. In essence, the perception of meaning in life boils down to an idiosyncratic judgment (Hicks and King 2009). The purpose of this chapter is to examine the meaning in life judgment process. First, we briefly review research that supports the idea that the (self-reported) experience of meaning in life is a subjective judgment influenced by many factors. Following this review, we speculate on the various ways in which existential crises (e.g., a traumatic event) influence this important judgment process.

Typical Judgments of Meaning in Life

It is quite unlikely that individuals evaluate meaning in life based on all possible information relevant to scholarly definitions of the term. Instead, evaluations of meaning in life are more similar to other global judgments. As with other judgments of subjective well-being (e.g., Schimmack and Oishi 2005; Schwarz and Strack 1991), judgments of meaning are influenced by relatively stable, chronic indicators of meaning, as well as temporarily accessible information and current affective states.

Feelings of meaning in life can be derived from relatively chronically activated sources of information. Frankl (1963/1984) discussed the idea that people have an

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innate “will to meaning,” or a need to possess a higher level purpose in life. In his writings, it is clear that Frankl was arguing that people need to find an overarching, chronically accessible source of meaning in life that provides them with a clear guide for their existence. Evidence abounds that people’s behavior is sometimes driven by chronic sources of meaning (e.g., Mother Teresa, Timothy McVeigh). Perhaps the best examples of chronically accessible sources of meaning in life are associated with religious beliefs. Religion has long been recognized as a central source of meaning in life, providing individuals with core beliefs, expectations, and goals, and placing the individual’s life into a larger context (Batson and Stocks 2004; Emmons 2003; Fletcher 2004; Fry 2000; Park 2005; Silberman 2005). Many different studies show that religious faith is associated with self-reported meaning in life (e.g., George et al. 2002; Steger and Frazier 2005). In fact, religious conversion has been shown to relate to enhanced meaning in life (Paloutzian 1981). Clearly, religion, and presumably any other chronic source of meaning, has a strong, direct influence on the experience of meaning in life.

While some sources of meaning may be chronically activated, elements of one’s current situation can influence how easily any source of meaning is retrieved from memory. Research shows that enhancing the accessibility of meaning sources can directly bolster meaning in life judgments. For example, a substantial body of evidence suggests social relationships are a primary source of meaning (e.g., Baumeister 1991; Baumeister and Leary 1995; Deci and Ryan 2000; Mikulincer et al. 2004) and research demonstrates that bringing concepts related to social relationships (e.g., one’s family) to the fore increases meaning in life ratings (Lambert et al. 2010, *in press*; Chap. 23 by Stillman and Lambert, this volume). Further support for the idea that meaning sources can become temporarily accessible comes from research examining the effects of priming one’s “true self-concept.” Philosophers and psychologists have often argued that the true self may be associated with well-being, including meaning in life. Recent studies revealed that those individuals who received primes of traits associated with their “true self” reported higher levels of meaning in life compared to people who were primed with control words (Schlegel et al. 2009; see also Schlegel et al. 2011; Chap. 14 by Schlegel et al., this volume). Although it is unclear whether positive aspects of one’s social relationships or true self-concept were already accessible to the individual (i.e., whether those domains were chronically accessible), enhancing their accessibility clearly biases judgments of meaning in life (see also King et al. 2009; Vess et al. 2009).

When examining meaning in life judgments, one must not only consider the relative accessibility of important sources of meaning but also how one feels at the time of the assessment. After all, research demonstrates that one’s affective state often has a strong influence on reports of subjective well-being (e.g., Schwarz and Clore 1996). Research has shown that positive affect (PA) is a unique predictor of meaning even after controlling for many variables (e.g., King et al. 2006). For example, happiness has been shown to predict meaning in life over and above variables such as depression, self-esteem, religious commitment, autonomy, competence, and relatedness (Lambert et al. 2010). Personality traits associated with PA, such as extraversion (King et al. 2006), have also been shown to be highly related

to meaning in life, suggesting that even chronic sources of positive affect may influence meaning in life judgments. With regard to experimentally induced PA, research using a variety of mood induction techniques has shown that positive mood inductions increase self-reported meaning in life (e.g., Hicks and King 2009). Moreover, even subliminal primes associated with PA (e.g., words such as “happy” and “joyful”) lead to higher meaning in life judgments compared to primes associated with neutral words (e.g., “hubcap”). These results suggest that even making concepts associated with positive emotions temporarily accessible can influence meaning in life judgments. Although it is unclear whether these individuals are consciously using their current feelings as a source of information, or if they are just using their mood as a heuristic, these findings suggest PA contributes to the feeling that life is meaningful.

It is important to note that, regardless of what type of information is used when forming judgments of meaning, most people, most of the time, feel that their lives are meaningful. In our studies, participants’ average ratings of meaning in life are often well above the midpoint (e.g., 5+ on a 7-point scale). In fact, although experimental manipulations aimed to elicit a sense of meaninglessness (e.g., Heine et al. 2006; Hicks et al. 2010; Stillman et al. 2009) occasionally temper MIL judgments, research has yet to show that these tasks actually make people think their lives are meaningless (i.e., their ratings are *still* above average). These findings may not be particularly surprising. After all, meaning in life has long been recognized as a central human motivation (Frankl 1963/1984) that is viewed as desirable and morally good (King and Napa 1998; Scollon and King 2004), suggesting that individuals may be particularly motivated to find confirmatory evidence of the meaningfulness of their lives. The idea that people are motivated to rate their lives as meaningful resonates with previous theory. For example, decades of research in social psychology has shown that people are motivated to maintain a sense of positive self-regard (e.g., Pyszczynski and Greenberg 1987; Taylor and Brown 1988). Research shows that people selectively ignore threatening stimuli (Sedikides and Green 2000) and often recall flattering self-relevant information (Sanitioso et al. 1990). Therefore, it is perhaps not surprising that meaning in life judgments would be influenced by similar biases and strategies.

To summarize, both informational and motivational processes influence judgments of meaning in life. Although the most accurate assessment of life’s meaningfulness would entail a process in which the individual “adds up” their standing on each personal source of meaning and somehow compares that value to an objective standard of meaning in life, it is clear this type of evaluation process is not plausible. Instead, people often appear to use a “quick and easy” strategy in which the answer to life’s meaningfulness often comes from the positive information that is salient at the time of the judgment. This type of information can come from chronically accessible knowledge structures, can be made temporarily accessible by relevant situational cues, and many times may simply come from experiential information derived from one’s mood. However, when negative information about a source of meaning is easily accessible, people often appear to discount this information and instead use alternative sources of meaning that allow them to maintain the belief that their life is meaningful (Heine et al. 2006; Hicks et al. 2010).

While most research generally supports argument espoused in the previous paragraph, research thus far has neglected to examine how the meaning in life judgment processes is influenced by major life circumstances. For example, how might a divorce or losing a loved one affect one's sense of meaning in life and alter how one constructs that sense of meaning? The rest of the chapter will speculate on how existential crises influence the MIL judgment process.

Exceptional Challenges to Meaning: Existential Crises

Although the belief that life is meaningful is deeply held and nearly ubiquitous, circumstances may arise in which we find ourselves forced (or force ourselves) to carefully examine our justification for this belief. Philosophical reflection, a traumatic event, or an otherwise life-changing experience may challenge the foundations of our beliefs in meaning, leading us to doubt and reevaluate their validity (Janoff-Bulman 1992). In most cases, individuals are able to maintain their system of meaning by interpreting the new information in such a way that it no longer challenges these beliefs (e.g., Kuhn 1962/1996; Park and Folkman 1997), effectively assimilating it into their current framework (Block 1982; Cason et al. 2002), or by more strongly adhering to other sources of meaning (Heine et al. 2006; Chap. 4 by Proulx, this volume). However, some threats may be so significant that they effectively shatter the individual's existing meaning structures (Janoff-Bulman 1992).¹

For instance, imagine a person whose primary source of meaning in life is through her belief in Christianity, who at some point in her life has an experience that grants her perspective on the vast extent of death and suffering that exists in the world. With her newfound perspective, this person may experience great difficulty in reconciling the seemingly unnecessary evil and death she is now aware of with her belief in a benevolent, omnipotent God who conceivably could and should do something about it (Park 2005). Her source of meaning in life may be called into question and the individual may no longer feel justified relying on religion as a primary source of meaning. Of course, this is only one example that may precipitate such a challenge to meaning, and other sorts of life events may also have the potential to successfully challenge one's beliefs. Salvatore Maddi (1967), for example, describes other potential sources of stress that can challenge basic beliefs in meaning, including concrete threat of imminent death of the self and gross disruption of the social order (e.g., war, economic depression). In any case, these examples illustrate the potential for life events to uproot one's system of meaning.

¹The present discussion of resolving an existential crisis has much in common with the literature on posttraumatic growth (see Chap. 5 by Park, this volume; Tedeschi and Calhoun 2004). However, this chapter focuses on meaning in life as a judgment process, leaving a more complete examination of the relationship between existential crises and posttraumatic growth for future work which can devote sufficient attention to the matter.

Such an experience would not be easily or simply resolved through typical coping methods as it presents a non-transient, significant challenge to one's world-view. New information wholly at odds with one's foundational meaning in life beliefs cannot be easily accommodated by the very system of beliefs it challenges, nor can it be easily ignored or reinterpreted. The individual's ability to rely on other sources of meaning to sustain them is also limited as the challenging information presents a perpetual threat to meaning until it has been addressed. Importantly, it is not just particular sources of meaning that can be threatened by these experiences but also the very idea of meaning in life itself (Janoff-Bulman 1989). When the source of meaning being challenged is primary and central to their perceptions of meaning in life, it may be difficult to effectively face this threat without also questioning one's entire system of beliefs.

Unable to assimilate, reinterpret, or ignore threatening information, the individual may be forced to reevaluate her system of meaning in life, potentially finding herself carefully considering the evidence, reasons, and justifications for her current system of meaning. This time of critical examination of one's system of meaning may actually be the first time many people have actually thought about their own system of meaning extensively. Thus, upon reflection, it may be possible for individuals to conclude that the new information is in fact *not* in conflict with their meaning structure or find some sort of compromise allowing them to maintain their current system of meaning. However, these possibilities may be unlikely if previous attempts at accommodating the new information have failed. A more probable outcome is that the threat to meaning will lead the individual to conclude that her current system of meaning is unjustified and insufficient. Her foundational meaning in life beliefs will be challenged, leading her to question what her meaning in life actually is or if her life is meaningful at all – that is, she will experience an *existential crisis*. In this state of existential crisis, an individual's system of meaning is not merely threatened but has been found to be insufficient, unjustified, and unsound. The system of meaning that has been maintained for an extended period of time and has been the basis of one's decisions, behaviors, and beliefs is compromised. The implications of such a realization should not be understated, given the central role meaning in life plays in human experience (e.g., Baumeister 1991; Frankl 1963/1984; Heine et al. 2006; Yalom 1980).

Given the powerfully aversive and distressing nature of existential crises, individuals should be motivated to resolve a crisis by restoring a system of meaning in life or otherwise reducing the discrepancy between the threatening information and their meaning beliefs (Chap. 5 by Park, this volume; Park 2010). The process of resolving an existential crisis and potentially reinstating a functional meaning system will be discussed in the following sections. We propose that an existential crisis can produce one of three types of responses: affirming meaning through leap of faith, careful reconstruction and justification of a new meaning system, or determining that life is meaningless. Each of these possible outcomes will now be discussed in turn, describing the progression of event that might lead to each conclusion as well as the role of judgment processes in developing and maintaining these systems of meaning.

Affirming Meaning Through a Leap of Faith

One potential resolution to an existential crisis is to affirm meaning through a leap of faith in which one asserts that life is meaningful without developing empirically reasoned justifications. Individuals resolve the conflict between wanting to believe that life is meaningful and having that meaning challenged by simply deciding to believe without requiring a strictly reasoned justification. Exemplifying this perspective, Søren Kierkegaard argues that a leap of faith is required in order to fully accept Christianity and to escape feelings of existential anxiety (Kierkegaard 1980). For many people, it may be difficult to reason their way to the conclusion that they were created by God and are imbued with a divine purpose and meaning; however, this belief must be accepted if it is going to serve as an individual's source of meaning. This non-dependence on reasoned arguments and empirical evidence allows for the possibility that individuals experiencing an existential crisis can quickly restore a system of meaning, bypassing the potential negative psychological consequences of a longer, more involved process of restoring meaning.

Resolving an existential crisis by making a leap of faith is in itself an intuitive judgment process, as it does not rely on rational justification in order to actually affirm meaning. As such, individuals oriented toward intuitive processing (e.g., high dispositional levels of faith in intuition; Epstein et al. 1996) may be more likely to resolve an existential crisis through a leap of faith, compared to individuals with less intuitive processing styles. Because a leap of faith relies solely on the intuitive feeling of it "being right," factors influencing this feeling of rightness should influence judgments of meaning in life for these people. Examples of such factors include mood (e.g., Schwarz and Clore 1983), metacognitive fluency (i.e., ease of processing; Alter and Oppenheimer 2009), and other temporarily accessible information which may bear strongly on judgments of meaning for people who resolve their crises in this type of manner.

Affirming meaning through a leap of faith is also likely to influence how individuals respond to threats to their system of meaning. Because their system of meaning is based on an intuitive hunch rather than empirical evidence that can be directly challenged, it may be difficult for information inconsistent with their beliefs to actually threaten their global sense of meaning in life. Individuals who make a leap of faith when judging the meaningfulness of their lives may be more likely to ignore potentially disconfirming sources of information as they can be easily dismissed as irrelevant to their intuitive beliefs. Individuals can still endorse sources of confirming information, although this is not necessary to maintain their intuitive beliefs. Consistent with this ability to flexibly adapt to meaning threats by selectively disregarding the threatening information while focusing on any validating cues, these individuals may also be more likely to look for and rely upon alternative sources of meaning when meaning in one domain is threatened. Individuals who make a leap of faith are not necessarily locked in to a concrete, static source of meaning. Rather, they can utilize the interpretive flexibility inherent in an intuitive judgment. For instance, a religious individual may disregard

information inconsistent with a benevolent and omnipotent God (e.g., needless suffering) by asserting that “God works in mysterious ways” and identifying other sources of support for her experience of meaning. This ability to flexibly adapt to meaning threats and find alternative sources of meaning would potentially be a very effective means of maintaining and promoting meaning in life (Hicks et al. 2010; Heine et al. 2006). Thus, meaning based on a leap of faith may be especially robust as long as faith in the source of meaning is maintained.²

Careful Evaluation and Reconstruction of Meaning Sources

Another resolution to an existential crisis is to rebuild one’s foundation of meaning, relying only upon those sources of meaning which withstand careful scrutiny and are sufficiently justified to the individual. This solution takes advantage of a challenge to meaning in life by using the opportunity to reassess what meaning in life actually means to the individual. If an individual’s foundations of meaning in life are unjustified or contingent on unrealistic expectations (e.g., deriving meaning in life through always winning, after having just been defeated), these sources can be rejected. Through careful analysis of what makes one’s life meaningful, individuals are able to overcome the doubt of an existential crisis and restore a more stable system of meaning in life. This process reflects a wholesale reevaluation of existing meaning structures, concepts, and schemas in order to successfully accommodate the new information (Block 1982; Cason et al. 2002; Chap. 5 by Park, this volume).

The evaluation and selection of sources of meaning in life is an idiosyncratic and subjective process, dependent on an individual’s values, standards, experiences, preferences, and other factors. For instance, one person may find her family life to be an important source of meaning, whereas another person may completely disregard family life and instead find seeking and exerting power over others to be her greatest source of meaning. This process of consciously selecting only sources of meaning which withstand intense scrutiny (from the individual, not necessarily outside observers) should produce a strong foundation of meaning in life.

²Restoring meaning through a leap of faith would likely not be strongly associated with personal growth, as compared to carefully examining and reconstructing one’s sources of meaning. In the intuitive process of making the leap of faith, individuals are not forced to engage in introspection and reflection regarding what they believe makes their life meaningful and what justification they have for those beliefs. Interestingly, there is the potential for a leap of faith to lead to substantial personal growth depending on the endorsed source of meaning. One possibility is that while an individual may not be able to come up with a justified source of meaning when trying to resolve her existential crisis through careful reconstruction, she may feel strongly that searching for meaning is a good and meaningful activity in itself. Thus, she may make a leap of faith and affirm that it is the search for meaning which provides their life with meaning. Others may affirm the pursuit of knowledge or the betterment of humanity, both of which may promote considerable personal growth. With such possibilities in mind, it remains an empirical question as to whether the process of carefully examining and rebuilding meaning in life offers distinct benefits beyond making a leap of faith in response to an existential crisis.

After carefully reconstructing one's sense of meaning, judgments of meaning in life will likely be more stable over time. Potential meaning-related cues may only be particularly relevant if they are related to the specific sources of meaning the individual now values. For instance, if a person has determined that family life is her most important source of meaning, success at work may not influence meaning in life very much. However, going on an enjoyable vacation with one's family would have a much stronger effect on meaning in life.

As a result of selecting stable, reliable sources of meaning in life, individuals may feel an enhanced sense of purpose or meaning relative to others who have not undertaken the project of rebuilding their system of meaning. The process of carefully analyzing exactly what makes one's life meaningful is likely associated with personal growth as individuals have the opportunity to engage in deep introspection and develop a better understanding of who they truly are and what is meaningful in their life (Park et al. 1996; Tedeschi and Calhoun 2004; Helson and Roberts 1994). They may also develop an increased openness to alternative sources of meaning they may not have previously considered as a result of their careful reflection. This personal growth and increased self-understanding has the potential for many psychological benefits. Individuals who have reconstructed their sense of meaning will be better able to articulate and express exactly what makes their life meaningful, making it that much easier to select and engage in particularly meaningful activities (i.e., self-concordant goals; Sheldon 2002). It should be easier for these individuals to behave authentically, expressing their true self, as they will have a well-developed sense of who they are and what matters most to them. This self-knowledge should enable these individuals to be more confident in their judgments of meaning in life, goal selections, and other self-relevant judgments.

Despite the apparent benefits of reconstructing sources of meaning in life in response to an existential crisis, this process has some additional drawbacks. First, the process itself involves a considerable amount of critical reflection and may take an extended amount of time to complete, during which individuals may suffer negative psychological consequences due to their lack of a stable source of meaning in life. Additionally, if during this process of assessing potential sources of meaning the individual fails to properly identify unhealthy or unreliable sources of meaning, they may unintentionally set themselves up for future susceptibility to threats and existential crises. While the robust nature of carefully reconstructed meaning is likely associated with a reduced potential for existential crises in the future, this is contingent upon the individual selecting sources of meaning which will be resistant to future meaning threats. For example, if an individual fails to identify her work life as a potentially unreliable source of meaning and is later laid off from her job, the core of her reconstructed system of meaning may be sufficiently shaken to trigger another existential crisis. On the other hand, too much examination may also be psychologically unhealthy as the individual may reject potentially effective sources of meaning in life or even determine that life is actually meaningless. Finally, these individuals may even exhibit lower ratings of meaning in life compared to before the existential crisis or individuals who make a leap of faith if, after carefully evaluating their potential sources of meaning, they become more "realistic" and find that things are not actually as meaningful as they once believed.

Meaninglessness

A final resolution to the uncertainty of an existential crisis is making the determination that life is, in fact, not meaningful. That is, based on their perceptions of the information currently available, individuals may determine that there is insufficient reason to believe that life is meaningful at all. Meaninglessness may be the result of intuitive and/or reflective processes, as individuals may base their judgment on their intuitive feelings of meaninglessness or a reasoned argument and evidence. Meaninglessness appears to be a particularly undesirable resolution to an existential crisis associated with a multitude of potential negative well-being consequences. Directly conflicting with the notion of meaninglessness is the idea that human beings have a basic desire or need to see themselves and the world as meaningful – a will to meaning. Frankl (1963/1984) argued that the primary motivation of all individuals is the search for meaning and that by not fulfilling the will to meaning, individuals experience an existential vacuum in their life leading to a host of negative well-being outcomes (e.g., depression, anxiety, hopelessness; Mascaro et al. 2004). Thus, individuals who resolve their existential crisis by finding their life to be ultimately meaningless would likely suffer the associated negative psychological consequences.³ Although cases in which an individual truly finds the world to be meaningless may seem at first glance to be rare, chronic meaninglessness has been argued to be a critical and widespread issue in modern society (e.g., Maddi 1967; see also Chap. 1 by Crescioni and Baumeister, this volume).

Resolving an existential crisis by determining that one's life is meaningless, whether by intuitive or rational means, will influence subsequent meaning in life judgments. The belief that life is meaningless would be pervasive and chronically accessible, much in the same way other individuals believe that life is meaningful. This chronic accessibility may make it difficult to say or do anything without being reminded that the action actually has no ultimate meaning, leading to stable and chronic judgments of meaninglessness. Cues associated with typical sources of meaning such as close relationships, for example, would likely not increase meaning in life ratings for these individuals. Cues unrelated to typical sources of meaning, on the other hand, may not be entirely discounted and could potentially elicit some sense of meaning. This sensitivity to information that typically affirms one's sense of meaning may be influenced by how the individual reached her conclusion of meaninglessness. If the individual determined life was meaningless through rational reflection, actively rejecting all potential sources of meaning, she may be particularly resistant to typical meaning cues. Intuitive judgments of meaninglessness may also be very resistant to meaning cues if the individual takes what could be

³Recent research has examined “existentially indifferent” individuals who report low levels of meaning in life while not experiencing the elevated depression and anxiety typically associated with meaninglessness (Schnell 2010). These individuals do, however, report lower levels of positive affect and satisfaction with life compared to individuals reporting higher levels of meaning in life (Schnell 2010). These findings suggest that the psychological consequences of meaninglessness may not be entirely straightforward.

described as a leap of faith toward meaninglessness, engaging the same processes described above in the leap of faith discussion, except in support of meaninglessness rather than meaningfulness. It may also be possible that if the individual is not entirely confident in her intuitive judgment of meaninglessness, she may be more amenable to typical meaning cues as they have not necessarily been rejected through rational reflection or a leap of faith toward meaninglessness.

In addition to the potential negative consequences of meaninglessness, the same self-serving processes and confirmation biases (see Nickerson 1998; Taylor and Brown 1988) that work to promote meaning in life by discounting meaning threats for most individuals may actually be recruited to discount threats to the new norm of *meaninglessness*. For example, cognitive distortions associated with depression (Kovacs and Beck 1978) could work to maintain a state of existential meaninglessness through the overgeneralization of meaninglessness in one domain to all domains or through biasing attention and recall toward confirming meaninglessness.

Conclusion

There may, of course, be other resolutions or experiences that occur in response to an existential crisis, as the current considerations are only speculation. Future research should examine these ideas empirically in order to develop a more complete understanding of the factors that influence meaning in life judgments and the unique conditions that may be associated with experiencing and resolving an existential crisis. Although meaning in life has been contemplated by scholars for thousands of years, we are only now beginning to investigate these important ideas systematically. The prospects for future research on meaning in life appear promising as we come to more fully understand this central issue of human existence.

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Part III

Self, Identity, and Individual Differences

Chapter 14

Examining the True Self as a Wellspring of Meaning

Rebecca J. Schlegel, Christina M. Smith, and Kelly A. Hirsch

As can be seen throughout this volume, people derive meaning from a wide variety of sources: relationships, work, culture, goals, religion, and so forth. However, within each of these potential meaning sources, people make choices between options that are not necessarily any more *inherently* meaningful than the others. For example, when picking a spouse, potential suitors do not come with a predetermined amount of meaning-making potential. Neither do specific careers or goals. For instance, while one person might find a career as a teacher meaningful, someone else might find that choice relatively meaningless. What imbues these types of idiosyncratic choices with meaning? Along with Carl Rogers (1961) and others (e.g., Horney 1945; Laing 1960; Waterman 1993), we believe that people use their beliefs about who they really are (i.e., their true self-concepts) as an indicator of the potential meaning or value of any given choice. More specifically, choices that are consistent with the true self-concept are deemed valuable for that very reason. Because people have different true self-concepts, this perspective helps explain why a given profession, for example, is meaningful to some people but not others. In this way, we believe people can use their true self-concepts as the foundation for unique “life philosophies” that inform which choices are worthwhile as well as the relative importance of those choices to each other (i.e., a person who chooses to focus on their family vs. their work and vice versa).

The argument that the true self imbues one’s decisions and life with a sense of meaning does not assume that a true self literally exists; rather, it assumes that people place importance on the *idea* of a true self. Indeed, the supposition that people literally possess a single “true self” is tenuous at best (e.g., Baumeister 1995) and is challenged by a wealth of theoretical (e.g., Cooley 1902; James 1890; Sullivan 1953) and empirical (e.g., Andersen and Chen 2002; Darley and Fazio 1980; Drigotas et al. 1999; Murray et al. 1996) perspectives that point to the pervasive

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influence of environment on the self-concept. Why then is this potentially illusory self-concept able to confer meaning? After all, there is no evidence of literal true self existence. Why do people place such importance on it? In this chapter, we will first review the previous research on the relation between the true self and meaning and then explore several potential explanations that might help us understand why the true self is such a treasured domain of the self.

The True Self as a Source of Meaning

As mentioned at the outset, along with our colleagues, we have argued that the true self can provide each person with a unique “life philosophy” that imbues life activities and pursuits with meaning and value (Schlegel and Hicks 2011; Schlegel et al. 2009). Consistent with this idea, Bellah et al. (1985) found that when people were asked to justify their life decisions, most could not do so without referencing the self. This led these researchers to conclude that “each self constitutes its own moral universe” (p. 76). Baumeister (1991) has similarly argued that the self “exports” value to other life activities. This argument is also supported indirectly by research on self-determination theory (Ryan and Deci 2001), authenticity (Kernis and Goldman 2006), and personal expressiveness (Waterman 1993), all of which suggest a link between the true self and meaning.

In our own work, we have attempted to directly examine the meaning-making function of the true self by assessing the relationship between true self-relevant constructs and global judgments of meaning (Schlegel et al. 2009, 2011) and decision satisfaction (Schlegel et al. 2013). We review each of these approaches below.

True Self-Concept Accessibility and Global Judgments of Meaning

In our first attempt (Schlegel et al. 2009) to examine the importance of the true self to meaning in life, we looked at the relationship between cognitive accessibility of the true self-concept and global judgments of meaning. We reasoned that if the true self is an important contributor to meaning, then the extent to which it’s readily available in one’s mind (i.e., its cognitive accessibility) should positively predict judgments of meaning in life. This hypothesis was based on previous research that found that the cognitive accessibility of other meaning sources, such as religion and personal relationships, positively predicts global meaning judgments (e.g., Hicks and King 2008, 2009a, b; King et al. 2006; see also, Hicks et al. 2010).

To meet this aim, we conducted five studies that either measured or manipulated true self-concept accessibility and then measured global meaning by asking participants to indicate their agreement with statements such as, “I understand my life’s meaning” (from the Meaning in Life Questionnaire; Steger et al. 2006). To assess self-concept accessibility, we asked participants to provide words that they felt best

described both their true self-concept and a control self-concept (i.e., their “everyday self,” defined as how they behave in daily life). These words were then used as stimuli in either a reaction time task that measured individual differences in self-concept accessibility (Studies 1, 2, and 4) or a priming task (Studies 3 and 5) that manipulated self-concept accessibility. The results of each study revealed that true self-concept accessibility positively predicted meaning in life judgments, whereas accessibility of the everyday self-concept had no influence on meaning in life judgments. This pattern supports the idea that the true self has a unique relationship with the experience of meaning over and above the self-concept more generally. Providing even stronger evidence for the unique role of the true self-concept, we also controlled for potentially related predictors of meaning such as positive affect, authenticity, self-esteem, and the valence of the self-concepts in these studies.

Perceived True Self-Knowledge and Global Judgments

While the findings for true self-concept accessibility were encouraging, those studies required the use of relatively nonconscious measures and manipulation that are difficult for the participant to control (i.e., very quick reaction times or subliminal priming). While that approach has the appeal of decreasing the chance of response bias, we also wanted to examine how other true self processes might influence meaning, particularly processes that participants are more aware of. Thus, we examined how perceived true self-knowledge might mirror the observed effects of true self-concept accessibility (Schlegel et al. 2011).

People likely experience ebbs and flows in their confidence in their own true self-knowledge. We tried to capitalize on the tenuous nature of this confidence by using the metacognitive experience of ease/difficulty (Schwarz 1998; Schwarz and Clore 1996) in a true self description task as a means of measuring and manipulating perceived true self-knowledge. This methodology was based on the idea that people use the metacognitive experience of ease (or difficulty) as a cue to how much they know about a topic (Schwarz 2004). Thus, experiencing true self description as easy (vs. difficult) should influence the perception of possessing (or not possessing) true self-knowledge. People who experience true self description as easy should feel confident in their level of true self-knowledge, whereas those who experience it as difficult should question their level of true self-knowledge.

Across three studies, we asked participants to describe their true and/or everyday selves (the everyday self was used as a control self-concept for comparison) and either measured perceived self-knowledge (by coding the description for detail or asking participants how easy the task was to complete) or manipulated perceived self-knowledge (by explicitly making the task easy or difficult by asking participants to generate either a few (8) or many words (15); adapted from Schwarz et al. 1991). Consistent with the findings for true self-concept accessibility, we found that perceived true self-knowledge positively predicted global judgments of meaning in life and that perceived everyday self-knowledge was unrelated to these judgments.

These studies also controlled for positive and negative affect as well as self-esteem, further supporting the unique, strong influence of the true self-concept on judgments of meaning.

Perceived True Self-Knowledge and Decision Satisfaction

Encouraged by the findings for global judgments, we endeavored to look more specifically at what we believed was ultimately driving our effects: the use of the true self as a “guide” to decision-making (Schlegel et al. 2011). Recall that the foundation for our argument that people use their true selves to create meaning is that the true self-concept helps create a “life philosophy” that guides decision-making. Thus, we reasoned that people must be confident in their true self-knowledge in order to also feel confident in their decisions. To test this idea, we again utilized metacognitive ease as a means of measuring and manipulating perceived self-knowledge and asked participants to either reflect on major decisions they had recently made in their lives (e.g., the university they chose to attend, the choice of their current major) or to complete a simulated career choice task in which they quickly chose which career they would prefer from a number of paired choices (adapted from Nakoa et al. 2010). Consistent with predictions, perceived true self-knowledge was related to satisfaction with both real life and hypothetical decisions, whereas perceived everyday self-knowledge was unrelated to decision satisfaction.

These findings suggest that perceived true self-knowledge is an important contributor to feelings of confidence both in one’s past decisions and in one’s ability to make future decisions. Each of which could have important implications for one’s ability to find meaning in his or her life. This is particularly true, considering that the decisions one makes (e.g., relationships, career, goals) are the “stuff” that meaning is made of.

In sum, the findings from all three of these lines of inquiry support the role of the true self-concept in judgments of meaning. But the question remains: why is the true self able to influence people’s perceptions of meaning? In other words, why are people so attracted to the idea of a true self and why does it exert such influence in people’s lives? The remainder of this chapter explores several possible explanations for the mass appeal of the true self.

Why Is the True Self Meaningful?

We now return to the question of why the true self is able to serve as a wellspring of feelings of meaning. As we noted earlier, we cannot observe it directly, we cannot be certain if we know it accurately, and we cannot know for sure if it even exists at all! We offer a number of potential explanations for why this potentially illusory self-concept is such a treasured aspect of the self. The specific explanations we put

forward are derived from three broader possibilities: (1) the true self fulfills other important psychological needs that, in turn, elevate its place in our lives, (2) there are certain beliefs about the nature of the true self that enhance its perceived importance, and (3) there are certain conditions that enhance (and attenuate) the attraction of the true self. We believe that each of these broader approaches to the question has the potential to shed light on the question: why the true self is perceived as meaningful.

Other Needs the True Self May Fulfill

Self-Consistency

Humans have a strong desire for self-consistency (Aronson 1968, 1969; Festinger 1957; Heine et al. 2006; Lecky 1945; McAdams 1985; Swann 1983). For example, the Meaning Maintenance Model suggests that “people seek to establish that the person they were 10 years ago is related to the person they are now, that they are somehow the same person despite enacting different roles in life” (Heine et al. 2006, p. 90). This desire for self-consistency is at odds with our awareness of our own self-presentational behaviors (Goffman 1959; Leary 1995; Schlenker 1980) and with the idea that we all possess multiple (and potentially conflicting) self-concepts (Higgins 1987; Markus 1983; Markus and Sentis 1982; Mischel and Shoda 1995). However, in the ever-changing landscape of one’s life, the true self may afford a sense of self-stability.

The true self seems to be immune to the problem of shifts in behavior because people recognize that behavior is not necessarily diagnostic of the true self (e.g., Andersen 1987). Thus, instability in behavior can be overlooked when considering the contents of one’s true self. Even when behavior fluctuates over time and between contexts, any specific behavior can be dismissed as not reflecting the person’s true self. For example, a person who believes that her true self is extraverted but acts quiet at a particular party can reinterpret this potential threat to consistency as an example of simply not behaving like her true self. Even if the contents of a person’s true self-concept change over time, the prevalent idea that the true self is discovered over time suggests that it isn’t the person who has changed, only their awareness of whom they really are. When such changes in self-concept occur, people can reflect back on the past to search for supportive evidence that this was actually who they have always been, they just didn’t realize it. Indeed, stories related to discovering the true self may be important tools in developing a coherent life story, something that is considered an important developmental milestone (Habermas and Bluck 2000; McAdams 2003; McLean 2008; McLean et al. 2007).

Thus, the true self may be an important vehicle people use to find evidence that, at the core, they are the same despite the variety of social masks they might wear. Perhaps it is this very need for coherence in the self that drives us to believe we have a true self, a part of us that endures through everything else.

Individuality

Another possibility is that the true self is treasured because it is what makes us feel unique as a person. Indeed, Lakoff and Johnson (1999) argue that the true self is a reflection of the folk theory of “essences” – the idea that each person has something inside them that makes them uniquely them.

Consistent with this proposition, the private nature of the true self may amplify this perceived uniqueness. Because we are simply more aware of our own internal lives compared to the internal lives of others (Johnson et al. 2004), we tend to judge private experiences as more unique than behaviors. Consistent with this, people believe that their thoughts and feelings are more unusual than their behaviors (Andersen 1984, 1987; Andersen et al. 1986; Johnson 1987; Nisbett and Wilson 1977). For example, Andersen et al. (1986) found that participants judged religious thoughts and feelings as more unique than religious behaviors, even though the content of the items was otherwise identical (e.g., feeling like praying vs. praying). As Johnson et al. (2004) note, humans are nearly always engaged in some sort of thought, but are not always engaged in behavior. In their words, humans are “thinkers and feelers more than they are doers” (p. 629). Considering that such private mental activities are thought to originate from the true self (e.g., Andersen 1984, 1987), it makes sense that the true self might provide us with that feeling that we are unique. Given how much our society values uniqueness and individuality, this may help explain why people are invested in their true selves.

Self-Enhancement

A third possibility is that the true self is used for self-enhancement. Just as people take credit for their successes while avoiding blame for their failures (e.g., Miller and Ross 1975), people may use the true self to emphasize their favorite characteristics and minimize their less desired characteristics. Supportive of this notion, people report that they like their true self more than their “everyday self” (i.e., their behavior around most others; Schlegel et al. 2009) or their “false self” (Harter 2002). This may be explained by the fact that the true self allows for some leeway in deciding which of your behaviors reflect the true self and which do not. Self-enhancement biases would suggest that people will see their positive behaviors as indicative of who they “really are” are, while dismissing their less desirable behaviors as products of situations. This possibility extends even to private thoughts that are never expressed in behavior. For example, a participant in Harter and Monsour’s (1992) study said, “I really think of myself as friendly and open armed to people, but the way the other girls act, they force me to become an introvert, even though I know I’m really not” (p. 253). Thus, the true self may be uniquely suited to serve as an important defense against behavior that threatens positive self-regard.

Beliefs About the True Self

A second possibility is that there are certain beliefs surrounding the nature of the true self that make it so appealing. In particular, we focus on the belief that the true self is “discovered.”

As Waterman (1984) contends, identity development is typically characterized by one of two metaphors: discovery or creation. The true self is more strongly linked to the metaphor of discovery. This is important because the discovery metaphor itself may serve as an important existential function because it allows people to believe that life is not arbitrary. The implication of the discovery metaphor is that we are already inherently somebody and just have to *find* that somebody within ourselves. By contrast, when identity development is characterized as a process of creation, the self is thought of as a choice among endless possibilities. Having to make a choice among these endless possibilities has the potential to feel overwhelming and arbitrary, thus arousing existential anxiety, or what Waterman calls “existential dread” (p. 335). In this way, the discovery metaphor may underlie the true self’s relationship with meaning.

Guided by these ideas, Schlegel et al. (2012) found evidence for the importance of the discovery metaphor to the role of the true self in meaning judgments. Specifically, individual differences in discovery beliefs interacted with true self-knowledge to predict global judgments of meaning. The nature of the interaction suggested that true self-knowledge is a strong predictor of meaning for individuals with relatively strong discovery beliefs, whereas this relationship is attenuated among individuals with relatively weak discovery beliefs. Creation beliefs had no influence on the relationship between true self-knowledge and meaning in life.

This makes sense in light of the argument that a *discovered* true self is existentially comforting because it can serve as a “legitimate” moral guide to a variety of other decisions, thus making these decisions also feel less arbitrary. Once a person has figured out who they are, other decisions can then be judged in terms of whether or not they are expressions of this true nature. In this way, a discovered self serves as a defense against people’s concerns over the capricious nature of existence.

Undoubtedly, there are a variety of other beliefs about the true self that one could examine. However, there is little to no research on the folk conception of the true self. We hope that future research will examine what other beliefs might be associated with the true self and the implications of those beliefs.

Limiting Conditions

The final class of proposed explanations are conditions which might limit the ability of the true self to influence meaning. By identifying the factors that influence when the true self is not related to meaning, we might better be able to understand why the true self relates to meaning in our own research. In other words, these limiting conditions may highlight other underlying factors that explain the perceived importance of the true self.

Historical Context

Although notions of the true self and self-discovery are important psychological concepts today, it is likely that they have not always been, nor will they necessarily continue to be. Indeed, the distinction between one's inner (or true) self and one's behavior seems to have only emerged in modern history (Baumeister 1987, 1991; Becker 1971; Bellah et al. 1985; Frankl 1959; Fromm 1941/1969). Prior to the sixteenth century, the self was synonymous with that which could be observed (Baumeister 1987). The reason for this shift is not entirely clear; however, Baumeister notes that this shift was first spurred by concerns about recognizing deception in others. The recognition that people could hide parts of the self from others might have led people to believe that parts of your own self can be hidden from you. The dissemination of psychological theories that emphasized the role of a hidden self to the masses also likely played a role. For example, Turner (1976) notes that Freud's greatest impact may have been that he persuaded people that a person's true nature could be found in their hidden drives and impulses. Similarly, Baumeister (1987) argues that Freud's continuing influence is evident in the widely held belief that possessing *complete* self-knowledge is impossible.

These shared beliefs about the self may underlie its relationship with meaning. On the other hand, and consistent with the proposed functional arguments, these shared beliefs may be the product (rather than the cause) of the true self emerging as an important psychological concept. For example, scholars have long commented on the erosion of culturally embraced structured sources of meaning that has left the individual with the primary responsibility of fashioning a meaningful life (e.g., Becker 1971; Frankl 1959; Fromm 1941/1969; Chap. 1 by Crescioni and Baumeister, this volume). Whereas past societies provided their members with widely agreed upon value bases, such as religion or tradition that offered clear direction for how one should live a valuable life, in modern society, people are confronted with more responsibility to decide for themselves the answers to the fundamental questions of what is right and wrong, what is good and bad, and what is worthwhile or not (e.g., Baumeister 1991). In Frankl's (1959) words, people are increasingly faced with an "existential vacuum." This historical shift may have spurred the need for people to find a more individualized moral guide such as the true self.

Culture

Just as the emphasis on the true self may be unique to a certain point in history, the true self may be a uniquely Western phenomenon. Cross-cultural researchers have identified several important differences in beliefs about the self between the Eastern and Western cultures. These broad differences raise the question of how the true self translates across cultures.

One possibility is that the true self is not equally valued (or even recognized) across cultures. For example, privacy, independence, self-reliance, and individuality tend to be more important values in Western cultures, whereas Eastern cultures tend

to place greater value on relationships and interdependence (Markus and Kitayama 1991; Markus et al. 1997; Suh 2002; Tesser and Campbell 1983). Consistent with these differential values, Westerners tend to think of the self as something that exists within the person, while Easterners tend to think of the self as existing entirely within relationships and contexts (Markus and Kitayama 1991). Considering that the true self is closely tied to internal processes and attributes, it is reasonable to suspect that these types of differences lead to variability in the perceived value of an idea like the “true self.”

On the other hand, cultural differences in the true self may simply be manifested in the content of true self-descriptors rather than in the perceived value of the concept. Consistent with this, the Japanese language contains similar metaphors about containment and a “real” self (Lakoff and Johnson 1999). Thus, the true self may be similarly valued across cultures but “look different.” While the predominant view in Western cultures focuses on which of one’s multiple self-concepts is “true” (Bellah et al. 1985; Gergen 1991), Kanagawa et al. (2001) posit that other cultures allow for multiple true selves (i.e., a true self for each situation; see also Kashima et al. 2004). Some research that accounts for this distinction has found that the general concept of authenticity is important across cultures (Cross et al. 2003; English and Chen 2007; Kashima et al. 2004; Neff and Suzio 2006). Clearly, examining these complex issues is a promising direction for future research both in general and in specifically examining what underlies the meaning-making function of the true self.

Developmental Concerns

A final potential limiting condition is age. The vast majority of the empirical studies reviewed have relied on college students or younger adolescents, and as Harter (1999; Harter and Monsour 1992) has argued, the resolution of identity conflicts and the recognition that one has multiple selves that are equally true may be an important milestone of development. As such, the true self may be less linked to meaning across the life span. Nonetheless, there is also evidence that at least some true self concerns continue through the life span. Even Harter (2002) notes that after people recognize that multiple selves may be true, they continue to be concerned about authenticity. Consistent with this, authentic self-expressions predict decreased depression and increased meaning in life in older adults (Krause 2007). Clearly, development concerns are another promising area for future research.

Conclusions

Even if the true self is an illusory concept, it constitutes an important part of most people’s self-concepts. In this chapter, we have focused on how the of the true self informs meaning judgments and the potential underlying factors that might explain this relationship. Though it is difficult, if not impossible, to imagine a way to prove

whether or not the true self is “real,” we believe examining the psychological “reality” that surrounds it is both interesting and important. In this way, the true self is similar to other concepts, such as free will (Vohs and Schooler 2008; Wegner 2002), that are potentially not “real” but serve important psychological functions. We hope that future research explores this psychological reality by examining the ways in which the true self enriches people’s lives and the reasons that underlie this enrichment.

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Chapter 15

Finding Meaning in the Mirror: The Existential Pursuits of Narcissists

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Humans are meaning-seeking animals (Becker 1971; Frankl 1959). Unlike other organisms, they are able to gaze up at the stars and wonder what it all means, why they are here, and what happens to them when they shed their mortal coils. This pursuit of existential comfort has considerable psychological utility. A sense of personal meaning in life provides protection from distress (Debats 1996; Routledge et al. 2011) and promotes psychological and physical health (Ryff 1989; Steger and Frazier 2005; Updegraff et al. 2008; Zika and Chamberlain 1992). Not surprisingly then, there is growing empirical interest in elucidating the many ways in which people find and preserve perceptions of meaning in life. Interestingly, though, there has been little effort to examine distinct meaning-pursuits as a function of specific personality traits, especially given the powerful effects of traits on cognition and emotion (Corr and Matthews 2009). In the current chapter, we dive into this uncharted territory by offering a theoretical analysis of how the trait of narcissism may affect the pursuit of life meaning.

Narcissism is a complex and intriguing personality trait. It refers to a persona that has both child-like, seemingly innocent sides (i.e., self-centered, self-aggrandizing, vain) and adult, potentially problematic sides (i.e., dominant, entitled, manipulative). Narcissists are driven by success, power, and prestige rather than by relational harmony, interdependence, and organizational citizenship. They exude self-confidence, extraversion, and energy. They are liked by others initially, but, with repeated

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contact, they are found increasingly unappealing. In sum, narcissists have an overly positive perception of themselves and a negative perception of others; they are high on agency and low on communion (Back et al. 2010; Campbell and Foster 2007; Morf et al. 2011). These two proclivities can be negatively associated (Schwartz and Rubel 2005). For example, priming participants with achievement values increases success in task completion and decreased helpfulness to an experimenter, whereas priming them with benevolence values decreases success and increased helpfulness (Maio et al. 2009). In this chapter, we ask whether narcissists rely on agency to seek, attain, and sustain meaning in life. We speculate that narcissists derive meaning from at least three agentic domains: achievement, materialism, and reflections of glory.

Narcissists' Agentic Pursuit of Meaning in Life

Below, we will contemplate on how narcissists may pursue and acquire meaning through their achievements, materialistic orientation, and reflections on glory past. We also suggest future research to assess these theoretical assertions.

Narcissism and Achievement

One means by which people can attain a sense of meaning in life is through personal achievements. Achievements allow people to feel as if they are significant contributors to a meaningful universe (Solomon et al. 1991). Most people derive, no doubt, some meaning from achievements. After all, positive performance feedback increases self-esteem (Dutton and Brown 1997), and people find boosts to self-esteem more pleasurable than eating a favorite food, engaging in a favorite sexual activity, drinking alcohol, receiving a paycheck, or seeing a best friend (Bushman et al. 2011). Yet, for narcissists the path from achievement to meaning may be particularly potent. There are several indicators that narcissists over-value achievement (Hepper et al. 2010). We will discuss three classes of indicators.

First, narcissists thrive in competition and status-seeking. Narcissism is positively related to competitiveness, and narcissists relish competitive environments (Morf and Rhodewalt 2001). In fact, they compete ruthlessly to win it all, strive to ascend to leadership positions (Brunell et al. 2008), emphasize status-themes in self-reports (Bradlee and Emmons 1992), fantasize about status (Raskin and Novacek 1991), select dating partners who are likely to enhance their status (Campbell 1999), and affiliate with high-status others (Brunell et al. 2008). Furthermore, (male) narcissists persist longer and enjoy better tasks that are framed as competitive than tasks that are framed as learning (Morf et al. 2000). Finally, narcissists try harder and perform better at challenging tasks than at easy tasks (Wallace and Baumeister 2002).

Second, narcissists rely on their accomplishments to increase their self-esteem and gain a sense of haughtiness (Hepper et al. 2010). Narcissists regard themselves superior to others on agentic traits such as intelligence (Campbell et al. 2002), and they overestimate their agentic traits in relation to objective criteria such as standardized

IQ tests (Gabriel et al. 1994). They also overestimate their final university course grades (Farwell and Wohlwend-Lloyd 1998), and they rate their own contribution to a group discussion as more impactful than the contribution of other group members in spite of objective evidence (i.e., judgments of observers and peers) to the contrary (John and Robins 1994). Additionally, narcissists attribute a successful group performance on an agentic task (i.e., creativity) to themselves but blame other members for an unsuccessful group performance on the same task (Campbell et al. 2000); similarly, they perform better in commons-dilemmas tasks at the individual level by neglecting the communal interest (Campbell et al. 2005). Such is their zeal to overperform and outperform others on agentic (i.e., intelligence) tasks that they persist even when the tasks are unsolvable (Wallace et al. 2009).

Third, narcissists defend themselves fiercely against criticism of their talents (Hepper et al. 2010). To begin with, they are hypervigilant toward negative feedback: They show cognitive activation of worthlessness-related words following subliminal exposure to failure-related primes (compared to neutral primes; Horvath and Morf 2009). When they are concerned that their low competence will be detected, they react by bolstering the positivity of their self-presentations (Morf et al. 2010) and by self-handicapping (Rhodewalt et al. 2006). When outperformed, they treat their competitors with verbal venom (Rhodewalt and Eddings 2002). Finally, when criticized, narcissists respond with force. They derogate unfavorable evaluators, labeling them as incompetent and unlikable (Kernis and Sun 1994), and they aggress eagerly toward them (Stucke and Sporer 2002). In a similar vein, narcissists react with hostility when experiencing upward social comparisons in their daily lives, as such comparisons threaten their perceptions of superiority (Bogart et al. 2004).

In summary, narcissists thrive in competitive settings, regard their accomplishments as superior to those of others, and defend themselves vigorously when their competence is threatened. Given the centrality of achievement to the narcissistic self-concept, we speculate that the achievement domain is a source of meaning particularly for narcissists (Chap. 14 by Schlegel et al., this volume). Narcissists may seek meaning in life through achievement pursuits and may find purpose in life when they attain their achievement-related goals. Future research is needed to gauge this possibility. For example, studies could directly assess the extent to which achievement pursuits bolster meaning for narcissists. Also, findings have shown that existential threat motivates achievement striving (Pyszczynski et al. 2004); research has yet to consider the potential role of narcissism. Is it individuals high in trait narcissism that are most inclined to utilize achievement pursuits as a compensatory response to conditions that challenge a sense of meaning in life?

Narcissism and Materialism

Research has linked materialism to existential strivings (Arndt et al. 2004). For example, the existential threat of mortality salience increases desire for wealth and greedy behavior (Kasser and Sheldon 2000). This research did not consider, however, individual differences in narcissism. Materialism is likely a powerful

source of meaning for narcissists. There are several indicators that narcissists over-value materialism (Cisek et al. 2008; Sedikides et al. 2007, 2011). We will consider three classes of indicators.

First, narcissists may treat money (a sign of status and power; Belk 1985) as a feeder to their grandiose self-image and their exaggerated perceptions of competence and as a way to influence and control others. Narcissists may use the display of material possessions as an impression management tactic, in full awareness of cultural norms that affluent people are judged as capable (e.g., intelligent, self-disciplined) and sophisticated (e.g., cultured, successful; Christopher and Schlenker 2000). Narcissists indeed “divide the world into famous, rich, and great people on the one hand, and the despicable, worthless ‘mediocrity’ on the other” (Kernberg 1975, p. 234). As mentioned or implied in the opening paragraph, self-sufficiency, low levels of altruism, egocentricity, and poor relationships are typical narcissistic qualities. Thoughts of money activate self-sufficiency, which decreases altruism (Vohs et al. 2006). Also, material preoccupation is associated with egocentricity (Belk 1985) and poor relationship quality (Kasser 2002).

Second, narcissism is directly linked to materialism. Specifically, narcissism is positively related to desire for material possessions (Cohen and Cohen 1996) and compulsive buying (Rose 2007). In addition, narcissism is positively related to aspirations of economic success (Roberts and Robins 2000) and to aspirations of wealth or fame (Kasser and Ryan 1996).

Third, materialistic persons are particularly likely to engage in conspicuous consumption (i.e., acquisition of brand name or prestige products) in an effort to elevate their status (Richins 1994). For example, many owners of fast and expensive cars buy to improve their image on others (Kressman et al. 2006). Given that narcissists are prone to materialism, it is no surprise that they are also prone to choice of brand name products for image-management purposes. Indeed, narcissists manifest a preference for flashy, ostentatious, or expensive products (e.g., designer clothes, expensive jewelry, top-range cars, rare antiques) and a disdain for common, practical, or affordable products. Narcissists are motivated to prove that they are fashionistas, always aware of the latest label, always knowing what's “in” (Sedikides et al. 2011).

Conspicuous consumption has additional benefits for narcissists: hedonic value and novelty seeking. Brand name products entail hedonic value (Vigneron and Johnson 1999). Narcissists (relative to non-narcissists) are fun-seeking (Miller et al. 2009). They are also approach oriented: They report endorsing goals that promote desirable outcomes such as having fun (Foster and Trimm 2008) or maximizing profits (Foster et al. 2009). Narcissists, then, may find high hedonic value in the purchasing of brand names products (O'Shaughnessy and O'Shaughnessy 2002). In addition, novelty-seeking or excitement is a key feature of narcissism (Miller et al. 2009). Studies, for example, have linked narcissism with traits such as sensation-seeking (Emmons 1981) and impulsivity (Foster and Trimm 2008; Vazire and Funder 2006). The materialism domain, and in particular acquisition of brand name products, provides plenty of opportunities for narcissists to satisfy their novelty-seeking need.

In summary, narcissists regard money as the royal route to status, are wealth-oriented and fame-oriented, and engage in conspicuous consumption. Assuming the centrality of materialism to the narcissistic self-concept (Sedikides et al. 2007), we speculate that materialism, and in particular conspicuous consumption, is a source of meaning for narcissists. Narcissists may seek meaning in life partly through conspicuous consumption and may find purpose in life when they acquire their desired, high-prestige products. Future research should directly consider this assertion. For example, such research could examine the extent to which narcissists derive meaning in life from materialistic behavior such as conspicuous consumption. Similarly, this research could determine whether narcissists are particularly likely to respond to existential threat (e.g., philosophical claims about meaningless in life and the universe) with such behavior.

Narcissism and Reflections of Glory

Reflections of glory likely comprise another vital source of meaning in narcissism. Recent empirical research suggests that nostalgia increases a sense of meaning in life (Routledge et al. 2011). Such studies show that the link between nostalgia and meaning in life is mediated by social connectedness. However, in line with the basic personality structure of a narcissist (high in agency, low in communion), there are several indicators that narcissistic reflections on the past are self-centered and refer to accomplishments (Hart et al. 2011). We will focus on two classes of indicators.

First, nostalgic reflections of narcissists are agentic. Hart et al. (2011, Study 1) subjected narcissists' nostalgic recollections to linguistic text analysis (Pennebaker and King 1999) to find out if narcissists use more agentic words (e.g., competitive, competent, leader, dominant) than communal words (e.g., charitable, cooperate, listen, understanding). Narcissists indeed used a higher proportion of agentic words in their nostalgic narratives than non-narcissists did. The two groups did not differ in their use of communal words.

Second, when narcissists reflect nostalgically on their past, their agentic reflections make them feel better about the kind of person they are. Hart et al. (2011, Study 2) induced nostalgia in narcissists and non-narcissists by asking them to think and write about a nostalgic event in their lives. Then, these researchers assessed, through narrative analyses, whether participants reflected on agentic or communal objects and whether nostalgia increased self-positivity or a sense of social connectedness. In replication of Study 1, narcissists spontaneously waxed more nostalgic about agentic objects (e.g., past success/achievements, having dreams and aspirations, mastering something, overcoming challenges) than non-narcissists did. The two groups, once again, did not differ in their nostalgic reflections on communal objects (e.g., my family, my friends, being part of a group or community, reunions with family or friends). In addition, narcissists (compared to non-narcissists) experienced a greater boost in self-positivity (e.g., feeling good about myself, feeling I have many positive qualities) following nostalgic reflection. As previously, the two groups did not differ on social connectedness (e.g., feeling loved, feeling connected to loved ones).

The surge in self-positivity that narcissists experience when they evoke the past cannot be accounted for by other personality traits. Hart et al. (2011, Study 3) assessed their participants in terms of the Big Five (i.e., extraversion, agreeableness, conscientiousness, neuroticism, openness to experience; Denissen et al. 2008). Then, these researchers induced nostalgia in narcissists and non-narcissists by instructing them to bring to mind a nostalgic song, report its name, and report the name of the performing artist. Finally, they assessed self-positivity and social connectedness. As in Study 2, narcissists (compared to non-narcissists) experienced a stronger boost in self-positivity (i.e., feeling good about myself) following nostalgic reflection. The two groups did not differ on social connectedness (i.e., feeling connected with the people I care about). Importantly, these results generalized above and beyond the Big Five and also gender and age.

In summary, narcissists engage in reflections of past glory. They engage in nostalgia about agentic objects and experiences, and this nostalgic engagement augments the positivity of their self-concept and self-regard. McAdams et al. (1996) claimed that thematic coherence provides life with meaning, unity, and purpose. We speculate that glory reflections constitute a source of meaning for narcissists. Though for non-narcissists, communal themes are important for deriving meaning from the past (Routledge et al. 2011), narcissists may pursue meaning and acquire a sense of purpose in life, to some extent, by resorting to past agentic themes (e.g., success, aspirations, challenges). Future research should examine more closely the agentic path as the means by which narcissists derive meaning from the past.

Why Do Narcissists Derive Meaning from Agency?

So far, we have proposed that narcissists derive meaning from agentic pursuits. Our proximal explanation was self-positivity or self-worth. Narcissists pursue achievements, conspicuous consumption, and glory reflection, because these pursuits inject their self-system with positivity by making them feel successful, special, and mighty. However, there is an alternative explanation. The agentic pursuit of meaning may compensate for inner fragility.

Narcissistic Fragility

There is evidence from explicit measures that narcissists (relative to non-narcissists) have a fragile inner self. Their affective states are unstable both in everyday life (Rhodewalt et al. 1998) and in response to experimental manipulations (Bogart et al. 2004). Also, their state self-esteem fluctuates widely as a function of negative life events (Zeigler-Hill et al. 2010). Evidence from implicit measures is rather mixed. Some studies have showed that narcissists (compared to non-narcissists) have low implicit self-esteem (Boldero et al. 2007; Gregg and Sedikides 2010;

Jordan et al. 2003; Rosenthal 2005; Zeigler-Hill 2006), whereas other studies have not replicated this pattern (Bosson and Prewitt-Freilino 2007; Campbell et al. 2007). Yet, on balance, the data seem to be friendlier to the narcissistic ego fragility argument.

Compensating for Ego Fragility

We posited that narcissists obtain meaning from three agentic domains: achievement, materialism, and reflections of glory. Of those three, materialism has been linked directly to inner fragility. As Tuan (1980) put it: “Our fragile sense of self needs support, and this we get by having and possessing things because, to a large degree, we are what we have and possess” (p. 472). Indeed, persons high on self-instability (i.e., disconnect between current and future selves) are more likely to be driven by immediate than long-term benefits and thus engage in impulsive consumption: They accept eagerly rewards that are smaller but arrive sooner, demand a relatively high premium to delay the reception of a gift card, and wait less to save money on a purchase (Bartels and Urmansky 2011). Persons who focus on their sadness (arguably, an index of insecurity or inner fragility) are eager to spend high amounts of money on product consumption (Cryder et al. 2008). Insecurity, as reported in dreams (Kasser and Kasser 2001) or as a result of death cognitions (Kasser and Sheldon 2000), is related to materialism. Also, when one experiences insecurity, the acquisition of products is compensatory in that it restores a sense of worth. Moreover, persons expressing inadequacy in a certain domain are particularly likely to own materialistic displays that reinforce the relevant identity (Braun and Wicklund 1989). For example, committed but novice tennis players who feel inadequate about their skills are more likely to wear branded clothing compared to expert tennis players who feel confident about their skills. Finally, persons high on dispositional self-doubt (e.g., “More often than not, I feel unsure of my abilities,” “Sometimes I feel that I don’t know why I have succeeded at something”) or persons primed with self-doubt words (e.g., “insecure,” “uncertain,” “doubtful”) express higher levels of materialism compared to their low self-doubt counterparts (Chang and Arkin 2002).

Summary

The literature suggests tenuously an association between inner fragility and materialism. Both chronically and momentarily insecure persons report strong materialistic tendencies. Arguably, materialism helps restore in those individuals a sense of self-worth. Future research would need to assess this proposition more rigorously and also to test the possibility that at least certain forms of excessive achievement and glory reflection stem from an underlying sense of inadequacy. Also, future research would need to address an implication of this reasoning: Does choice or purchase of

brand name products (as well as excessive achievement or glory reflection) solidify the inner world of narcissists? Preliminary evidence for this possibility comes from the work of Sivanathan and Pettit (2010). They showed that individuals consume brand names (i.e., status-enhancing products) for the reparative effects that such a consumption pattern has on self-worth.

In addition, future research would do well to examine whether the relation between inner fragility and materialism – and perhaps achievement or reflections on past glory – is a defining characteristic of grandiose narcissists (the type of narcissists that we have discussed so far) or of vulnerable narcissists. Although interpersonally antagonistic, vulnerable narcissists differ from their grandiose counterparts in that they are introverted, negative-affect laden, and emotionally turbulent (Miller et al. 2010).

Concluding Remarks

Narcissism manifests as a self-aggrandizing, entitled, dominant, and manipulative interpersonal orientation that is propelled by success, power, and prestige. Narcissists must have a need for meaning in life that is as strong as that of their non-narcissistic counterparts. But how do narcissists satiate this need? They certainly do not do so through harmonious relationships, cooperative interactions, or equitable group membership. Rather, we maintain, they satiate their need for meaning in life through agency.

We speculated that narcissists pursue and derive meaning in life from three agentic domains. The first domain is achievement. This involves competition or status-seeking, boasting about own accomplishments, and defending ferociously against criticism of own accomplishments. The second domain is materialism. This involves treating money as a way to increase one's sense of competence and subjugate others, aspiring to material possessions and wealth, and engaging in conspicuous consumerism. The third domain is reflections on past glory. This involves using a relatively high proportion of agentic words in nostalgic reflections, bringing to mind predominantly agentic objects when becoming nostalgic, and experiencing a strong boost in self-positivity after waxing nostalgic on agentic objects.

We also asked why narcissists rely so much on the agentic domain for finding meaning in life. Our answer was that this domain increases their self-worth and self-positivity, which itself is a source of meaning (Chap. 14 by Schlegel et al., this volume). An alternative explanation, though, is that narcissists use strategically the agentic domain as a way to compensate for their inner fragility. The evidence on materialism is generally consistent with this explanation. Nevertheless, more research is required to evaluate rigorously this alternative explanation. Also, research will need to zero in on whether inner fragility underlies the compensatory tactics of grandiose narcissists or of vulnerable narcissists.

Narcissists appear to “put all their eggs in the same basket” in their pursuit of life meaning: They capitalize on the agentic domain. Are they capable of diversifying

their strategies and pursuing meaning not only in the agentic domain but also in the communal domain? Preliminary evidence suggests that narcissists can indeed be “rehabilitated,” as the narcissistic interpersonal style shows signs of flexibility. For example, after being primed with communal concerns (e.g., sharing a birthday or a fingerprint type with another person; Konrath et al. 2006), narcissists report lower levels of aggression toward another person. Also, after being primed with communal attributes, narcissists report higher levels of relational commitment (Finkel et al. 2009). Finally, after being self-affirmed, narcissists show increased desire for common and practical products (Thomaes et al. 2009).

In this chapter, we submitted a speculative agenda on the relation between narcissism and meaning, and we suggested avenues for future research. Although some forays into this relation have been made and are laudable, many gaps in our knowledge remain. The narcissistic quest for meaning entails numerous twists and turns, and it is certainly worthy of ardent empirical attention.

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Chapter 16

“But Wait, It Gets Even Weirder...”: The Meaning of Stories

Kate C. McLean and Sarah Morrison-Cohen

Nobody can bend your ear like Peter Webster. You know this if you have ever been to a family dinner at the Webster's. You know this if you have ever been in line behind him at the post office. You know this if you have ever showered next to him at the gym. His story repertoire contains a long line of hilarious mishaps that start with, “You’ll never believe this,” continue with, “But wait, it gets even weirder,” and end with, “Can you believe that?” He’ll spin a yarn about his east coast boarding school days, such as the time he drew the short straw and got Bruno, the Farting Horse, to ride in the show for parent-visiting day. He’ll lay one on you about San Francisco in the 1960s – perhaps the time his wife was on an acid trip and almost jumped out the window naked. Or the best stories – his sailing exploits – such as the time he found himself inexplicably naked and blind (he had lost his glasses), swimming frantically after his sailboat as it drifted off towards Alcatraz; or the time he sailed to Hawaii with some buddies and the food spoiled on day three of a 2 week trip, leaving them with only Snickers bars, tequila, and whatever they could pull out of the ocean. Peter’s stories are funny – they are absurd. Yet no matter how many times they have been trotted out around the dinner table, they never fail to draw a laugh (after some eye rolling), and they are always good to hear; one gets the impression that they are also always good to tell.

At this point, the reader might be asking, how does this relate to the topic at hand? How does a story about a flatulent horse relate to meaning in life? We want to make the case for our readers that Peter’s storytelling not only brings him great joy but also brings him the sense that his life has meaning. This meaning comes from the connection to others inherent in much of storytelling, from feeling the significance of having a story to tell that others hear and enjoy, and from the art of constructing a coherent self with our stories.

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Several years ago one of us coauthored a paper on two different ways of telling stories – to explain oneself and to entertain others (McLean and Thorne 2006). The argument we put forth was that much research on stories has focused on identity deep – that is, on how individuals craft and tell stories in the service of self-understanding and self-explanation, which often occurs in narrating episodes of conflict or challenge. Yet, a good deal of storytelling does not appear to be done for the purposes of this kind of explicit meaning-making but, like Peter’s stories, for the purposes of fun and entertainment, and we termed these stories identity light (McLean and Thorne 2006; see also Pasupathi 2006). In this chapter, we want to extend the argument that both kinds of stories are valuable to understanding meaning in life. We will detail the ways in which meaning may be derived from both kinds of narrative activities, but we will expend particular effort emphasizing the telling of stories for social connection and for fun and argue that identity light is a potent mechanism for having meaning in life.

Meaning in Life

As human beings we revel in our unique ability to contemplate the world with complexity and abstraction. Unfortunately, this remarkable skill comes with a heavy burden to bear. In seeing the world in all of its complexity humans are also capable of seeing the multiple meanings and possibilities of each and every stimulus and event. This lack of a singular meaning and the resultant choice in determining the “true meaning” of any given event leads to the experience of what Hirsh (2009) terms an “existential uncertainty” that must be reconciled. It is within this reconciliation that we find humankind’s pervasive need for a sense of meaning in life.

How then do we reconcile this uncertainty? The question of what constitutes meaning in life has plagued philosophers for centuries and humanity for so long that the question itself seems like an existential put-on. There are theorists, however, who have tackled the question of humankind’s reason for being, either through a literary, artistic, philosophical, or more recently a psychological lens.

In philosophy, Naturalism refers to those meaning in life theories that do not necessitate the existence of a God or soul (Metz 2002). Naturalism theories can be divided into two categories: *subjectivism*, in which meaning is a product of one’s subjective experience and beliefs about life and *objectivism* in which one must have the cognitive abilities sufficient for thinking beyond one’s own current state as well as engaging in meaningful and worthy goals (Metz 2002). Current philosophers generally adhere to objective naturalism theories, believing that a meaningful life must be observable and derivative of cognitive ability and action (Metz 2002). Researchers in the field of psychology, however, have focused on the subjective experience of meaning, interested instead in the feeling of having experienced meaning or a meaningful life (Hicks and King 2009). In fact, Hicks and

King (2009) posit that an objective definition of meaning in life is unnecessary as people appear to subjectively understand the feeling of meaning in life. These psychological theorists focus on either the pure experience of a meaningful life (Steger et al. 2009) or the motivation behind the need for such an experience of meaning in life (Baumeister and Vohs 2002; Heine et al. 2006; Hicks and King 2009; Park 2010).

While the experience of meaning in life may be subjectively judged, it appears to have objectively positive psychological outcomes for those who report experiencing it. For example, King and Hicks (2009) found that individuals with the highest subjective well-being appear to judge major events in their lives to be highly meaningful and trivial events to be of low meaning (King and Hicks 2009). In addition, experimentally manipulated variables such as affect, self-esteem, mortality salience, and social isolation have all been shown to result in changing appraisals of meaning in life (King et al. 2006; Stillman et al. 2009; Vess et al. 2009). This may be due to the fact the *search* for meaning is associated with lower well-being and more negative affect, especially at older ages (Steger et al. 2008), and this search may be prompted by negative experiences. Yet, the experience of the presence of meaning in life, defined as the understanding that life is important and oriented towards specific goals or purposes, is associated with more positive outcomes (Steger 2009). While recent research has provided insight into meaning in life judgments, less work has been done to look at the *mechanisms* by which people find meaning in their lives. In order to access the processes of searching for, and experiencing, the presence of meaning in life, we turn to storytelling, an almost omnipresent human activity (e.g., Bohanek et al. 2006; Fiese et al. 1999; Pasupathi et al. 2002, 2009; Rimé et al. 1991; Thorne et al. 2004).

The Stories We Tell Have a Story to Tell

Constructing a story of the self is a developmental accomplishment, the seeds of which begin in early childhood, with blossoms appearing by late adolescence, and fruit by emerging and young adulthood (McAdams 1993; see McLean 2008; McLean et al. 2007 for reviews). This narrative sense of self is a collection of stories about past experiences that a person utilizes to define who he or she is. That is, narrative identity emerges by engaging with the personal past and considering the implications of past events for current self-understanding and future directions.

This self-story is a product of one’s socialization into the structure of stories via culture and, primarily, via family (Fivush et al. 2005; see Fivush et al. 2006 for a review). Something that we put great emphasis on as a culture and as individuals is the importance of meaning. Indeed, in building this story of where we have been, who we are, and where we are going, we are engaged in an exercise

of meaning-making (Bruner 1990; Singer 2004). However, there are different ways of engaging in this exercise and, thus, different mechanisms for finding meaning, to which we now turn.

Storytelling as a Vehicle for Meaning in Life via Self-Understanding: Identity Deep

One of the primary uses of narrative is to make sense of the noncanonical (Bruner 1990). When something unexpected happens, particularly the unexpected that is challenging or difficult, stories help us to develop an explanation for what has happened. We can select details and shade experiences in ways that create coherence out of chaos. Similarly, some researchers in the field of meaning in life assert that this is when meaning-making occurs – in the face of chaos (Heine et al. 2006; Hirsh 2009; King and Hicks 2009; Park 2010). For example, Park (2010) argues that trauma or disruption provides the impetus for meaning-making to right the world, so to speak. Heine and colleagues (Heine et al. 2006) argue for a meaning maintenance model that is broader than a trauma model, in which any disruption in expectations results in actions to reaffirm one's sense of meaning or perceptions of how the world works. Interestingly, in Heine's model if meaning is disrupted in one domain, work to reaffirm one's meaning model can occur in another domain. Heine's model focuses on threats to meaning and argues that if one's sense of meaning is threatened in a relationship domain, for example, one may affirm meaning in a non-relational domain (e.g., achievement). Finally, consistent with narrative theorists (e.g., McAdams 1993), others emphasize that the appraisal of events is more important than what has actually happened, because it is the appraisal of whether or not the event is disruptive that will prompt meaning-making processes (e.g., deRoon-Cassini et al. 2009; Park 2010).

From a narrative perspective, engaging in meaning-making processes to make sense of challenging experiences is not only a central mechanism of identity development, but it is also associated with positive functioning. For example, individuals who are able to explore the meaning of past experiences to one's current identity, and resolve the negativity from those experiences, have higher well-being, maturity, and health (Pals 2006; King and Hicks 2009). From the meaning in life perspective, the *search* for meaning is often associated with poor psychological well-being (Steger et al. 2006a, b), but experiencing the *presence* of meaning is associated with higher psychological well-being (Steger et al. 2009). Similarly, from an Eriksonian identity perspective, Marcia (1987) showed that those in a stage of identity moratorium – exploring one's identity, but not yet having found or committed to an identity – are more anxious than those who have found an identity. Thus, identity deep may be associated with poor well-being during the search, but having explored and resolved past experiences to better understand the self is associated with positive well-being (Pals and McAdams 2004) and may be one aspect of the *presence* of meaning in life. But how else might one experience the presence of meaning in life? By telling stories about Bruno the Farting Horse.

Storytelling as a Vehicle for Meaning in Life via Connection: Identity Light

While there are various approaches to studying meaning in life, there is one clear thread of consistency across these approaches – meaning in life is derived from connections, especially to other people (Baumeister and Vohs 2002; Heine et al. 2006; Park 2010). Heine et al. (2006) stated that meaning occurs in connecting to others or by avoiding alienation, serving one of our basic needs – affiliation (McAdams 1988; Deci and Ryan 2000). Further, Hicks et al. (2010) showed that when social relations are threatened (e.g., by priming loneliness), individuals are strongly motivated to search for other sources of meaning (see also Steger et al. 2008). Thus, social relationships are a major source of meaning in life.

We argue that storytelling is a primary vehicle for connecting to others – in fact, storytelling done for connection, as opposed to self-understanding, provides meaning in the activity itself, which we term identity light. We defined identity light as a kind of entertainment- and other-oriented telling that capitalizes on turning trouble or personal faults into humorous stories, with the goal of creating fun, making others laugh, and feeling good (McLean and Thorne 2006). We have argued that one of the purposes of these light tellings is to connect with others without the risks of some identity deep tellings (McLean 2005; McLean and Thorne 2006). Indeed, telling fun and entertaining stories to connect with others carries less risk than telling an unformed story, which may risk rejection, or an emotionally laden negative story, which may make an audience uncomfortable (Thorne and McLean 2003; McLean and Morrison-Cohen 2013; Dindia and Allen 1992). This is not to say that these light stories do not contain conflict – being on a boat for 2 weeks with a bunch of guys with only Snickers bars and tequila is certainly trouble, but the trouble is likely what makes the story funny and entertaining (Labov and Waletsky 1967; McLean and Thorne 2006), as opposed to traumatic and difficult to tell or hear.

Indeed, the use of humor in identity light tellings may be critical to the benefits of such telling. For example, humor is thought to facilitate the maintenance and enhancement of close relationships (Lefcourt 2001), and those who report greater use of humor styles in which one’s humor is aimed at other’s amusement, the facilitation of relationships, and the reduction of interpersonal tension also report higher levels of well-being and lower levels of psychological distress (Frewen et al. 2008; Martin et al. 2003). Humor may be especially important for dealing with negative experiences. For example, the use of humor may help to create more objectivity and mastery over dire circumstances (e.g., Lefcourt 2001). Further, both experimental and descriptive work supports the idea that using humor in the face of distressing events can be effective at reducing emotional distress (Keltner and Bonanno 1997; Lefcourt et al. 1997; Martin 1998). Thus, some individuals may turn faults to foibles as a way of distancing the self from something painful. Yet others may embrace the variety of emotion in past experiences – positive and negative – as a way of acknowledging the existential absurdity of our existence, which would certainly put things in some perspective.

We argue that, for many, entertainment and humor-based storytelling is a pleasurable activity. The pleasure can come from capturing an audience, getting the timing just right, getting a laugh, or the simple warmth that comes from sharing with others. Indeed, disclosure is related to increased intimacy (Derlega 1993; Harvey and Omarzu 1997; Laurenceau et al. 1998) and positive affect (Hicks and Diamond 2008; Vittengl and Holt 2000), and Pasupathi (2007) has shown that the negative affect in a story lessens with subsequent telling experiences. Similarly, Hicks and King (2009) detail research showing that positive affect provides a sense of meaning in life, both eudemonic and hedonic, suggesting that meaning comes not just from making sense out of chaos but also from pleasure.

Of course, simply telling identity light stories is not enough for social connection. The success of the social connection may depend on the relationship, of course, but perhaps also the quality of the story. Is it truly entertaining? If there is trouble, is it resolved? Is there redemption to the Snickers story – is there a wonderful meal once the sailors reach Hawaii? Is it told with the audience in mind? Thus, there are skills in telling entertaining stories, skills that have not been clearly elucidated by narrative researchers (cf., Labov and Waletzky 1967).

Some of these skills may be related to individual differences in personality. For example, extraversion is associated with the frequency of storytelling and the enjoyment derived from it (McLean and Pasupathi 2006), but the individual differences in the art of storytelling have not yet been delineated (Bamberg 2011). Peter is a storyteller – he does it a lot, he is good at it, and he gets joy out of it. Part of this may be due to the fact that he is more extraverted than introverted (McLean and Pasupathi 2006), but there are likely other individual differences in the propensity to tell light or deep stories, as well in the profile of a storyteller for whom this activity brings meaning to life. In fact, one may argue that the reason Peter gets such meaning from telling these stories is that part of his *identity* is a storyteller (see Schlegel et al. 2009). Thus, in these moments of capturing and connecting to an audience, he is also enacting and validating his identity.

Beyond individual differences, the action of storytelling may be related to success with identity light. The stories we opened this chapter with are high-frequency occurrences. Peter has told these stories dozens, if not hundreds, of times over the course of his life. Retelling certainly aids in the connection, as the stories become familiar moments of connection within the family. But retelling likely also aids in the accomplishment of having the story to tell, especially the story that really “works.” Thus, there may be meaning in the practice of crafting the story and meaning in the sharing of a well-crafted story.

The skilled use of identity deep and light may also be related to what Pasupathi (2011) calls “narrative flexibility.” Knowing when to tell a story in a deep or a light fashion may depend quite a bit on one’s audience and one’s motivation with the audience. For example, Peter’s account of Bruno the Farting Horse is a hilarious story about family visiting day at his boarding school when he got the flatulent horse for the horse show put on for parents. While the story is an excellent identity light story of great hilarity, it can also be an identity deep story. It is also a story about the embarrassment of a little boy who was trying to please his hard-to-please

parents and failed. The identity deep story may be one that is shared one-on-one with his children in talking about the more serious aspects of his childhood but perhaps less appropriate over family dinner. Knowing when and how to share this story may be a skill that develops over time.

Indeed, there may be developmental implications of these processes. While Peter’s wife assures us that he has always been a hilarious storyteller, Peter may have honed his skills over time. While children can tell very funny stories, they may have more difficulty than adults in engaging in the *artful* storying of trouble to garner laughs. And, as mentioned above, knowing how to craft a given story for the right audience may be a flexibility that one hones with repeated telling and experience. Further, social connection is a primary motivation of older adults, compared to younger adults, and they may derive more social connection and pleasure from such stories (e.g., Pasupathi and Carstensen 2003). Indeed, the search for meaning declines with age, while the presence of meaning increases with age (Steger et al. 2009), so we may see associated trajectories with identity deep and light (see McLean 2008; Pasupathi and Mansour 2006), such that identity deep may be more of an emerging adult phenomenon as identity exploration is the primary task, and identity light may become more common as connection to others trumps self-exploration in older adulthood.

Multiple Paths to Meaning

Our aim in this chapter is to bring to the table of researchers who study meaning in life an emphasis on the normative and frequent activities in which humans engage so that we may see meaning as situated in the proximal settings of daily life. We emphasize that while the search for meaning may derive from disruption and trauma (Heine et al. 2006; Park 2010; Proulx and Heine 2006), the presence of meaning can be found in the quotidian (Hicks and King 2009).

We do not want to argue that identity light is better or worse than identity deep or even that these are mutually exclusive (see McLean 2005). Indeed, the reader might be forming a story in his or her mind of the deeper identity of Peter based on the few snippets of stories we have communicated. Thus, the self can be explained in the context of these light stories (McLean and Thorne 2006). Further, sometimes a traumatic identity deep story can be told with a laugh – indeed, that might be a good way to make an audience feel comfortable when disclosing a story with potentially heavier implications, such as Bruno the Farting Horse. Thus, the two meaning processes – making coherence out of chaos and connecting to others – can happen in the same story-telling context. Connecting to others may also come in the seemingly simple process of realizing one is significant to another person; that is, when someone laughs at your funny line and smiles at you – you exist! You matter to someone else, and that is meaningful. Further, while identity deep may be more explicitly about coherence making, identity light can also create coherence. Indeed, any action in which one displays the self is likely to be coherence-making. That is, one must be the same

person in whatever story one is telling or however one is telling it. Yet, we argue that identity deep is more self-laden and identity light is more connection-laden – that is, there are shades to these two manners of narrating the self, but they are not different colors and they both serve to create coherence, to bring meaning to one's life.

Yet, we argue that the light often gets short shrift in the study of meaning. As researchers, many of us appear drawn to the deep, the eudemonic, and the difficult to understand meaning. And there is a strong basis for this draw – it is important, perhaps critical, to understand chaos and ourselves at deeper levels. But it is also important, and perhaps critical, to understand light moments of laughter around the kitchen table. Thus, we argue that storytelling has a unique place in the study of meaning in life, as stories can provide both a sense of coherence and connection – perhaps the two primary drives for having meaning in life.

Many of those who study meaning in life discuss the importance of having purpose in order to experience meaning (Baumeister and Vohs 2002; Deci and Ryan 2000; deRoon-Cassini et al. 2009; Hicks and King 2009; McAdams 1988; Singer 2004). McAdams (e.g., 1988) argues that purpose comes from the narrative level of personality – that is, it is constructing a coherent story about where we have been, where we are, and where we are going that provides us with a sense of purpose. Yet purpose may not only come from *having* the story but also from *telling* the story. Telling stories – being the person in the room who commands the floor for those few minutes of drama and laughter – provides a sense of purpose, a role to play, a role that brings the teller and the audience pleasure and feelings of belonging, of being *significant* to others. For Peter and his family, storytelling is the primary shared activity of the family, and it is the mechanism for connection within the family.

Yet to put a base note under the treble clef of our argument about identity light, we dig deeper into the question of purpose and ask if storytelling is only about proximal connection. Interestingly, Peter has done a good job at “giving” these stories to his children such that the kids already recount the stories to much laughter when Peter is not around. In fact, we expect that as any good family with Irish blood does, Peter’s funeral will be a story-fest. So there must be another level of importance to these stories beyond the context of Peter’s storytelling, another level of purpose.

One argument is that stories not only provide continuity for the self but also for others (Fivush et al. 2008; Pratt et al. 2010). Indeed, telling Peter’s stories creates a sense of continuity across generations, a place for his children to locate themselves in the story of a family (Fivush et al. 2008). That is, a father’s story becomes a son’s story – where the son has come from, where he might be going. In discussing a study on intergenerational narratives, Fivush (2007, p. 51) writes, “These findings point to the critical importance of placing one’s own life in the context of familial history that provides a framework for understanding one’s self as a member of a family that extends before one’s birth and provides the stage on which one’s individual life will be played out. One’s own story is embedded in the stories of others in the past and in the present.” Thus, these stories serve a purpose for the teller – providing him with a sense of identity and meaning – and also for the audience – providing that audience with a sense of place, identity, and meaning.

Another argument is that these stories, passed on to the next generation, serve the needs of generativity (Erikson 1959; McAdams 1988; and se de St. Aubin, Chap. 19). McAdams (1988) argues that generativity answers the “what’s next” question in conceptualizations of identity. He argues that the future is as important as the past and present in constructing identity and that future scripts focus on generativity. Indeed, identity construction serves the purpose of finding generativity – it is in the narrative construction that one “resolves” identity by knowing where one is going and even how one will end (McAdams and de St. Aubin 1992). One’s hopes for the future are a part – a big part – of the current, present self (e.g., McAdams 1988, 2001).

In linking these thoughts about generativity to the literature on meaning in life, there is a clear connection between the two. One explanation for our intense need for generativity, as well as for meaning, is the fear of mortality (Heine et al. 2006; McAdams 1988). “At a much deeper level of analysis than power and intimacy motivation, and even beneath Freud’s Eros and Thanatos, lies a solitary human fear. The fear of death is the mainspring of human activity, the prime mover which activates from below all other motives which are in some way derivatives of it” (McAdams 1988, p. 256). Thus, at the deepest, and perhaps darkest, level, these stories may work to address the desperate and deep-seeded fear of death and the potential for nonexistence. The great uncertainty of our existence creates a need to confirm that existence, and drawing a response from someone in telling a story is a way to confirm that one is here. In telling a story, one can argue: I come from a history of people and stories, and there is a lasting impact of these people (and stories), which will continue to be shared even after I am gone – thus, I will live on.

Thus, at that Irish wake, Peter’s family will create meaning with the connections that his stories bring, the stories that tie us to each other. When we are tied to others, then we are something larger than ourselves, and we experience the feeling of meaning. Peter has developed meaning in life by attaining some special significance in sharing these stories with others and experiencing the pleasure and connection that such sharing brings. Thus, meaning in life does not only derive from disruption or trauma but also from the joy-filled daily activities of spinning a yarn to create the thread of coherence and the joy of the absurd. In that way the light is actually deep. “Can you believe that?”

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Chapter 17

Nostalgia Bolsters Perceptions of a Meaningful Self in a Meaningful World

Jacob Juhl and Clay Routledge

Every year companies make billions of dollars by marketing and selling products that offer people a way to connect to their past. If you turn on the television, go to the cinema, or head to the local shopping mall, you are bound to find opportunities to travel back in time. Consumer critics lambast writers, directors, designers, and corporations for recycling products and media from the past, arguing that it shows a lack of creativity, innovation, or originality. Perhaps it is easier to turn a profit by reimagining products from the past than creating something completely new. However, consumers seem to love it. Nostalgia is big business.

But why is nostalgia so seductive? In the present analysis, we argue that nostalgia is an important means by which people find and maintain a sense of meaning. Specifically, we assert that nostalgia provides two distinct types of meaning. First, nostalgia bolsters a sense of personal meaning in life (the self as meaningful). Second, nostalgia helps maintain the feeling that the world outside of the self is meaningful. On the pages that follow, we present the case for nostalgia as a meaning-making resource. We begin by briefly considering the history of the study of nostalgia, highlighting nostalgia's journey from being conceptualized as a disease to being recognized as a psychologically healthy and beneficial activity. We then consider contemporary research showcasing the positive effect of nostalgia on psychological states which are important for finding meaning in life (i.e., positive mood, self-esteem, and social connectedness). Subsequently, we review an emerging line of research focused on examining the connection between nostalgia and meaning. We conclude by discussing the future of nostalgia research. Specifically, we stress the need for intervention-oriented research on nostalgia as a meaning resource and ask important questions relating to the limits of nostalgia's capacity to elevate meaning.

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From Past to Present: The History of Nostalgia

The New Oxford Dictionary (1998) defines nostalgia as a “sentimental longing for the past.” As we will soon discuss in detail, the present day analysis of nostalgia treats this emotional experience as healthy and personally valuable. However, this positive view of nostalgia was hard won. The term “nostalgia” was first introduced by the Swiss physician Johannes Hofer (1688/1934) to label the adverse psychological and physical symptoms displayed by Swiss mercenaries working in foreign lands. Hofer viewed nostalgia as a medical or neurological disease characterized by symptoms such as persistent thinking of home, weeping, anxiety, irregular heartbeat, anorexia, insomnia, and even smothering sensations (McCann 1941). He postulated that this disease was caused by “the quite continuous vibration of animal spirits through those fibers of the middle brain in which impressed traces of ideas of the Fatherland still cling” (p. 384). The physician Scheuchzer (1731) also perceived nostalgia as a sickness but proposed that it was the result of “a sharp differential in atmospheric pressure causing excessive body pressurization, which in turn drove blood from the heart to the brain, thereby producing the observed affliction of sentiment” (cited in Davis 1979, p. 2). Scheuchzer believed this explanation could account for the purportedly high incidence of nostalgia among Swiss mercenaries who had to leave the familiarity of their Alpine homes to fight on the plains of Europe. In a further attempt to explain what was believed to be a disease largely confined to the Swiss, physicians proposed that nostalgia was caused by the unremitting clanging of cowbells in the Alps, which damaged the eardrum and brain (Davis 1979). In short, throughout the seventeenth and eighteenth century, nostalgia was viewed as a neurological disease.

By the early nineteenth century, the conceptualization of nostalgia as a neurological disease was changing. A more psychological viewpoint took hold, and nostalgia started to be considered as a form of melancholia or depression (Rosen 1975; McCann 1941). This view of nostalgia as a mental illness persisted for much of the twentieth century. Scholars in the psychodynamic tradition described nostalgia as an “immigrant psychosis” (Frost 1938, p. 801), a “mentally repressive compulsive disorder” (Fodor 1950, p. 25), and “a regressive manifestation closely related to the issue of loss, grief, incomplete mourning, and, finally, depression” (Castelnuovo-Tedesco 1998, p. 110). It was not until the latter part of the twentieth century that the conceptualization of nostalgia started to change once again. When nostalgia was perceived as a form of depression, it was considered to be closely related to, if not synonymous with, homesickness. However, research focusing mostly on homesickness began to suggest that nostalgia was something distinct from homesickness (Davis 1979). Whereas homesickness is associated with negative emotions and states (e.g., sadness, loneliness), nostalgia tends to be associated with warm and positive feelings (see Wildschut et al. 2006). Interestingly, however, while research on homesickness began to flourish, research on nostalgia came to a halt. And it was not until marketing and consumer psychology researchers began considering the power of nostalgia in consumer behavior that the construct returned to the empirical

scene. However, this research did little to elucidate the psychology of nostalgia. Instead, it focused on nostalgia as predictive of preferences for products connected to one's past (Holak and Havlena 1998; Schindler and Holbrook 2003). Based on this consumer research, as well as studies suggesting that nostalgia is not akin to homesickness, we can surmise that nostalgia is not a neurological disease or mental illness. Yet, this research does not provide any specifics as to what nostalgia is (the content of nostalgia) or what it does for people (the functions of nostalgia). In recent years, however, nostalgia has regained the attention of psychologists, and in particular, social psychologists. Now, answers to questions regarding the experience of nostalgia and its functionality are emerging.

Nostalgia Reloaded

In order to consider nostalgia as a meaning-making tool, we must first consider recent research that contradicts previous assertions that nostalgia is problematic and establishes that nostalgia provides positive psychological states that are associated with meaning in life. In 2006, Wildschut and colleagues presented the first systematic empirical investigation of nostalgia. They began their analysis by analyzing the content of people's written accounts of nostalgic experiences. They observed that although nostalgic narratives featured some negative emotions (e.g., sadness), they were largely characterized by positive emotional experiences. On average, positive emotion-related words occurred three times as frequently as negative emotion-related words in these narratives. In addition, the narrative sequence of these nostalgic accounts tended to follow a redemptive pattern in which negative feelings progressed into positive feelings. These analyses further revealed that nostalgia is both a self-relevant and highly social experience. Specifically, the self was typically given center stage as the protagonist in these nostalgic narratives, but, in most cases, close others (e.g., parents, spouses, friends) were prominently featured. In sum, nostalgia is a primarily positive emotional experience that is both focused on the self and close relationships.

Next, Wildschut and colleagues (2006) began considering the potential functions of nostalgia. Based on the results of the content analysis of nostalgia narratives, they proposed that nostalgia serves three psychological functions (see also, Sedikides et al. 2004). Specifically, these researchers hypothesized that nostalgia increases positive mood, bolsters self-esteem, and provides feelings of social connectedness. They then conducted several experiments to test whether nostalgia serves these functions. In these experiments, nostalgia was manipulated by asking participants to reflect on and spend a few minutes writing about an experience they are nostalgic about. Participants in the control conditions were given similar instructions but were instead asked to reflect on an ordinary autobiographical experience. Concerning positive affect, two studies found that nostalgia, compared to the control condition, increased positive mood while it had no effect on negative mood. Concerning

self-esteem, two studies similarly found that nostalgia increased state self-esteem. More recent research also observed that nostalgia increased the accessibility of positive self-attributes and reduced the use of self-serving attributions (Vess et al. [in press](#)). Concerning social connectedness, three studies (Wildschut et al. 2006) showed that nostalgia increased feelings of being “loved” and “protected,” decreased attachment-related avoidance and anxiety, and increased feelings of interpersonal competence.

Taken together, contemporary research on nostalgia has found that nostalgia is a self-relevant but highly social reflection on the past that is generally positive in tone. Engaging in nostalgia increases positive affect, self-esteem, and feelings of social connectedness. Drawing from this initial research as well as other recent theory on the temporal self (Routledge and Arndt [2005](#)), a fourth function of nostalgia was proposed. Specifically, researchers have postulated that nostalgia provides a sense of personal meaning.

The Meaning-Making Capacity of Nostalgia

As was the case with the previously discussed functions of nostalgia, the exploration of a potential meaning-providing function was inspired by content analysis of nostalgic narratives (Wildschut et al. [2006](#)). This analysis also revealed that nostalgic narratives often involve momentous (i.e., personally meaningful) life events (e.g., graduations, weddings). In addition, each of the three established functions of nostalgia has been linked to a sense of meaning in life. Specifically, research has shown that positive affect (King et al. [2006](#)), self-esteem (Greenberg et al. [2008](#)), and social connectedness (Hicks et al. [2010](#); Lambert et al. [2010](#)) positively predict meaning. Thus, it seems reasonable to expect that nostalgia bolsters meaning.

The initial examination of a meaning-providing function of nostalgia began by turning to terror management theory (TMT; Greenberg et al. [1986](#)). According to TMT, people need to have feelings of personal meaning in order to manage existential concerns about death. Specifically, the theory notes that although humans are motivated to preserve their lives, they also are acutely aware of their inevitable death. This awareness has the potential to produce terrifying anxiety. However, the theory further asserts that people are able to manage this anxiety by attaining feelings that their existence has meaning and significance. Supporting TMT, numerous studies have shown that experimentally heightening the awareness of death (mortality salience) increases investment in socially and culturally based sources of personal meaning (e.g., family, religion, social identities). Additionally, these sources of meaning reduce the accessibility of death-related thoughts (Greenberg et al. [2008](#)) and help maintain psychological well-being when death thoughts are accessible (e.g., Routledge and Juhl [2010](#); Routledge et al. [2010](#)).

Drawing on the TMT framework, Routledge and Arndt ([2005](#)) reasoned that if nostalgia provides personal meaning, then it should help manage concerns about death. Routledge et al. ([2008](#)) tested this possibility in three experiments. In the first

study, these researchers assessed whether being a nostalgia-prone person prevented the salience of mortality from reducing feelings of meaning in life. Nostalgia proneness was measured (e.g., “How often do you engage in nostalgia?”) and then death was primed with a standard mortality salience manipulation (Rosenblatt et al. 1989). Specifically, those in the mortality salience condition answered two open-ended questions about their own death (e.g., “Briefly describe the emotions that the thought of your own death arouses in you”), while those in the control condition answered two parallel questions about another aversive topic. Lastly, participants completed a measure of perceptions of meaning in life (e.g., “All strivings in life are futile and absurd,” “Life has no meaning or purpose”; Kunzendorf and Maguire 1995). Results showed that mortality salience significantly decreased perceptions of meaning in life but only for those with low, not high, nostalgia proneness.

In a second study, Routledge and colleagues (2008) examined whether nostalgia can similarly mitigate the effects of mortality salience on the increased accessibility of death thoughts. As with the previous study, they measured nostalgia proneness and manipulated mortality salience. Death thought accessibility was then assessed with a word-stem competition task (Greenberg et al. 1994). Specifically, participants completed a number of word fragments. Some of these words could be completed with death or non-death-related words (e.g., COFF_ _ could be COFFIN or COFFEE). The more fragments completed with death-related words, the greater participants’ death thought accessibility. Results showed that mortality salience increased death thought accessibility but only for those with low, not high, nostalgia proneness. In a third study, these researchers replicated this pattern but manipulated, instead of measured, nostalgia (as previously described, Wildschut et al. 2006). Participants who were assigned to conjure up nostalgic thoughts and feelings did not experience an increase in death thought accessibility that was otherwise observed after mortality salience.

A second series of three studies further investigated nostalgia’s ability to help manage existential concerns about death (Juhl et al. 2010). In all three studies, these researchers measured nostalgia proneness and manipulated mortality salience as previously described. In the first study the dependent measure was participants’ investment in a particular ingroup. This was used because social identities provide meaning and previous TMT research has shown that people display increased investment in their social identities when meaning is needed after mortality has been made salient (Greenberg et al. 2008). Specifically, participants read and evaluated an essay that criticized their university identity (North Dakota State University). As in previous research, mortality salience was expected to decrease positive reactions to an essay criticizing one’s ingroup. However, if nostalgia protects against death concerns, this effect should be mitigated among nostalgia-prone participants. This hypothesis was supported. Mortality salience increased participants’ investment in their university identity (decreased essay evaluations) for those with low, but not high, nostalgia proneness.

In a second experiment (Juhl et al. 2010), death anxiety was measured as the dependent variable in order to directly assess whether nostalgia can prevent heightened death awareness from causing death anxiety. As predicted, mortality salience

increased death anxiety for low, but not high, nostalgia-prone participants. In other words, nostalgia keeps death thoughts from turning into death fears.

In a final experiment, they assessed state feelings of nostalgia as the dependent measure in order to determine if nostalgia-prone participants actually turn to nostalgia in order to manage heightened death thoughts. Results showed that high, but not low, nostalgia-prone participants became more nostalgic after mortality salience. Thus, people who regularly wax nostalgia utilize nostalgia when grappling with death thoughts.

Taken together, these six studies (Juhl et al. 2010; Routledge et al. 2008) unequivocally show that nostalgia helps manage concerns about death. However, they do not demonstrate that nostalgia provides meaning in the absence of death-cognition. Thus, further research was needed to establish that nostalgia provides meaning outside of a terror management context.

Routledge and colleagues (2011) conducted a series of studies to examine more generally the meaning-providing function of nostalgia. First, in this research, two studies examined the basic relationship between nostalgia and personal meaning. These researchers proposed that if nostalgia provides perceptions of meaning in life, then those who are nostalgia prone should have greater perceptions of life as meaningful. In the first study, American undergraduate participants completed three scales. First, they completed a measure of nostalgia proneness (Routledge et al. 2008). Then, they completed two measures of meaning (e.g., "My personal existence is purposeful and meaningful," "I have a good sense of what makes my life meaningful"; McGregor and Little 1998; Steger et al. 2006). Results revealed that nostalgia proneness was positively and significantly correlated with both measures. In a second study, Dutch nationals (ranging in age from 10 to 71) completed an online study that examined music-engendered nostalgia. Previous research had demonstrated that bringing to mind or listening to songs from the past can evoke nostalgia (e.g., Barrett et al. 2010). Thus, in this study, participants were asked to reflect on their favorite song and listen to popular songs. They also rated how nostalgic each song made them feel and how much each song made them feel that life was worth living (as an indicator of meaning). Results showed that across all age ranges there was a positive and significant correlation between how nostalgic a song made participants feel and how much meaning they derived from the song.

Routledge and colleagues then conducted a study to determine the effects of experimentally induced nostalgia on perceptions of meaning in life. If nostalgia provides meaning, then inducing nostalgia should increase perceptions of meaning. To examine this hypothesis, nostalgia was manipulated with song lyrics. Specifically, in a pre-experimental session, participants listed the names of three songs that made them feel nostalgic. Before participants returned to the lab for the experimental session 2 weeks later, they were randomly assigned to a nostalgia condition or a control condition. Then, in the experimental session, those in the nostalgia condition were asked to read the lyrics of a song they had previously listed as nostalgic. Those in the control condition were yoked to a participant in the nostalgia condition and read

the same lyrics as this person (i.e., control participants did not read a song that they had previously indicated was personally nostalgic). Finally, participants completed a measure of meaning in life (Steger et al. 2006). Results revealed that those in the nostalgia condition were more nostalgic (as indicated by a manipulation check), and importantly, they evidenced higher levels of meaning. Further, the effect of the song lyric condition on meaning was mediated by state nostalgia (the manipulation check). Thus, this study experimentally demonstrated that feelings of nostalgia increase perceptions that one's life has meaning.

After providing direct evidence that nostalgia increases meaning in life, Routledge and colleagues (2011) reasoned that nostalgia might also help people navigate situations that threaten the meaningfulness of their existence. They conducted two studies to explore this possibility. In the first study, they threatened meaning and then measured state nostalgia. Specifically, participants were assigned to a meaning threat or a no meaning threat condition. Those assigned to the meaning threat condition read a short passage of a philosophical essay that highlighted the insignificance of human life (e.g., "What is 68 years of one person's rat-race compared to five billion years of history? We are no more significant than any other form of life in the universe"). Those assigned to the no meaning threat condition read a philosophical essay that discussed the limitations of computers. Pilot data showed that the meaning threat essay undermined perceptions of meaning. Finally, participants completed a measure of state nostalgia (Wildschut et al. 2006). Results showed that participants who read the meaning threat essay were more nostalgic than those who read the computer essay. This study thus demonstrated that people turn to nostalgia when meaning is threatened. However, does nostalgia actually help people navigate threats to personal meaning?

To examine the compensatory power of nostalgia, Routledge and colleagues (2011) conducted a study assessing whether nostalgia can reduce defensive reactions to a personal meaning threat. Specifically, they manipulated nostalgia as previously described (nostalgia vs. control; Wildschut et al. 2006) and then manipulated meaning by assigning participants to read the meaning threat or no meaning threat essays used in the previous study. Finally, participants evaluated the essay they had read. More negative evaluations reflect more defensive reactions to the essay. Results showed that the participants displayed more defensive reactions to the essay that threatened meaning. However, this effect was only significant in the non-nostalgic condition. In other words, nostalgia compensates for threatened meaning as it mitigated the need to defensively respond to a meaning threat.

Routledge and colleagues (2011) furthered their analysis of the meaning-making capacity of nostalgia by investigating the potential for nostalgia to be used as an intervention to improve the psychological well-being of those who lack a sense of meaning in life. Meaning in life is a strong predictor of psychological well-being (King and Napa 1998; Low and Molzahn 2007; Steger and Frazier 2005; Zika and Chamberlain 1992). Thus, if nostalgia provides personal meaning, it may lead to improvements in well-being among those with meaning deficits. To start evaluating this hypothesis, Routledge and colleagues conducted an experiment in which they

measured trait levels of personal meaning and then manipulated nostalgia (nostalgia vs. control; Wildschut et al. 2006). Finally, vitality (feeling alive and energized) was measured. Vitality reflects eudaemonic well-being and correlates with other general measures of well-being (e.g., satisfaction with life; Ryan and Frederick 1997). Results revealed that nostalgia increased vitality for participants who lacked perceptions of personal meaning. Next, Routledge and colleagues (2011) conducted a study to assess whether nostalgia can reduce stress reactions among people with low levels of meaning. As in the previous study, they measured perceptions of meaning and manipulated nostalgia. Next, they employed an established laboratory stress paradigm in which participants engaged in a mock job interview and performed challenging mental arithmetic in front of an audience (the Trier Social Stress Test; Kudielka et al. 2007) and then assessed subjective stress levels in response to the stressor task. As predicted, those with low levels of personal meaning experienced increased levels of stress after the stress test. However, nostalgia mitigated this effect. In other words, nostalgia prevented those who lacked perceptions of meaning from experiencing increased stress reactions. Taken together, these final two studies showed that nostalgia interventions can help improve well-being for those with deficits in meaning.

In sum, a number of studies have indicated that nostalgia provides perceptions of meaning in life. Nostalgia not only increases feelings of meaning, but it also helps people navigate situations that threaten meaning, improves well-being, and reduces stress for those who lack meaning. Thus, in addition to positive affect, self-esteem, and feelings of social connectedness, nostalgia functions to provide feelings of meaning in life.

Further Exploring the Meaning Making Capacity of Nostalgia: Using the Past to Make Sense of the World

The findings just discussed showcase nostalgia as a resource that people can utilize to bolster a sense of personal meaning in life. That is, nostalgia bolsters perceptions that the self has meaning (i.e., my life is meaningful or significant; Frankl 1956/2006; King and Napa 1998; Steger 2009). However, as other chapters in the current volume highlight, there are many ways to conceptualize the construct of meaning. In addition to being construed as a characteristic of the self, meaning can refer to feelings that the world outside of the self makes sense (i.e., meaning as a characteristic of the world; Berger and Luckmann 1967; Cantril 1941; Heine et al. 2006). A world that makes sense is a place in which objects exist to serve a purpose, events happen for a reason, there are expected relationships between events and objects, events have clear causes and effects, and people get what they deserve. A world that makes sense gives people an epistemic base upon which they can manage uncertainty (Kahneman and Tversky 1982; Kaschak and Maner 2009) and maintain a sense of control (Rutjens et al. 2010). Furthermore, being able to make sense of the world is important

for managing stressful situations that can challenge people's sense of reality (Janoff-Bulman 1992; Updegraff et al. 2008). Finally, making sense of the world may be a critical first step toward perceiving one's self as meaningful. For example, Vess (Chap. 21) asserts that in order for people to have feelings of personal meaning, they need to perceive that there is a coherent and predictable reality in which behavioral standards of significance can be understood (see also Sullivan et al. Chap. 2; Becker 1971, 1973). With this issue in mind, the authors of the present chapter sought to further explore the meaning-making capacity of nostalgia by testing if, in addition to serving a self-oriented existential function, nostalgia also helps people make sense of the world (Juhl and Routledge 2011). More specifically, in addition to making one's self feel meaningful, can nostalgia engender perceptions that the world is meaningful?

Juhl and Routledge (2011) were inspired to test nostalgia as a sense-making resource by anthropological and sociological theoretical perspectives (Boym 2001; Davis 1979; Stewart 1988). These perspectives view nostalgia as a reaction to anxiety and uncertainty caused by rapid social change. When waxing nostalgic, people often talk about the good old days when the world was simple and understandable and when life seemed more fair (Davis 1979). Furthermore, nostalgic reflections are not just about the self (Wildschut et al. 2006). They are about the broader social world and expectations and beliefs about how the world works or at least should work (Davis 1979). Thus, nostalgia may serve a sense-making function, helping people cope with a constantly changing world in which events seem unpredictable and difficult to understand, expectations are violated, and life outcomes seem unjust. Juhl and Routledge (2011) conducted a series of experiments to test this possibility.

One way to make sense of the world is to view it as a just place where people get what they deserve (Lerner 1980). Juhl and Routledge (2011) thus hypothesized that if nostalgia helps people make sense of the world, threatening just world expectations would increase nostalgia. To test this hypothesis, a study was conducted in which participants read an ostensibly true story about two employees (Dan and Brian) who were competing for a job promotion. The story made it clear that Dan was more qualified and deserving of the promotion. So in a just world, Dan would get the promotion. In the experimental condition, just world expectations were threatened by informing participants that Brian, instead of Dan, received the promotion. In the control condition, participants were informed that Dan (the deserving employee) received the promotion. Next, participants completed a state measure of nostalgia (Zimbardo and Boyd 1999). Consistent with the predictions, those in the threat condition reported significantly higher levels of nostalgia. In another study examining nostalgia and the need for a just world, participants engaged in the nostalgic or control reflection task previously discussed (Wildschut et al. 2006) and were then given the opportunity to assert how severe a moral transgressor should be punished. Punishing people who violate moral expectations helps preserve the feeling that people get what they deserve. In other words, greater levels of punishment reflect a greater desire to enforce justice. In line with predictions, participants in the nostalgia condition

indicated significantly less severe punishment for the moral transgressor than control participants. In sum, people turned to nostalgia when the idea that the world is just was threatened and inducing nostalgia decreased the need to engage in justice-seeking behavior.

Juhl and Routledge (2011) then sought to more directly examine whether nostalgia increases perceptions that the world is meaningfully structured. To do this, they manipulated nostalgia (nostalgia vs. control) as previously described (Wildschut et al. 2006) and then measured the extent to which participants felt that life is structured and predictable (e.g., "I feel consistency in my life"). As predicted, nostalgia increased perceptions of structure.

With direct evidence that nostalgia provides a sense that the world is meaningfully structured, Juhl and Routledge (2011) next considered the possibility that nostalgia might reduce the need to further make sense of the world. In this study, they manipulated nostalgia as before (nostalgia vs. control; Wildschut et al. 2006) and then measured the desire to make sense of the world by assessing the extent to which participants sought a causal reason for a seemingly senseless crime (Landau et al. 2004). Specifically, after the nostalgia manipulation, participants read an ostensibly true news story about a senseless crime and were given the opportunity to choose additional articles to read about this story based on quotes. Some of these quotes suggested that the crime had a specific cause (and thus was not senseless). As hypothesized, participants in the nostalgia condition chose significantly fewer quotes implying that the crime had a cause. That is, nostalgic participants had less of a desire to make sense of the crime than non-nostalgic participants.

Juhl and Routledge (2011) conducted one final study to examine the hypothesis that if nostalgia helps people make sense of the world, then it should make them more tolerant of senseless stimuli. To test this hypothesis, participants were randomly assigned to view an absurd (Rene Magritte's *The Son of Man*) or representational (John Constable's *Landscape With a Double Rainbow*) art piece with the expectation that they would have to explain the meaning of the art (see Proulx et al. 2010). While the objects in the representational piece were structured in meaningful and expected ways, the objects in the absurd piece were not (e.g., an apple hovering in front of a man's face). After studying the art, participants were assigned to a nostalgia condition or a control condition as previously described (Wildschut et al. 2006). Participants were then shown the art piece that they previously saw and were asked to evaluate it (e.g., "How much do you like this piece of art?"). Results revealed that participants liked the representational piece more than the absurd piece. However, this effect was only significant in the non-nostalgic control condition. In other words, nostalgia increased participants' tolerance for senseless stimuli.

Taken together, these studies provide compelling evidence that nostalgia increases perceptions that the world is meaningful. People turn to nostalgia when the meaningfulness of the world is undermined. In addition, nostalgia increases perceptions of a meaningfully structured world, decreases the need to make sense of the world, and increases tolerance for senseless stimuli.

Concluding Thoughts: Moving Forward with Nostalgia and Meaning

The findings summarized thus far provide compelling evidence that nostalgia is a psychologically beneficial activity. Nostalgia helps give people perceptions of meaningful lives in a meaningful world. However, numerous questions regarding the functionality of nostalgia remain. For example, how might nostalgia work among clinical populations? Meaning in life has long been tied to mental health problems. For instance, the absence of meaning is a predictor of depression (Wong 1998) and an antecedent of suicide (Harlowe et al. 1986). Additionally, Frankl (1946) argued that the pain of meaninglessness and an inability to find meaning could lead to negative health-related behaviors such as excessive drinking, drug abuse, and problematic gambling. In support of this assertion, both excessive drinking (Marsh et al. 2003; Orcutt 1984; Waisberg and Porter 1994) and drug abuse (Padelford 1974) have been linked to meaning in life deficits. Considering that nostalgia bolsters meaning and mitigates the effects of low meaning on well-being and stress, might a nostalgia-oriented clinical intervention be useful in the treatment of illness related to a lack of perceived meaning in life? The current analysis suggests that the answer to this question is yes, and thus future research is needed to explore this possibility.

That being said, when considering the potential therapeutic value of nostalgia, it is important to note that none of the research examining the psychological functions of nostalgia has been conducted using clinical samples. Therefore, another possibility is that nostalgia would not have the same beneficial effects for people suffering from mental illness. In line with this possibility, recent research further examining the social function of nostalgia has observed that in the case of romantic relationship-oriented outcomes, nostalgia only serves a positive social function (i.e., increased relationship satisfaction and desire) among individuals low in attachment-related avoidance (Juhl et al. 2012). For participants high in attachment-related avoidance, nostalgia actually had a detrimental effect (i.e., decreased satisfaction and desire). This effect can be understood by considering the cognitive landscape of avoidant attachment. People high in avoidance possess negative cognitions and emotions about relationships (Hazan and Shaver 1987). Consequently, nostalgia may not be a positively valenced reflection for these people. Instead, nostalgia may bring to mind negative thoughts about relationships, thus perpetuating current negative feelings. Similarly, people with chronically negative schemas about the self and the world (i.e., depressed individuals) may also find nostalgia to be an unpleasant exercise. For example, for depressed individuals, even if nostalgia is a relatively pleasant experience, it is possible that it would do little to repair their negative mood. In fact, research suggests that positive memory recall does not lead to positive mood among depressed individuals (Joormann et al. 2007). Future research is needed to examine the utility of nostalgia among diverse populations as well as at varying levels of individual differences that may greatly influence the cognitive and affective processes involved in nostalgia. The current literature showcases many positive outcomes of nostalgia. However, much more work is needed to discover the full potential and limits of nostalgia in the meaning-making enterprise.

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Chapter 18

Hardiness as the Existential Courage to Grow Through Searching for Meaning

Salvatore R. Maddi

This chapter elaborates on stressful circumstances as ubiquitous experiences in living. To have a good life, therefore, it is essential to be able to perceive the stresses accurately (rather than deny and avoid them) and be able to do the hard work of turning them from potential disasters into growth opportunities. This is the direction of a meaningful, fulfilling life. What is needed to bring this about is existential courage. The theorizing and research concerning personality hardiness supports it as an expression of existential courage.

The Inherently Stressful Nature of Living

According to existential psychology, life is by its nature a continuously changing and therefore stressful phenomenon (Frankl 1963; Graber 2004; Kierkegaard 1954; Maddi 1996, 2004a; May et al. 1967). A major source of this stressful change is the ongoing developmental process. Development begins with the birth trauma (Rank 1929), when we are pushed out of our mother's womb, into an environment with bright lights and loud noises, and are slapped on the back by the physician, so that we have to begin breathing for ourselves. As the days go on, we must learn to eat with our mouths, recognize the words the people around us are using to communicate with us, accept the regulations of sleeping and waking, and cry when we need something. Just as we are getting a bit more socialized, we must begin regularly leaving the home into which we were born, in order to start schooling. We cry when our mothers drop us off at the unfamiliar environment and find ourselves interacting with peers and teachers we know nothing about. The rules and regulations are new

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to us, and we must figure out how to behave, who to be friendly with, and what to learn. This process of change continues through middle and high school and leads to the requirement that we consider what our adult lives will be like. What kind of career will we have, who will we date, and what does this all mean now that we are becoming more distant from our families of origin? Will we go to college, or not? If we go, what shall we major in, and do we work on finding someone to partner with in establishing a family of reference? Who are we, anyway? Then, once we have started a career, and a family of reference, we need to get involved in taking care of our spouses and helping our children go through this entire process of development. And, as we get even older, we struggle to know how to stay healthy, how to help significant others whose health is failing, and what to do to prepare for our inevitable deaths and that of those around us.

As if these developmental stressors were not enough, there are also stressful megatrends imposed on us by changes taking place in our societies and environments. Examples that we have encountered in our time include the breathtakingly rapid technological advances that have led to our telecommunications industry, the related shift toward an information industry, the outsourcing of jobs abroad, shifts in requirements of job performance, economic downturns, and the threat of global warming. It seems to many people that nothing is stable and predictable anymore.

The Need for Existential Courage in the Decision-Making Process

According to existential positions (Frankl 1963; Kierkegaard 1954; Maddi 1996, 2004a), the changing (and therefore stressful) nature of living requires that we continually make decisions as to what we think and do with regard to interacting with the world. Specifically, existentialists emphasize in this the interaction with others and social institutions, the environment, and ourselves (in the sense of an internal dialogue). Binswanger (1963) called this *mitwelt*, *umwelt*, and *eigenwelt*, respectively. This interaction with the world involves a continual process of making decisions as to what is going on, what to do, and how to feel. Although these decisions have a wide variety of content, they all have the same form, namely, decisions can be made either for the future or the past. Decisions for the future involve perceiving experiences as changes provoking new directions, whereas decisions for the past involve insisting on imposing what one already knows on experiences (rather than learning and growing).

The existentialists emphasize that making decisions for the future is the way to grow in wisdom and fulfillment, whereas making decision for the past has a stultifying effect. But deciding for the future brings ontological anxiety (Frankl 1963; Kierkegaard 1954; Maddi 2004a), because one is entering unpredictable and uncharted paths. One might think that choosing the past would be less troubling. But choosing the past brings ontological guilt (the sense of missed opportunity), the accumulation of which results in emptiness and meaninglessness. So, for

existentialists, the best answer is to choose the future as often as possible, so that one continues to grow and feel fulfilled. In this, the attitudes of existential courage are critical, because they help in tolerating ontological anxiety, so that the future-oriented decisions that facilitate growth and development can be made.

This existential position is different from the initial theme of positive psychology (Seligman and Csikszentmihalyi 2000), which emphasized happiness, as shown in such traits as optimism (Sheier and Carver 1985) and subjective well-being (Pavot and Diener 1993). Recently, however, existential courage has been added to positive psychology (Maddi 2006), as mere happiness is insufficient in understanding how people can deal well with the stressful circumstances that are so ubiquitous in living.

Hardiness as Existential Courage

We have conceptualized hardiness as three attitudes that together constitute existential courage (Maddi 2004b, 2006). Specifically, these attitudes are the 3Cs of commitment, control, and challenge. If you are strong in commitment, you believe that, no matter how stressful things get, you are best off staying in close contact with the people and events around you. It seems like a loss to pull back into isolation and alienation in hopes of protecting yourself from what might happen. If you are strong in control, you believe that, no matter how complex things get, you need to continue to have an influence on the outcomes going on around you. It seems like pulling back into passivity and powerlessness is just giving up, rather than living fully. If you are strong in challenge, you believe that life is by its nature continually changing and stressful, but that is an opportunity to grow from what you learn by seeing what you can make of circumstances. It seems like a waste of life to just wish for and try to have easy comfort and security instead. In order to have existential courage, it is not enough to just be strong in one or even two of these attitudes. You need all three.

It is the interaction between the 3Cs together that constitute the strength and motivation to do the hard work of choosing the future and learning from that experience, in order to turn changing and stressful circumstances from potential disasters into growth opportunities. Specifically, strong levels of the 3Cs should lead to low levels of painful emotions (e.g., anxiety, anger, fear, depression), even though you are addressing, rather than avoiding, the stressful circumstances. This is because the courage constituted by the 3Cs leads you to accept stress as natural and not let it interfere with your social and environmental interactions. Further, strong levels of the 3Cs should motivate you to do the hard work of problem-solving (rather than avoidance) coping, socially supportive (rather than conflictful) interaction with others, and facilitative (rather than indulgent and undermining) self-care. Doing this hard work should result in hardiness, leading to enhanced performance, health, fulfillment, and meaningfulness.

In contrast, an absence of the existential courage of hardiness will lead you to respond to changing and stressful circumstances by denying and avoiding or

exaggerating and striking out (Maddi 2004b, 2006). Instead of looking to the future, and learning from the resulting experiences, you will be insisting on maintaining your conventionalism and what is already assumed to be the truth of experience. In this pattern, you will likely engage in avoidant or aggressive (rather than problem-solving) coping, avoidant or conflictual and retaliatory (rather than socially supportive) interactions with others, and overindulgent (rather than facilitative) self-care techniques. This destructive pattern will also lead to experiencing painful and disruptive emotions (however much you may be trying to avoid them), an undermining of performance and health, and an increasing sense of missed opportunities and meaninglessness. This destructive process may also lead to addictive behavior, in hopes of further avoiding stress, pain, and emptiness.

The Development of Hardiness

Hardiness is conceptualized as a learned phenomenon. Important in this process is the interaction between the roles of parents in the first 10–15 years of a child’s life (Maddi 1996). It is more likely that hardiness will be developed if the parents interact with the children by (1) making sure they are exposed to rich and diverse experiences, (2) love and respect them as budding individuals, and (3) teach them the value of vigorous symbolization, imagination, and judgment in making sense of the resulting circumstances. This frame of reference is consistent with the underlying position that life is a changing, stressful thing and that meaning and fulfillment is to be found in what one learns through an open and committed involvement in what happens. Thus, youngsters with a good start from interaction with parents will continue to develop and individualize into adulthood and old age, with their hardiness (existential courage) continuing to grow in the process.

Instead, if parents overprotect their children so that they will be happy and safe, or insist that they adopt their parent’s meanings as to what is true and unchangeable, the result is likely to be an absence of the existential courage of hardiness. Throughout their lives, they will attempt to deny and avoid stresses and show various signs of failing to grow and develop. But, even if youngsters emerge from interaction with parents as low in hardiness, this can be changed through the application of our HardiTraining program, which will be detailed later in this chapter.

Research on Hardiness as Existential Courage

In the last 30 years, considerable research on the relationship of hardiness to performance, health, and the sense of meaning and fulfillment has been done in various settings and around the world (Maddi 2002). As will be reviewed here, the findings of this research process have been largely supportive of the position elaborated above that hardiness is the existential courage that facilitates personal development and growth.

The Illinois Bell Telephone Natural Experiment

The first findings concerning hardiness emerged from the 12-year longitudinal project we conducted at Illinois Bell Telephone (IBT), in Chicago, IL (Maddi 1987; Maddi and Kobasa 1984). Begun in 1975, this project followed supervisors, managers, and decision-makers at IBT, during the stressful period starting before and continuing after the U.S. Government's deregulation of the telephone industry in 1981. Prior to that time, the telephone industry had been regulated in order to provide good and inexpensive service to citizens. I was a consultant for IBT in the early 1970s, and it was becoming apparent that deregulation would take place in order to spur the competition that would result in the US making strides in the new telecommunications industry provoked by the initial development of the internet. Thus, it seemed to me that, from a research perspective, the coming deregulation would serve as a relevant natural experiment to see what the effects of a major stressful change would be on employees theretofore in a stable and predictable work environment.

Thus, every year from 1975 through 1987, we collected extensive psychological, performance, and health data on 450 IBT supervisors, managers, and decision-makers. Used for this purpose were yearly psychological interviews and test batteries, medical examination data, and job evaluations. There were lots of evidence that the 1981 deregulation of the telephone industry was a major upheaval for IBT. The company became preoccupied with the dramatic changes it needed to make, in order to take a competitive approach, after all those years when its bottom line was relatively unimportant and predictable. One year after the deregulation, the number of employees in the company had dropped nearly 50 %. In 1982, we asked the people in our sample what it was like to work in the transforming company. One manager verbalized the disaster all were experiencing very well when he reported that he had worked for ten different supervisors in that 1 year. They were in and out the door and did not know what they were doing. He, too, insisted that he did not know what he was doing. His was a common experience among the members of our sample.

In the 6 years following the 1981 disaster, two-thirds of the managers in our sample showed significant signs of the undermining of their performance, health, and sense of meaning and fulfillment. There were heart attacks, anxiety and depression disorders, violence in the workplace, divorces, and suicides. There were also dramatic statements about how terrible the upheaval was on their family and work interactions and on their sense of what life was all about. But the other third of the sample was resilient in not only surviving the upheaval but also thriving on it. If they remained at IBT, they rose to the top of the transitioning company. If they were downsized out, they tended to use their experience to either start their own companies or become central in other companies that were forming in the new, competitive telecommunications industry.

In order to get a full picture of the long-standing differences between the two-thirds of the sample that fell apart, and the one-third that thrived, we compared the data on them collected in the 6 years before the upheaval. In this comparison, what

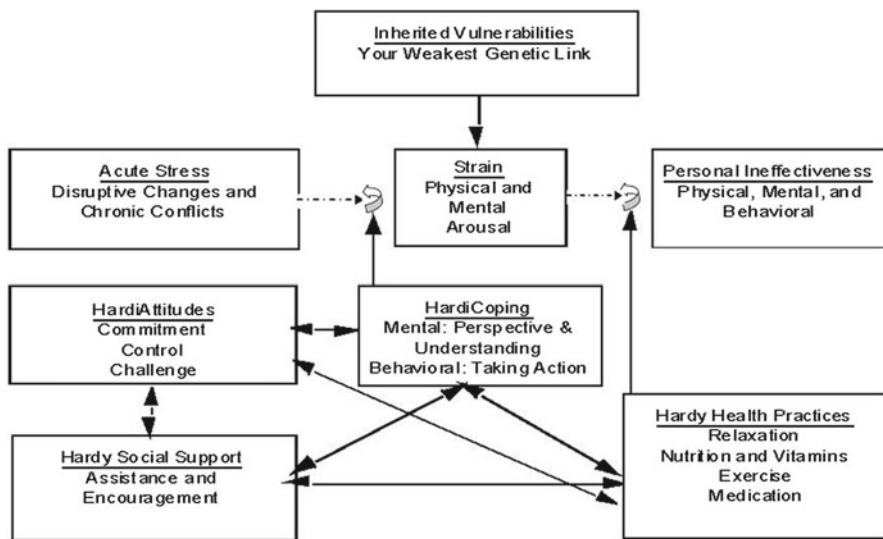


Fig. 18.1 The hardiness model for performance and health enhancement (©Copyright 1986–2004)

we found was that, all along, the one-third of our sample that responded resiliently to the upheaval had shown clear signs of (1) higher hardiness attitudes of commitment, control, and challenge; (2) higher hardiness skills of problem-solving coping, socially supportive interactions with others, and effective self-care; and (3) lower anxiety and depression. Indeed, these differences between the two subgroups persisted even after the upheaval. Interestingly, we also found that the resilient one-third of the sample described their early lives as full of change and stresses and their parents as supportive of them in their attempts to make sense out of all this (Khoshaba and Maddi 1999).

The voluminous findings of the IBT project were depicted in the Hardiness Model, which is shown in Fig. 18.1. This model indicates that stress may be either acute (i.e., unexpected changes) or chronic (i.e., continuing conflicts between what you want and what you get). Acute and chronic stresses accumulate and, if they are not reduced, provoke strain (i.e., mental and physical arousal resulting from perceived, continuing dangers). At the physical level, strain involves increased hormonal levels of cortisol and adrenalin. If the strain level is not reduced, it may be strong and long enough to deplete you of resilience resources, resulting in breakdowns into physical symptoms (e.g., nausea, sleep difficulties, loss of concentration, and memory), psychological symptoms (e.g., anxiety, depression, anger, loss of meaning), and performance difficulties (e.g., inability to meet deadlines, decline in self-esteem and effort, cognitive and energy difficulties). As depicted in the model, these breakdowns may well be influenced by your inherited physical vulnerabilities.

The good news depicted in the Hardiness Model involves the boxes at the bottom of the figure. Specifically, the hardiness attitudes of commitment, control,

and challenge together provide the courage and motivation to do the hard work of transformational (problem-solving) coping, activistic (socially supportive) interactions with others, and beneficial self-care. Beneficial self-care helps avoid breakdowns by lowering the strain provoked by stress (in such ways as moderating sweet and fatty foods and alcohol intake). But self-care alone is not enough to maintain performance and health, as it does not really resolve the stressful circumstances imposed on you. The most effective path to resilience involves a combination of transformational coping and socially supportive interactions, which help in avoiding breakdowns by decreasing the stressfulness of circumstances through taking actions that help in resolving the particular stresses involved.

Subsequent Hardiness Research

Subsequent research has tended to confirm the hypotheses that hardiness maintains and enhances health under stressful circumstances. In stressful work and social contexts, ranging from life-threatening military combat and peacekeeping missions (e.g., Bartone and Snook 1999) to firefighting (Maddi et al. 2007) and the culture shock of immigration (e.g., Kuo and Tsai 1986) or work missions abroad (e.g., Atella 1989) through everyday work or school pressures and demands (e.g., Maddi 2002), the buffering effect of the courage and motivation constituted by hardiness attitudes is shown in decreasing mental and physical symptoms.

Evidence is also accumulating that hardiness attitudes lead to enhancement of performance under stress. For example, there was a positive relationship of hardiness to subsequent (1) basketball performance among varsity players (Maddi and Hess 1992), (2) success rates in officer training school for the Israeli military (Florian et al. 1995; Westman 1990) and in firefighter training in the U.S. (Maddi et al. 2007), (3) transformational leadership and other signs of effective performance among West Point military cadets (Bartone and Snook 1999; Maddi et al. 2011), (4) retention rate among college students (Lifton et al. 2000), and (5) speed of recovery of baseline functioning following disruptive culture shock (e.g., Atella 1989; Kuo and Tsai 1986).

There are also research findings concerning the mechanisms whereby hardiness attitudes (as existential courage and motivation) lead to turning stresses from potential disasters into performance and health advantages. In an experiential sampling study (Maddi 1999), participants were paged at random to comment on their ongoing activities. What emerged was a positive relationship between hardiness and (1) involvement with others and events (commitment), (2) the sense that the activities had been chosen and could have been avoided (control), and (3) the positive process of learning from what was going on (challenge). Several studies (Maddi 1986, 1994, 1997, 2002; Maddi et al. 1996; Weibe and McCallum 1986) show that, as expected, hardiness is positively related to problem-solving coping, socially supportive interactions, and beneficial self-care efforts. Consistent with these findings are others showing that

hardiness is associated with viewing stressful circumstances as more tolerable (Ghorbani et al. 2000; Zone and Rodewalt 1989) and avoiding excessive physiological arousal (Allred and Smith 1989; Contrada 1989) and negative emotions (Maddi 2002; Maddi et al. 2009). There is also evidence that hardiness protects against addictive behaviors regarding drugs and alcohol (Maddi et al. 1996) and internet usage (Maddi et al. 2013). Further, the findings of another study (Maddi et al. 2011) show a positive correlation between hardiness and measures from a test of existential approaches to meaning (Langle et al. 2003), of accurate perceptions of ongoing situations, recognition of one's evaluative reactions to these ongoing situations, recognition of the choices one is making, and emphasis on carrying out one's developed plans and decisions.

Also, over the years, the measurement of hardiness has improved through research. The original questionnaire measure, the Personal Views Survey (PVS), was met with early criticisms that (1) it might not be a unitary characteristic and (2) was little more than the opposite of negative affectivity or neuroticism (Funk and Houston 1987; Hull et al. 1987). In response, the PVS was quickly supplanted by the second edition (PVS II) and then third edition (PVS III), and this ameliorated both problems (cf., Maddi 1997; Maddi and Khoshaba 2001). As expected, the PVS II and III characteristically yield estimates of the 3Cs of hardiness that are positively interrelated in all populations studied (e.g., Maddi 1997; Maddi and Hess 1992; Maddi and Khoshaba 1994). There are also studies showing that the PVS II and III are not redundant with negative affectivity or neuroticism (Maddi and Khoshaba 1994; Maddi et al. 2002a). In particular, the negative relationship between hardiness and clinical scales on the Minnesota Multiphasic Personality Inventory, Second Edition (MMPI 2) persisted when negative affectivity was controlled. Further, hardiness was not only negatively related to neuroticism but positively related to the other four factors on the NEO-FFI. And all five factors (of this five-factor model) together accounted for only a small amount of the hardiness variance. In addition, the findings of a recent methodological study (Sinclair and Tetrick 2000) counter both early criticisms by confirming that, as expected, the 3Cs are best regarded as related subcomponents of a higher order hardiness factor and that this factor is empirically distinct from negative affectivity or neuroticism.

Now, there is an even shorter version of the hardiness test, the PVS III-R, which contains the 18 most reliable and valid items from the 30 in the earlier PVS III. The first study using this most recent test (Maddi et al. 2006b) shows that the 3Cs and total score on the PVS III-R are highly correlated with and show similar reliability to those on the PVS III. Continuing the process of construct validation, that study shows that hardiness as measured by the PVS III-R is negatively related to repression and positively related to both innovative behavior and success in entrepreneurial consulting. The second study using the PVS III-R (Maddi et al. 2009) shows that, as expected in college students, hardiness is (1) positively related to positive attitudes toward school and self; (2) negatively related to depression, anxiety, and hostility; and (3) unrelated to socially desirable responding.

Comparative Analytic Studies

The available findings seem to show that hardiness is a factor in enhancing performance and health and protecting against painful emotions and meaninglessness. It is important, therefore, to determine the relative effectiveness of hardiness by comparison to other personal characteristics that may also be helpful in turning stresses to advantage. As summarized below, the three comparative studies currently available suggest that the existential courage measured by hardiness is more effective than is happiness or religiousness in provoking problem-solving coping, moderating painful emotions, and enhancing performance.

The first such comparative analytic study (Maddi and Hightower 1999) utilized multiple regression analyses in comparing hardiness and optimism in their relative relationships to both problem-solving and avoidance coping. Although hardiness and optimism showed a significant positive correlation with each other, the regression analysis procedure purified each variable of shared variance with the other. Across two undergraduate and one adult samples, the results showed that hardiness showed stronger relationships, positively with problem-solving and negatively with avoidance coping, than did optimism.

Another comparative analytic study (Maddi et al. 2006a) compared hardiness with religiousness in their relationship to depression and anger in a sample of U.S. Army officers. Once again, the multiple regression analysis approach used purified hardiness and religiousness of their significant positive relationship and showed that hardiness, and not religiousness, was negatively related to depression and anger. This suggests that it is the existential courage of hardiness, rather than the spiritual hopes of religiousness, that protect against negative emotions.

Yet another study (Maddi et al. 2011) finds that hardiness is positively correlated with the variables of satisfaction with life (Pavot and Diener 1993), spiritual well-being (Bufford et al. 1991), and life regard (Battista and Almond 1973) in samples of undergraduates. But regression analyses using these personality characteristics as independent variables show that hardiness is the best predictor of performance in the form of subsequent GPA at graduation. These findings support the assumption that happiness is a less successful personality orientation, in the prediction of performance, than is the existential courage of hardiness. In this regard, it is possible that happiness has a component of complacency in living. In contrast, if you are strong in hardiness, whatever happiness you experience is likely to reflect your effectiveness in transforming the stresses you encounter into growth experiences.

Hardiness Training

There is also a procedure for helping people grow in hardiness, called HardiTraining (Khoshaba and Maddi 2008; Maddi 1987). Consistent with hardiness theory, this approach emphasizes assisting trainees in problem-solving coping, socially supportive interactions, and beneficial self-care, all the while using the feedback from

these efforts to deepen the hardiness attitudes of commitment, control, and challenge. The approach includes precise narrative and many related exercises that the trainee is to use in the process of transforming one's ongoing life stresses into growth opportunities. Also basic are both inspirational and negative examples of how others have performed and checkpoints during which the trainee reports on his/her efforts to the trainer. Evidence is accumulating that this training procedure is effective not only in increasing hardiness attitudes and skills but also in enhancing performance and decreasing illness symptoms for working adults (Maddi 1987; Maddi et al. 1998) and college students (Maddi et al. 2002b, 2013).

Hardiness assessment and training is clearly useful for individuals who want to improve their being-in-the-world and for organizations that want to improve their workforces (Khoshaba and Maddi 2008; Maddi 2002; Maddi and Khoshaba 2001). The increasing turbulence of our times has led not only businesses and colleges but also military, police, firefighter, and legal organizations to include our hardiness assessment and training procedures into their efforts to select and develop their personnel. This is happening not only in the U.S., but also in various European, Asian, African, and North and South American countries. Available on the internet for either individuals or organizations is the HardiSurvey III-R (www.HardinessInstitute.com) for assessment. There is also a workbook for the HardiTraining Program (Khoshaba and Maddi 2008). The HardiSurvey III-R incorporates measures of both hardiness attitudes and skills and produces a comprehensive report concerning the courage and capabilities of the individual in dealing effectively with stresses. The HardiTraining Program puts the individual through the narrative, exercises, examples, and checkpoints in a training process that facilitates learning the attitudes and skills that facilitate efforts to turn stresses from potential disasters into growth opportunities.

Conclusions

Conceptually and empirically, there is evidence for hardiness as the existential courage and motivation needed to turn stressful circumstances from potential disasters into growth opportunities instead. It appears that hardiness is a learned aspect of personality that facilitates the human capability to search for meaning, and enhance performance and health, regardless of circumstances. The implication is that an absence of learned hardiness is an important vulnerability, leading to reacting to changing, stressful experiences by denial and avoidance or exaggeration and striking out. By now, there are adequate procedures for hardiness assessment and training that are useful in teaching, counseling, and consulting.

Also of importance are the implications of what has been learned about hardiness for how parents bring up their children. In this regard, it is a mistake for parents to overprotect their children, on the grounds that happiness is all that matters. After all, if life is by its nature a stressful phenomenon, then parents need to accept this, and emphasize to their children the importance of learning as much as possible from their experiences, so that they can continue to grow and develop throughout their

lives. Thus, when the children experience painful stresses, their parents need to be supportive of them, and simultaneously encourage them to figure out what the experiences mean, and take this into account in their functioning. In short, parents need to help their children seek meaning out of painful experiences, which will result in their growing in wisdom and fulfillment. Indeed, this approach is an essential part of our specific HardiTraining.

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Chapter 19

Generativity and the Meaning of Life

Ed de St. Aubin

Bill Nitchke¹ was a 20-year-old U.S. soldier in the Vietnam War in 1967 when a spinal cord injury incurred during combat rendered him a paraplegic for the remainder of his life. Now in late midlife, Bill was recently asked to describe both his “positive future” and his “negative future.” These were presented as a potential realistic account of how his life might unfold if all goes as he desires and one that could happen but that he hopes will not happen. Here is what Bill had to say:

Positive Future

One of the things that I would like to see in my life is to help younger veterans. I know I've been a good, positive help to a lot of veterans just through my story and through me helping of them. What I'm saying is I'd like to continue on helping younger vets who might be going through some of the same stuff that I went through, negative stuff with alcohol or whatever, negative thoughts about our government or the American people. Other, ya know, emotional rough times. Just to help them come to terms with that. Maybe through directly talking with them or somehow giving them, ya know, some messages on tapes and CD's and other stuff.

Negative Future

I try not to dwell on negative things but I guess that would be my son Dylan. He has emotional issues. I wasn't able to have children but I did adopt and my son Dylan has emotional trauma from his birth mother and serious mental illness conditions. If I'm not able to help him enough, ya know, that would be a negative side. I wouldn't be able to help my son enough – helping him emotionally and spiritually and other ways. I guess that would be a real negative downside.

What Bill is telling us, without ever using the precise words, is that *generativity gives his life meaning*. Generativity is an investment of self into the well-being of

¹Pseudonym for a participant in our study of generativity, trauma, resilience, and meaning. Identifying information has been edited.

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younger and future generations. In Bill's optimistic future scenario, he is working to improve the lives of younger veterans. A potentially dark future is seen as his inability to help his son with his mental health problems. What is most important to Bill is not about regaining the use of his legs. Nor is it about reducing the very real hassles of living day-to-day as a paraplegic. It is about focusing on the well-being of younger generations.

The vicissitudes of Bill's life are unique and may be more dramatic than some, given the drastic nature of a spinal cord injury, yet I contend that a generative life mode affords contemporary adults a way of experiencing meaning in life. Generativity offers one possible answer to the existential questions regarding life and death. Generativity provides life with purpose and it offers symbolic immortality. It is not the only way to experience meaning. Yet once we can account for an individual's full range of generativity, we gain an understanding of one way that meaning exists in that life. After a section reviewing the concept of generativity, I will turn to a discussion of how meaning in life and symbolic immortality may be experienced via a generative path. I examine this dynamic through both empirical studies and a brief psychobiographic exploration. A final section of this chapter charts the course for future investigations of generativity and the experience of meaning.

Generativity

Psychosocial theorist Erik Erikson (1950) presented a life cycle model of human development wherein healthy midlife adults spend several decades in a mode of generativity. The first to use this term in a psychological sense, Erikson was suggesting that the long stretch of midlife, roughly from 30 to 65, is spent engaging in activities that will promote the well-being of future generations. The first five of Erikson's life cycle stages result, if successfully traversed, in the acquisition of psychosocial virtues that add to one's self-focused competencies and abilities (e.g., industry and fidelity to self). But in the sixth stage, *Intimacy vs. Isolation*, the emerging adult seeks to invest in the well-being of another – a romantic life partner whose needs and desires are perceived as significant as one's own. The gained psychological virtue here is *love*, an authentic ability to put another's needs on equal status with one's own. This developmental shift to other-orientedness allows for *care*, the psychosocial virtue associated with the successful resolution of the *Generativity vs. Stagnation* tension experienced in the lengthy years of midlife. The beneficiary, or target, of generative efforts is much wider than the single romantic other of the intimacy stage. Now, the adult seeks to benefit (though not always consciously) future humankind.

Generativity is manifested in a variety of behaviors. Sculpting a beautiful piece of art, attempting to instill certain values in one's children, donating money to a charitable fund, and minimizing one's carbon footprint are all generative behaviors

for each is an investment of self into the well-being of younger or yet born humans. Generativity is a blend of altruism, creativity, productivity, and future-orientedness. Both John Kotre (1984, 1999, 2004) and Dan McAdams (1984 and elsewhere) have made major theoretical advances to our understanding of generativity and each have evoked a gifting metaphor to demonstrate how generativity combines agency and communion. First, agency allows the adult to fashion some kind of gift (child, book, business, community program, personal project) that is self-promoting in that it represents one's values and proclivities (e.g., parenting style, leadership type, book content, artistic expression). And then the communal phase includes the giving of the gift to others – letting it go and liberating it from one's control (allowing for the separation-individuation of a child; letting others interpret and use one's products in unanticipated ways).

Erikson's final life cycle stage portrays the elder as having moved back again to a more self-based tension as one attempts to find a favorable balance of *ego integrity* (acceptance of one's lived life and of one's inevitable death) over *ego despair* (unfavorable review of one's life and inability to face death). As has been demonstrated, the successful resolution of this final psychosocial stage depends, in part, on one's earlier generativity (James and Zarrett 2006; Wink and Dillon 2007).

Although scholarship regarding generativity was sparse and sporadic for several decades after Erikson introduced it in 1950, there is currently a growing body of solid empirical work that documents the significance of this phenomenon. Momentum sped up in the early 1990s when Dan McAdams and I (1992) presented a seven-faceted model of generativity along with empirically sound measures for quantifying individual differences in some of those components. Without attempting to provide a comprehensive review of this research in this limited space, I'll highlight three core areas around which this scholarship might be clustered.

The Development of Generativity

According to Erikson's (1950) life cycle theory, the generative mode should be most pronounced during midlife, approximately from 30 years of age until 65. Cross-sectional and longitudinal examinations have found mixed but generally supportive results for this contention (Bellizzi 2004; Ferreira-Alves et al. 2006; McAdams et al. 1993; Sheldon and Kasser 2001; Westermeyer 2004). Longitudinal designs have demonstrated developmental precursors to generativity: identity achievement, education attainment, marriage, warm family environment, a mentor relationship, and favorable peer group relationships (James and Zarrett 2006; Westermeyer 2004). Likewise, generativity has been found to lead to higher levels of certain biopsychosocial phenomenon later in life: ego integrity (James and Zarrett 2006), physical health (Wink and Dillon 2007), investments in intergenerational relationships such as parent or child (but not nonintergenerational ones such as sister or friend) (Peterson 2002), and religiousness (Wink and Dillon 2008).

Michael Pratt and his colleagues have examined adolescent and emerging adult generativity. These are developmental epochs wherein Erikson suggested *Identity vs. Role Confusion* and *Intimacy vs. Isolation* are, respectively, the psychosocially most salient issues. Yet Pratt has established the significance of individual differences in generativity during these earlier years. This work has demonstrated that it is positively associated with levels of prosocial reasoning, volunteering behavior, moral identity, psychological adjustment, and being the object of authoritative parenting (Frensch et al. 2007; Lawford et al. 2005; Pratt et al. 2009). Others have found that generativity is a strong predictor of stress-related growth during this age span (Singer et al. 2002).

The Salience of Generativity Within Family Relationships

Several scholars have written forcefully and eloquently about the need to examine generativity within the context of family ecology (McAdams 2004; Marks and Greenfield 2009; Pratt et al. 2008a, b). Higher levels of generativity in those who are parents are associated with more satisfaction and commitment to parenting (Abrantes and Matos 2010) as well as more authoritative parenting (Peterson et al. 1997; Pratt et al. 2001). Further, generativity within parents has been associated with particular characteristics of offspring. Peterson (2006) found that parents' generativity was positively related to one's child's agreeableness, conscientiousness, religiosity, and interest in politics. Parental generativity has also been related to parent's forgiveness of perceived poor grandparent behaviors and maternal (not paternal) optimism about potentially problematic outcomes in children's lives (Pratt et al. 2008a, b). Finally, Roy and Lucas (2006) have explicated the salience of generativity for disadvantaged low-income fathers striving for second chances for themselves as fathers and for their families.

Beyond parent-offspring generativity, other family relationships have been the focus of empirical study. Milardo (2005) found the uncle-nephew relationship rife with generative content, such as mentoring and both supplemental and surrogate parenting. Generativity has also been associated positively with attachment to one's pet (Marks et al. 1994).

As parents age and move into their elder years, Erikson (Erikson et al. 1986) suggested that a "grand-generativity" emerges and replaces the direct responsibility and potential anxiety that characterizes midlife generativity. Grand-generativity is softer, more indirect, less day-to-day, and is connected to the evaluative life review that ensues during this elder phase of *ego integrity vs. despair*. Grand-generativity also includes grandparenting – a nurturing familial relationship that is typically more light-hearted and selective. Indeed, Hebblethwaite and Norris (2011) found that grandparents use leisure pathways to express the generative themes of mentoring and legacy building. Elsewhere, generativity was the strongest of several variables in predicting satisfaction with grandparenting (Thiele and Whelan 2008). Finally,

Cheng et al. (2008) found grandparents had a great desire to be generative with grandchildren but that the rapidity of social-technological change (in Hong Kong) frustrated such attempts.

The Association of Generativity with Quality of Life

Given that generativity is presented as the hallmark of the psychosocially healthy adult, we would expect to find individual differences in generativity to be correlated with various indices of well-being. In a sample of nearly 2,000 parents, An and Cooney (2006) reported that generativity was the strongest of several potential predictors of psychological well-being, particularly for women. Using that same 1995 MIDUS data, Rothrauff and Cooney (2008) again found a very strong association between generativity and psychosocial well-being for both parents and childless adults. Others have also documented the basic connection between generativity and well-being (Ackerman et al. 2000; Grossbaum and Bates 2002; McAdams et al. 1993; Sheldon and Kasser 2001).

Drawing on the reciprocal nature of the generative mode between generations, Cheng (2009) ran structural equation models that show “perceived respect for elders” completely mediated the association between generative behaviors and one’s sense of well-being. In another mediation model (Ardelt et al. 2010), it was found that WWII veterans with high combat experience, but not those with no combat experience, have levels of generativity closely related to physical and psychological health and well-being. Finally, ego development moderated the relation between generativity and well-being (de St. Aubin and McAdams 1995). In that study, the participants with high ego development scores who scored low on generative concern were significantly less satisfied/happy in life than those who scored high on generative concern. This last finding makes perfect sense, given that ego development – as conceptualized and quantified by Jane Loevinger (1976, 1987; Hy and Loevinger 1996) – captures an adult’s level of cognitive-emotional maturity. One with a high level of ego development would understand the societal and individual significance of generativity and so would be considerably less satisfied with one’s life if one were not particularly generative.

Summary

This growing body of empirical work assures generativity a seat at the table of significant psychological phenomenon. It most squarely falls within the category of personality development – an attribute that emerges fully in the midlife years, is manifested within familial and other relationships, and is associated with psychosocial

well-being. And yet, it is about much more than mere personality. The generative output of individuals is what shapes society. Our generative efforts connect us to something much larger than ourselves. And that provides meaning.

Experiencing Life Meaning via Generativity: Quantitative Investigations

The research reviewed in the previous subsection on quality of life included studies that employ measures of well-being that capture the *hedonic* form of happiness. Hedonic well-being slants towards pleasure and delight, forms of ephemeral happiness. Related yet distinct is *eudaimonic* well-being, which is more about a life mode of engagement and flourishing. I would argue that it is this second form of well-being, eudaimonia, that shares the most conceptual space with the experience of meaning, which is what this chapter and book address. I am hesitant to completely commit to this distinction as I see both forms as related, even similar. Further, psychologists have not always designed measures with the distinction in mind, so we have a collection of tools that contain a bit of both or that slant towards one but include fragments of the other. That being said, let's first look at studies that, in my view, examine how generativity is related to eudaimonic forms of life engagement. These are studies that examine generativity as it is manifested in life domains that are common locations for meaning making.

Generativity and Common Paths of Meaning Making

For many contemporary adults, *faith* provides an arena for the creation or discovery of meaning in life (Newton and McIntosh Chap. 20). McAdams and Albaugh (2008) compare the generative life narratives of two highly Christian women, one an evangelical Protestant with conservative political views and the other a mainline Protestant who is politically liberal. The authors find that the generative story of the conservative positions faith as a force that “save(s) her from an unregulated and chaotic life driven by impulse and materialism” (p. 225). Faith is perceived as a dam that allows her to contain unruly desires that would keep her from being generative. For the liberal, her personal faith is portrayed as an energy that fills her life with a capacity for love. Without faith, she would be empty and unable to muster the strength needed to be generative.

Brelsford et al. (2009) report that generativity in their sample was positively related to spiritual disclosure. For advanced seminarians, generativity is significantly related to intrinsic religiosity (Sandage et al. 2011). Wink and Dillon (2008) found that generativity was one path through which religiousness led to well-being. And Dillion et al. (2003) found that both religiosity and spirituality were correlated positively to generativity but with a twist. As hypothesized, the agentic aspect of

generativity (self-expanding) was more aligned with spirituality (self-oriented) and the communal facet (other-oriented) was connected to religiousness (social; giving/protective of others).

Another obvious venue for meaning making today is within the realm of *work* (Dik et al. Chap. 27). Zacher et al. (2011) demonstrate that leader generativity in the workplace predicts three indicators of leadership success: follower perceptions of leader effectiveness, follower satisfaction with leader, and follower extra effort. Clark and Arnold (2008) report that generativity in work leads to greater job satisfaction and higher subjective career success. Similarly, Westermeyer (2004) empirically linked generativity with work achievements.

A third potential avenue to meaning is *community involvement*. Cox et al. (2010) show that generativity was a stronger predictor of positive societal engagement than were any of the big five traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness). Kleiber and Nimrod (2008) similarly found a strong connection between generativity and civic engagement. A study of Australian adults likewise makes the connection between generativity and productive community engagement (Warburton et al. 2006). Taylor (2006) asserts that a better understanding of generativity dynamics will help community agencies in recruiting volunteers to help run youth development programs. Research has revealed that generativity is associated with higher satisfaction with (Peterson and Duncan 2007) and success in (Westermeyer 2004) *marriage*, yet another possible location for meaning making.

A perennial question in philosophical and psychological existential scholarship, which examines the various ways in which humans strive for meaning, is how one can achieve meaning in life when human existence is rife with absurdity and *suffering*. One response is the empirical research that articulates how generativity may serve as the path from suffering to meaning for adults who feel as though they are fading away into oblivion and a life of non-efficacy and loneliness (de Medeiros 2009) as well as for adults who suffer from being the lifelong victims of racism (Black and Rubinstein 2009). Bellizzi (2004) documented how generativity was correlated with posttraumatic growth for adult cancer survivors. Finally, preliminary results in one of my research labs (de St. Aubin et al. 2011) suggest that generativity is more strongly associated with post-injury psychosocial functioning than is religiosity in a sample of spinal cord survivors. These are adults who suffered a life-threatening accident and continue to confront the ever-present challenges that face paraplegics and quadriplegics.

A second question posed by existentialism concerns the *meaning of death*. Existentialist Ernest Becker's 1973 Pulitzer Prize-winning book, *The Denial of Death*, argues that the idea of our own finitude is too terrifying to even acknowledge. As the title conveys, humans "deny" this inevitability and keep it from consciousness – which leads to anxiety. The ever-growing research literature on Terror Management Theory (see Greenberg and Kosloff 2008 for a review) is built on this premise – that humans must manage the terror that stems from a knowledge that we must all one day die. This terror, so goes the theory, may be managed either by explicit systems of shared belief, such as religion, that articulate the meaning of death and even sometimes reveal the location of posthumous existence such as

heaven or reincarnation. The terror may also be managed subconsciously by boosting self-esteem via alignment with a shared cultural worldview. Generativity is implicated in this existential crises in that it affords one symbolic immortality. Generativity provides a way of “Outliving the Self” – this is the title of a 1984 book by John Kotre that addresses the meaning of generativity. An adult does not die, at least symbolically, if that adult instilled her values in her son or in some other generative way left a mark on the world that existed beyond one’s physical lifespan. Huta and Zuroff (2007) examined the three generativity motivations proposed in McAdams and de St. Aubin’s model (need to be needed, felt societal expectation to contribute to future generations, symbolic immortality) and found that only symbolic immortality predicted one’s well-being.

To summarize, the dynamics of generativity are heavily implicated in many of the meaning making paths adults traverse. It is one developmental force that shapes and is shaped by faith, work, love, community engagement, suffering, and death. Generativity involves creating a legacy of self by investing resources into the promotion of life quality for younger and future generations. This is an enterprise that is engaging, other-oriented, and legacy building. Once the generative content of a life is understood, we gain insight into an individual’s meaning-making process. Midlife adults experience meaning via generativity.

Experiencing Life Meaning via Generativity: A Psychobiographic Example²

My own thinking about how humans experience meaning has been heavily influenced by the life and scholarship of Victor Frankl (1905–1997), both of which speak profoundly to the significance of generativity in the quest for meaning. Like many, I was deeply moved by Frankl’s accounts (*Man’s Search for Meaning* 1963; *Recollections: An Autobiography* 2000) of having survived four Nazi concentration camps and fascinated by his theory of how humans find meaning and how psychotherapist might facilitate that search with logotherapy. He first used the term logotherapy (translated from “existenzanalyse” or existential analysis) in a public address delivered in 1926, still a young man (21) and 16 years before his arrest and containment at Theresienstadt in Bohemia. It was presented as a system of treatment for many mental illnesses that was not based on an assumption that humans are driven by a will for pleasure (his interpretation of Freud) nor a will for power (his take on Adler) but instead on a will for *meaning*.

²I hesitate to refer to this as psychobiography as this brief foray fails to do justice to the complexity of that method. For classic psychobiographies, see Erikson (1958, 1969), and for a recent excellent example, see McAdams (2010). Schultz (2005) offers a smorgasbord of psychobiographic tastings in his edited volume. Finally, I (1998) examine Frank Lloyd Wright’s generativity in a chapter-length psychobiography.

Logotherapy continues to be practiced and modified today, 85 years after its introduction (Wong 1998). Frankl's nascent thinking about this therapeutic approach and the postulates of human nature that undergird it – the various ways humans find (or do not find) meaning in life – were initially developed during a time when he was intellectually and clinically focused on suicide. This was his major topic of interest during his psychiatry/neurology training in medicine at the University of Vienna. Further, he was the Director of the suicide pavilion at the General Hospital in Vienna from 1933 until 1938, at which point the Nazis took over Austria and he was prohibited as a Jew from treating Aryan patients. This tension between understanding suicide and conceptualizing life meaning is not unique to Frankl. Albert Camus (1913–1960), another major contributor to the scholarship of existentialism and life meaning, begins his 1943 *The Myth of Sisyphus* with “There is but one truly serious philosophical problem and that is suicide.” The book goes on to detail how suicide is not an option as long as life has meaning. Both Camus (1955) and Frankl perceive meaning as the antidote to suicidal tendencies.

After being forced out of his Director's position by the Nazis, Frankl worked as a brain surgeon at Rothschild Hospital, the only one still admitting Jews. This is when he began to write *The Doctor and the Soul*, which was to be his full presentation of logotherapy. He was married in 1941 and then in 1942 was arrested and sent to the concentration camp, as were his wife, parents, and two siblings. Only he and his sister survived the ordeal. It was through his observations in the camps that he refined his understanding of how humans, despite despicable conditions and exposure to horrific behaviors, could find and maintain the experience of meaning – that which protected them from utter despair and thoughts of suicide.

He noted that the three clear paths to life meaning, though often intertwined, were attitude/faith, love, and the felt need to complete life projects. It is this last meaning avenue that shares much conceptual space with generativity. Frankl perceived life projects as stemming from creative longings and directed at the future: “A man who becomes conscious of the responsibility he bears toward... an unfinished work, will never be able to throw away his life. He knows the “why” for his existence, and will be able to bear almost any “how” (1963, p. 101).” Put more starkly, “In the Nazi concentration camps, one could have witnessed that those who knew that there was a task waiting for them to fulfill were most apt to survive” (1963, p. 126).

To reintroduce a prior metaphor, the creating of a generative gift ala *agency* leads to the giving of the gift, in a *communal* mode, to the future – to the ongoing enterprise that is the human species. Frankl (1963) tells us that humans “can only live by looking to the future (p. 115)” and that “The prisoner who had lost faith in the future – his future – was doomed” (p. 117). This insight ties into a critical moment in Frankl's life. Prior to his incarceration, he had begun to create a self-promoting and agentic gift in the form of a book manuscript (*The Doctor and the Soul*). This was to be his statement of the meaning making process and of his logotherapy technique. He managed to smuggle the manuscript with him and continue to work on it while confined. He had it sewed into his jacket but it was discovered while he was being transferred to Auschwitz and confiscated/destroyed. His need to complete that

project and to pass his insights on to future generations became a way of experiencing meaning. He reconstructed it on bits of stolen paper. He worked on it at every possible moment. It was, I would contend, his generative project: An investment of self into the well-being of future generations. It was this generativity that provided him with meaning even within the incredibly oppressive context of a concentration camp.

Frankl was released in 1945 and soon completed the book. He remarried, became a father, and directed the Vienna Neurological Polyclinic for the next two and a half decades. He held many visiting and honorary university positions in several countries and published some 32 books that were translated into 26 languages. A major component of his legacy is the impact that his scholarship had on younger generations of thinkers, practitioners, and others looking for a meaningful life. This generativity, captured microcosmically in his desperate attempt to rewrite his manuscript under horrendous conditions, provided his life with meaning and has assured him of symbolic immortality. He has not died, for his wisdom exists in those who read his work, and it exists in the therapeutic sessions wherein logotherapists facilitate meaning making in clients. To reiterate, when we locate the generative content of a life, whether that life is Viktor Frankl's or that of a less well-known person, we have found one way he or she experiences meaning.

Further Explorations

There are many potentially fruitful ways to further study how generativity and the experience of meaning are comingled. I'll outline two. First, we need a better articulation of how variations in the *self* ↔ → *society* dynamic contours generative meaning making. This is most obviously accomplished by either examining the manifestation of generativity in other cultures or by exploring the generativity of North American adult minorities. Initial steps have been made in both directions. There are a few published attempts to address generativity in cultures other than the US and Canada (de St. Aubin 2004; Hofer et al. 2008; Marushima and Arimitau 2007; Urien and Kilbourne 2011) but none that authentically capture generative meaning making dynamics quantitatively with psychometrically sound and culturally appropriate measures.

There has been research on generativity within the African-American community (Hart et al. 2001) but much more work is needed here. We would also learn much by examining individual differences in generativity within groups of sexual minorities. What factors, for instance, predict how a lesbian might navigate the two-step (agency, communion) generative gifting process? Given that the current climate in the US is quite stigmatizing and oppressive of sexual minorities (Nadal 2013), this is a woman who likely receives daily micro-aggressive (Shelton and Delgado-Romero 2011) messages that she is somehow incomplete or deficient. Does that *self* ↔ → *society* dynamic of heterosexism impact her ability to create a self-promoting generative gift? Does it diminish her desire to give this gift up – to a society that belittles her – in a communal gesture for the benefit of younger generations?

Does it shape the qualitative nature of her generative efforts such that she is more likely than heterosexual women to fashion a particular type of generative gift? Again, there has been very little inquiry into the generativity of either ethnic or sexual minorities (see Hostetler 2009; Oswald and Masciadrelli 2008) yet either would shed much needed light on generative meaning making.

The second area of work likely to advance generative meaning making consists of deep examinations of the rehabilitation process. Maruna (2001) and Maruna et al. (2004) joins the strengths-based approach promoted in criminal rehabilitation and demonstrates convincingly that providing opportunities for ex-prisoners to be generative facilitates individual crime desistance. This is a way to reduce the typically high recidivism rates that occur as men and women transition from prison through community reintegration. We need more research and policy analysis in this area, but I am also referring to rehabilitation in the context of health psychology, particularly for those who have experienced potentially traumatizing life episodes. Here too, there is a shift to include the positive. The emphasis is moving away from exclusive examinations of the pathological sequelae of such events such as PTSD, depression, or anxiety. Tedeschi and Calhoun (1996) and Parks (2010) and others are beginning to chart out trajectories of posttraumatic growth, finding that some trauma survivors actually find benefits within these horrendous situations. As noted earlier, a study by Bellizzi (2004) linked posttraumatic growth to generativity scores. The process of rebuilding a life after a life-threatening event requires, in many instances, a generative mode. The self is repaired when it turns away from itself and seeks to improve the lives of others and, by doing so, create a legacy of self.

The chapter begins with a set of quotes from Bill Nitchke, a paraplegic who faced the very real possibility of death over 30 years ago and who has lived ever since with the extremely limiting reality of life in a wheelchair. How does such a man experience meaning? As the quotes convey, Bill finds meaning via generativity. Bill's complete life story interview is rife with generative imagery and recurrent themes of hardiness and posttraumatic growth. Having listened to his lengthy story, I was not surprised to find out that, relative to the sample of nearly 100 spinal cord injury survivors, he scored very low on quantitative measures of depression and anxiety but quite high on psychosocial well-being and generativity. It is his generativity that gives his life meaning. Further investigations are needed to decipher the generative movement of the self as one rehabilitates from major setbacks and/or experiences that threaten one's very existence.

A Final Word

In conclusion, generativity is certainly not the only mode by which contemporary adults experience meaning, but it is one very viable path to creating and discovering a purposeful life. Midlife adults are called upon to engage in activities that promote the well-being of younger and future generations. Answering that call leads to a meaningful life.

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Chapter 20

Unique Contributions of Religion to Meaning

Taylor Newton and Daniel N. McIntosh

Despite global trends toward secularization (Epstein 2009; Taylor 2007), religion remains a common and potent way for people to find meaning in life. A 2001 Gallup poll of members of churches, synagogues, and other faith communities found that 63 % of respondents strongly agreed with the statement “Because of my faith, I have meaning and purpose in my life” (Winseman 2002). In a more recent survey of people in 84 countries, those with a religious affiliation were more likely to say that their lives have meaning and purpose (92 %) than those without a religious affiliation (83 %; Crabtree and Pelham 2008). These results should not come as a surprise given the search for meaning is one of the most defining characteristics of almost all religions (Livingston 2008) and the provision of meaning has long been identified as a key function of religion (Emmons and Paloutzian 2003; Frankl 1977; Geertz 1966; Jonas and Fischer 2006; Schweiker 1969). Indeed, meaning is so integral to religion that religion itself is often identified as a global meaning system, an interpretive lens through which all aspects of life are organized and understood (Park 2005a; Schweiker 1969; Silberman 2005). We therefore do not believe the key question in considering religion and meaning is whether there is an association. There is. More important in understanding the role of religion in meaning is the question of whether religion makes unique contributions to meaning. Does religious meaning look different from nonreligious meaning? Does religion provide meaning-making mechanisms unavailable through other means?

In considering these related questions, we first define what we mean by religion and then review evidence that religious meaning explains variance in meaning-related outcomes that general, nonreligious meaning does not. Taking our cue from Park

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(2005a, 2010), we distinguish between global and situational meaning in this chapter. Global meaning is the template people typically use to make sense of their world while situational meaning derives from day to day experiences and life events. Although the two can and often do agree, meaning-making efforts are necessary when situational meaning does not match with global meaning. Janoff-Bulman (1992) calls this disharmony “shattered assumptions” while others refer to threatened or violated meaning (see Heine et al. 2006). Religion can play a role in both global meaning and the meaning-making processes of situational meaning; we will consider the potentially unique contributions of religion to each. We will then turn our attention to reasons why religious meaning may function differently than general, nonreligious meaning. Finally, we will consider the implications of differences between religious and nonreligious meaning.

To analyze the relation between religion and meaning, it is necessary to consider what is meant by *religion*. This task is difficult because definitions of religion almost unfailingly commit one of two errors – inclusion or exclusion. Definitions with inclusion errors tend to be overly broad. For example, some definitions classify anything with a meaning-making function as religion (Barrett 2001; Lindbeck 1984), perhaps including systems of belief that adherents would adamantly deny are religious at all, such as atheism and secular humanism. Definitions with exclusion errors tend to be specific to a fault. For example, some definitions of religion identify belief in a supernatural creator as integral, ruling out nontheistic faiths that do not meet this criterion, such as Buddhism (Durkheim 1915). Further muddying the waters, it is possible to draw sharp divides between related concepts including religion and spirituality, personal and institutional religion, ethnic and elective religion, and a host of others (see Paloutzian and Park 2005 and Hood et al. 2009). Clearly, religion is multidimensional – not just one thing, but an organization of things. Moreover, the content of religion varies by condition, from situation to situation and individual to individual. This all means that religion is a fuzzy concept (Zinnbauer et al. 1997). Such distinctions are useful tools for conceptualizing a complex phenomenon; however, given the variety of possible definitions of religion, it is important when theorizing to note the working definition (McIntosh and Newton *in press*). As we are considering the relation to meaning, we try to avoid the tautology of defining religion as a meaning system. Instead, we focus on elements we see as common to a Western basic-level concept of religion: a belief system that typically includes elements of the metaphysical, typically includes a social structure, and to some degree self-identifies as religious or spiritual. The less similar to this conceptualization of religion the phenomenon of interest is, the more likely our analysis will be off the mark.

Evidence of the Uniqueness of Religious Meaning

Religion and Global Meaning

As noted above, the connections of religion to meaning are so pervasive that some view religion itself as a global meaning system and a far-reaching and powerful one at that (Park 2005a; Schweiker 1969; Silberman 2005). This is bolstered by

evidence supporting the ability of religion as a global source of meaning to trump other, situational sources of meaning, such as mood (Hicks and King 2008). But, is religious global meaning distinct from nonreligious global meaning? One way to answer this question is to directly compare individuals with presumably religious or nonreligious sources of global meaning. Pohlmann et al. (2006) found differences between the meaning systems of theology students and science students. Although the two groups identified a similar number of meaning sources, the theology students had more complex and coherent meaning systems than did the science students. Similarly, a comparison of religious and secular kibbutzim in Israel found that religious kibbutz members had a higher sense of coherence in life than their secular counterparts (Kark et al. 1996).

These two studies directly compared groups that presumably derived global meaning from either a religious or a nonreligious source. Because these groups were naturally occurring, there are several interpretations for the observed differences, however. One is the possibility that religion creates more coherent and complex systems of meaning than do other sources of meaning. Due to self-selection into these groups, a second possibility is that individuals with different meaning system characteristics (or different needs for meaning) choose affiliation with different groups. Those who have, or need, more complex and coherent meaning systems may be differentially attracted to the study of theology versus science or to life in a religious community versus a secular one. This second possibility is consistent with the idea that religious meaning differs from nonreligious meaning but does not make the assumption that religion plays a causal role in the development of different meaning system characteristics. Finally, a third possibility is that group differences other than the overt presence of religion may be responsible for the observed differences. For example, scholarship in the humanities might encourage ways of thinking and expression that register as more coherence and complexity in meaning than the ways of thinking and expression encouraged by scholarship in the sciences.

The first two explanations for these findings are both consistent with the idea that religious meaning differs from nonreligious meaning, but they disagree about whether religion itself influences meaning or merely reflects different meaning processes, goals, or outcomes. The third possibility suggests that differences found between religious and nonreligious meaning are artifacts and that religion is not unique (perhaps the study of Victorian novels produces a similar sense of coherence) but just another source of a broadly applicable meaning system. Any other broad meaning system could be expected to look the same as religious meaning and to have the same effects.

To narrow these possibilities and to avoid the uncertainties of evaluating the uniqueness of religion in naturally occurring groups, we have used randomized experiments to determine whether religious global meaning is distinct from nonreligious global meaning. To do so, we needed to find a truly global nonreligious meaning system. Because of the broad applicability of religious meaning to almost every aspect of life, however, it is difficult to find a nonreligious global meaning system as comprehensive as religious meaning to use as a comparison condition (see Hood et al. 2005). For example, feminism is a meaning system that can inform many aspects of a person's life, but it is unlikely to have quite the reach of religious

meaning. For this reason, when assessing what religion brings to global meaning, it is important to level the playing field with a meaning system that can be either religious or nonreligious. Humanitarianism as a meaning system, for example, can either be religious or secular (see Day 1952, and Russell 1925). If exposure to religious humanitarianism has effects on outcomes that exposure to nonreligious humanitarianism does not, it would indicate that something about religion is adding something to that particular meaning system. Although past research has compared moral and nonmoral versions of meaning systems (e.g., moral vegetarianism vs. health vegetarianism; Rozin et al. 1997), comparisons of religious and nonreligious versions of meaning systems have only recently been undertaken (Newton and McIntosh 2009a, 2013).

In two randomized experiments, we evaluated whether religious humanitarianism has a greater influence than nonreligious humanitarianism on the prosocial outcomes encouraged by humanitarian meaning systems (Fong 2007; Shen and Edwards 2005). Using website content to prime either a religious humanitarianism meaning system or a nonreligious humanitarianism meaning system, we found that exposure to religious humanitarianism resulted in greater preference for a product using prosocial advertising (i.e., a cookie made with fair trade ingredients) than a product using competence advertising (i.e., a cookie made with quality ingredients). Those exposed to the religious humanitarianism prime were also willing to spend more money on the prosocial product than those exposed to the nonreligious humanitarianism prime (Newton and McIntosh 2009a). These differences were main effects not mediated by individual differences in religion, perhaps due to the connection between religion and prosociality as part of a cultural-level schema of religion. In another study using the same website-priming technique, we found that exposure to the religious humanitarianism prime resulted in participants donating more money to charity when given the opportunity than exposure to the nonreligious humanitarianism prime, again regardless of individual differences in religion (Newton and McIntosh 2013).

The field evidence suggests that meaning is different – more complex and coherent and resulting in greater subjective sense of coherence – when derived from a religious versus a nonreligious source, providing support for the real-world importance of differences between religious and nonreligious global meaning (Kark et al. 1996; Pohlmann et al. 2006). The experimental evidence suggests that observed differences are not solely due to self-selection (though the data do not exclude self-selection as one factor contributing to observed differences in the field) or to artifactual influences. Further research documenting other differences between individuals in religious versus nonreligious groups would help clarify the reasons and nature of the differences between religious and nonreligious meaning. For example, do individual differences in need for meaning or in the occurrence of events that stimulate meaning-seeking predict choices to join different groups? Descriptions of social processes within groups that may influence the development of more coherent and complex meaning systems (see Ladd and McIntosh 2008) would also be useful to identify the mechanisms by which group membership can influence global meaning. Further, continued use of experimental methods should help to identify the

active ingredients of different types of global meaning systems and point to possible reasons for observed differences. In our view, the research to date clearly supports the importance and likely benefit of such investigations.

Religion and Meaning-Making

Religion's role as a global meaning system extends to the situational meaning constructed daily and thereby also guides meaning-making processes (Park 2005a). One frequently noted example of the relationship between religion and meaning-making is the influence of religion on the appraised meaning of stressors (Pargament 1997). For example, both religious importance and participation predict parents finding greater meaning after the sudden death of their child (McIntosh et al. 1993). Further, specific religious beliefs also predict understandings of stressful events. We have found that among parents of children with disabilities, general religiousness, positive God image, and a spiritual, deity-centered approach to religion were all associated with more positive appraisals of their child's disability, including thinking of the disability as a challenge rather than a threat (Newton and McIntosh 2010). Similarly, religion variables were also related to more appraisals of stressors associated with Hurricanes Katrina and Rita as beneficial by displaced Jewish college students along the Gulf Coast (Newton and McIntosh 2009b). Evidence also indicates that the influence of religion on appraisals explains unique variance in outcomes, offering further support for the unique role of religion in meaning making. One study found that religious appraisals (e.g., thinking of death as a benevolent act of God) were significant predictors of finding meaning in life among hospice caregivers, even after controlling for nonreligious appraisals (e.g., thinking of death as an opportunity for growth; Mickley et al. 1998).

Meaning-making coping is another process closely tied to religion (Pargament 1997). Religious coping strategies meant to increase meaning (e.g., "I tried to find the lesson from God in the event") have been shown to influence the outcomes of those coping with chronic pain (Bush et al. 1999), divorce (Webb et al. 2010), breast cancer (Gall et al. 2009; Thuné-Boyle et al. 2011), the death of a loved one (Park 2005b; Wortmann and Park 2009), and many other stressful situations to largely positive result. Further, religion may become even more important for meaning-making coping as the severity of the stressor increases. In an analysis of focus groups of cancer survivors and seriously ill nursing home residents, Ardel et al. (2008) found the importance of religion for meaning-making coping increased as the seriousness of the illness increased. Supporting religion's unique role in meaning making coping, one study found that religious meaning-making coping strategies had effects on outcomes of kidney patients that were not mediated by nonreligious meaning mechanisms (e.g., general cognitive structuring; Tix and Frazier 1998).

As suggested by the prevalence and potency of religious meaning-making during times of stress, threats to meaning especially reveal the unique contributions of religion to meaning. When primed with meaninglessness or thoughts of death, participants

reported greater religiousness, suggesting that religious meaning compensates for deficits in general meaning (Norenzayan and Hansen 2006; Van Tongren and Green 2010). The reverse is also true; when made to think about religion, religious participants found reminders of death and meaninglessness less threatening (Jonas and Fischer 2006). This compensatory pattern indicates that religious meaning can fill gaps that general meaning cannot.

Taken together, the evidence reviewed here suggests that religion differs from other global meaning systems and that religion is especially influential in meaning making processes. While we certainly do not argue that there are no other sources of meaning, we believe the evidence supports the idea that religion is unique in its relation to global meaning and meaning-making processes. Succinctly put, it appears as if religion makes meaning more meaningful. This conclusion raises the question of *why* religious meaning is distinct from general, nonreligious meaning.

Why Religious Meaning Is Unique

There are a number of possible reasons why religion may provide a unique type of global meaning and why it may be uniquely suitable for meaning making in stressful circumstances. We discuss these reasons using four categories – comprehensiveness, sacredness, particular religious beliefs, and social components of religion that encourage meaning. However, note that these reasons need not be mutually exclusive; indeed, one reason for religion's singular status may be that it incorporates some or all of these possibilities in distinctive combinations, whereas other meaning systems and meaning-making processes do not. Thus, our position is not necessarily that religion is unique in each of these respects taken individually (though that may also be true for some or all of them) but that it may be unique in that certain examples of religion contain multiple distinguishing characteristics.

Comprehensiveness

One central function of meaning is making sense of the world at large (Park 2010). Meaning, in this sense, is about making connections and identifying relationships (Baumeister and Vohs 2002; Heine et al. 2006). The more possibilities there are for connections to be made, the more meaning can be found. In other words, comprehensiveness leads to comprehension. To this end, the ability of religion to make meaningful connections is almost without compare (Hood et al. 2005). Religion can inform almost every aspect of an adherent's life, including his or her perceptions, feelings, goals, attitudes, beliefs, and behaviors (McIntosh 1995; Silberman 2005). Even the Latin origin of the word (*religare*, “to tie together,” Latin Concise Dictionary, 1st ed. 2003) points to the ability of religion to subsume many aspects of life under one umbrella, from interpersonal relationships, to food choices, to understandings

of physical reality. Further, because the reach of religion extends to metaphysical and existential matters, the comprehensiveness of religion is unique not only in its breadth but also in its content. Indeed, religion may be broad enough to incorporate meanings created or experienced in disparate domains, potentially making it a superordinate source of meaning (see Schweiker 1969). The uncommon breadth of religion, therefore, may lend itself to global meaning systems that are more complex and coherent as well as to more effective meaning-making. Despite its potential importance, however, breadth may not be the only influential difference between religious meaning and nonreligious meaning. Recall that the effects of a broad, nonreligious meaning system (i.e., secular humanitarianism) were weaker than the effects of the religious version of that same broad meaning system (i.e., religious humanitarianism; Newton and McIntosh 2013). Other characteristics of religion, such as the sacred as a point of reference, may offer further insight into why religion makes meaning more meaningful.

Sacredness

Another central function of meaning is providing significance, that is, whatever is worth caring about (Park 2010). What people consider to be significant varies widely, so one way religious meaning may differ from nonreligious meaning is the content of significance. Pargament (1997) defined religion as “a search for significance in ways related to the sacred” (p. 32). He later identified the quality of the sacred as the ultimate unique characteristic of religion (Pargament 2002). Therefore, sacredness may help to account for differences between religious meaning and nonreligious meaning. Baumeister (1991) identified four patterns of motivation underlying any search for significance or quest for meaning in life: purpose, value, efficacy, and self-worth. Religious searches for significance may differ from nonreligious searches by imbuing these meaning motivations with the quality of the sacred; we will consider the role of sacredness in each.

Purpose can be understood as having goals for the future and anticipating of a future state of fulfillment (Baumeister and Vohs 2002). In the context of religion, purpose becomes sacred purpose, with uniquely religious goals (e.g., holiness, transcendence, seeking the divine) and uniquely religious future states of fulfillment (e.g., heaven, reincarnation, enlightenment), so perhaps able to uniquely provide meaning. There is empirical support for the unique contributions of sacredness to purpose, particularly in the form of religious goals. In a community sample asked to describe their personal goals, those who reported more religious or sanctified goals (e.g., “deepen my relationship with God”) were more likely to report greater subjective well-being and a greater sense of purpose in life compared to those who reported more nonreligious or non-sanctified goals (e.g., “help my friends and let them know that I care”; Emmons et al. 1998). Similarly, another study found that people tended to place higher priority on and invest more resources in sacred goals than nonsacred goals and derived more meaning from these religious goals (Mahoney et al. 2005).

Like sacred purpose, sacred values may help to distinguish between religious and nonreligious meaning. Values inform our sense of right and wrong and provide a basis for our behaviors. Values that are considered sacred could arguably hold even more sway over morality and quests for meaning. For example, having a value that the environment is important and should be protected is enhanced when this value takes on overtones of sacredness (e.g., God created the earth, so it is our duty to take care of it; Tarakewshar et al. 2001). Relatedly, couples who value their marriage and believe that it is sacred experience more marital satisfaction and commitment than couples who valued their marriage but did not believe that it is sacred (Pargament and Mahoney 2005). Sacred values, then, seem to provide more meaning than non-sacred values.

Efficacy, the belief that one can make a difference may also draw particular potency for meaning when it is characterized by the sacred. Divine injunctions to “go forth” and do things (e.g., reproduce, spread the word, live a righteous life) are common in Western religions and may offer an uncommon sense of empowerment to adherents, thereby providing more meaning and significance in life.

Finally, the belief that one is a good person worthy of good things (i.e., self-worth) may also get a boost from sacredness. Beliefs about self-worth abound in Western religions; the belief that one is created in the image of God, the belief that one belongs to a people chosen by God, and the belief that one is redeemed by God are but a few examples. These beliefs can all lend a sacred aspect to beliefs about self-worth (e.g., I am good because God thinks I am good), perhaps making beliefs about self-worth less vulnerable to threat (e.g., it doesn’t matter that she doesn’t think I am good because God thinks I am good) and more conducive to meaning. In sum, religious searches for significance and meaning, particularly in the domains of purpose, values, efficacy, and self-worth, seem to be enhanced by the uniquely religious quality of the sacred.

Particular Religious Beliefs

All religions have particular beliefs that help to set them apart from secular institutions or groups. Some of these have direct implications for global meaning systems and meaning-making processes. One such belief is in the existence of a divine planner or a universal plan which may go beyond individual understanding. Belief in such a plan or planner may provide a sense that there is meaning, even if one does not understand it. Meaning may be experienced, and sense of coherence preserved, even if the individual cannot himself or herself develop an understanding of the event that can be reconciled with prior understandings of the world. A belief system that does not have an agent with a plan (even an unknowable plan) means that if the individual cannot find meaning, then the individual may be left with the conclusion that there is no meaning. A metaphysical plan or planner allows for the conclusion “I don’t know the meaning” to be dissociated more easily from “there is no meaning.” Note that this belief does not require a theistic religion.

Another particular religious belief with implications for meaning is the belief in a literal afterlife. An explanation for an event or the ability to see purpose or meaning stemming from an event may be enhanced if the time horizon for the realization of that meaning is extended infinitely. One may not be able to see any purpose in the near term, but it may be plausible that a purpose will become evident if one believes life will continue. More dramatically, if a belief in a literal afterlife is combined with a belief that rewards and punishments will occur in such an afterlife, then purpose in negative events may be easily seen. Furthermore, belief in a literal afterlife enables people to feel significant and eternal, contributing to a subjective sense of meaning in life and potentially effectively warding off existential terror (Jonas and Fischer 2006).

Social Components

As noted in our working definition, religion typically includes a social structure (which may or may not be an institution). Components of this social structure may contribute to the uniqueness of religious meaning. As an example of the importance of the social component beyond other aspects of religion, note that among bereaved parents, religious participation predicted finding meaning in the loss even when controlling for importance of religion to the individual (McIntosh et al. 1993). One reason for this might be the centrality of meaning to the religious social context. One more or less explicit purpose of religious organization is to grapple with issues of meaning (Emmons 1999). The immediate social structure of religion provides interactions and roles that support development, maintenance, and expansion of meaning. Participation in such an organization will increase the likelihood that one will actively develop and apply a meaning system and also that one will have social resources to support or suggest meaning when meaning is challenged; other groups may provide some meaning, but the breadth and focus on meaning is likely to be much higher in religious organizations (cf. Ladd and McIntosh 2008). Participation in a religious social network may provide both informational (e.g., this is why such an event would happen) and normative (e.g., this is how one should think about this event) social influence (Deutsch and Gerard 1955) that may facilitate development of meaning. Members of a person's religious community may support beliefs and provide consonant cognitions that bolster the cognitive stability and influence of the beliefs (Festinger 1957; Festinger et al. 1956). Further, participation in the social aspect of religion may increase certain individual behaviors, such as prayer or meditation, which in turn may facilitate development and maintenance of meaning.

The social component of religion may expand beyond other social sources of meaning not only because meaning is explicit and foundational to religious groups but also because religion is typically more than just an immediate social group. As both a cultural idea and an organization, religion often extends back generations. Moreover, it often explicitly notes this temporal continuity and refers to individuals and events in the past that are important and that exemplify meaning. Separate from

any reality of consistency of beliefs or meaning, the messaging of religion supports the individual in thinking that the understandings he or she has are well supported, stable, and coherent.

Conclusion

Religion and meaning share a close relationship. However, religion is not simply meaning and meaning is not simply religion. These two constructs are independently complex, and as suggested by this chapter, examining how religious global meaning systems differ from nonreligious global meaning systems as well as how religious meaning-making differs from nonreligious meaning-making can enlighten us about the nature of each. These differences indicate that religion seems to provide a distinct type of global meaning and seems to be uniquely suitable for meaning making in stressful circumstances. Therefore, we contend that the study of religion is necessary to fully understand meaning and vice versa. However, neither meaning nor religion should be reduced to the other. Religion may do what it does in many cases because of its association with meaning, but simply studying meaning would omit part of what is important about religion. Religion may support meaning and meaning-making, but nonreligious versions of these exist, and we believe they will differ in important ways from the religious versions.

To understand the interrelationship of meaning and religion, documenting specific characteristics of religious global meaning that differentiate it from nonreligious global meaning and identifying mechanisms by which religious meaning making differs from nonreligious meaning making will be important next steps. We speculated here about potential features and pathways, but direct empirical tests of these are lacking. We especially recommend experimental designs to isolate the causal active ingredients of religion in the creation of unique global meaning systems and the use of unique meaning-making processes. For example, if one hypothesizes that religion increases the subjective experience of meaning because it encourages belief in a divine plan, the degree of “divine planfulness” could be manipulated with exposure to religious passages that emphasize or deemphasize this characteristic compared to exposure to a control passage. Parsing the individual differences that lead to different types global meaning systems could also help to shed light on the role of religion in meaning. Do some people seek out religion because they need, want, or have more coherent and complex meaning systems? Who is more likely to find religious meaning to be more meaningful? Identifying the situational factors underlying religious versus nonreligious sources of meaning is another fertile line of inquiry. Does exposure to events that stimulate meaning-seeking (e.g., trauma events, the birth of a child, bereavement) predict choices to join different groups with different global meaning systems and meaning making strategies?

The assumption throughout this review has been that religion *enhances* the subjective sense of meaning and leads to more positive meaning-related outcomes. This assumption that religion is generally good for meaning has broad empirical support

(see Park 2005a); however, exceptions to religion's goodness for meaning may not be uncommon. These exceptions could further illuminate the relationship between religion and meaning. Are there circumstances in which a religious global meaning system decreases the subjective sense of meaning compared to a nonreligious global meaning system? For example, the Western belief that God is good and powerful is not easily reconciled with the reality of bad stuff happening to good people. Does this asymmetry lead to a decreased sense of meaning and worse meaning-related outcomes?

It also may be true that a meaning approach can help us to understand variation in religion. For example, aspects of religion that are hard to understand at face value (e.g., belief in a vindictive God, refusing blood transfusions, wearing restrictive garments) make more sense if embedded in a meaning system perspective. The powerful need for meaning could then help us to understand the forms and functions of religion just as considerations of religion can help us to more fully understand the processes and effects of meaning.

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Chapter 21

Death, the Need for Unambiguous Knowledge, and the Construction and Maintenance of Multi-level Meaning

Matthew Vess

Because it's only intangible ideas, concepts, beliefs, fantasies that last. Stone crumbles. Wood rots. People, well, they die.

Chuck Palahniuk, *Choke* (p. 160)

It is truly remarkable to consider that the most enduring aspects of our individual existences may be the cultural beliefs and values that, though varying dramatically in content from one culture to the next, define who we are. Nature is tenacious in the ways that it can erase the physical evidence of our lives. Our towns, our homes, our bodies, even the stones that are purchased to mark our graves will eventually deteriorate and give way to the natural process of decay. At its most basic level, human life is no different than the life of any mortal organism whose physical presence fades away with time. Yet, the human capacity for symbolic and self-reflective thought has given way to the creation of a symbolic world where humans are more than simply the sum total of their physical parts. We've created elaborate belief systems to explain our origins, the nature of our existence, and what lies beyond it. We impose cognitive structure on the world to extract meaning from it and to understand how our actions will function and be interpreted by others. These abilities allow us to construct broad forms of symbolic meaning found nowhere else in nature and that endure well beyond the brevity of any single life. We construct meaning that transcends physical death. As Becker (1973) put it, "the hope and belief is that the things that man creates in society are of lasting worth and meaning, that they outlive or outshine death and decay" (p. 5).

The idea that perceptions of meaning serve a death-denying function is a central component of terror management theory (TMT; Solomon et al. 1991). As described earlier in this volume (Sullivan et al. Chap. 2), TMT proposes that the construction of symbolic forms of meaning allows people to operate unencumbered by the potentially distressing recognition that death is inevitable. This chapter uses TMT to

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explore: (a) the importance of and interplay between micro- and macro-level meaning, (b) how individual differences in the preference for unambiguous knowledge shape the ways that people construct meaning in response to heightened death-relevant cognitions, and (c) the implications of this analysis for understanding the consequences of deteriorating foundations of meaning. We'll begin with a broad overview of TMT, its conceptualization of meaning, and its analysis of why meaning is so fundamentally important.

Terror Management Theory and Meaning

...man is cursed with a burden no animal has to bear: he is conscious that his own end is inevitable, that his stomach will die...

- Becker (1975, p. 3)

Largely inspired by Becker's work (e.g., 1973), TMT (for recent reviews, see Greenberg et al. 2008; Sullivan et al., Chap. 2) argues that the uniquely human recognition of mortality represents an ever present source of intense anxiety. Humans are hardwired for survival and, like all other creatures, demonstrate general inclinations to stay alive. However, we are also keenly aware that regardless of how many vegetables we eat, vitamins we take, or laps we run, death is inevitable. TMT proposes that, in an effort to keep the potential anxiety emanating from this awareness at bay, much behavior is geared towards maintaining faith in the legitimacy of one's cultural worldview and fulfilling the standards of value prescribed by that worldview. Cultural worldviews are shared systems of beliefs that provide people with: (a) stable and coherent symbolic conceptions of reality, (b) specific guidelines for becoming a valued contributor to that reality, and (c) the promise of immortality to those who live up to those standards of value. Immortality can come in literal forms via religious notions of an afterlife or in symbolic forms via the perception that one has contributed and therefore connected to something more permanent than his/her own existence (e.g., families, corporations, communities). Regardless of the form, however, TMT posits that obtaining the opportunities for death- transcendence afforded by cultural worldviews depends on people's ability to adhere to the specific standards of value that their particular worldview prescribes.

Support for this broad analysis has come through examinations of several inter-related hypotheses. The logic behind the most common of these, the *mortality salience hypothesis*, is fairly straightforward. If maintaining the integrity of cultural worldviews and striving to live up to worldview standards alleviate anxieties about death, reminders of mortality (mortality salience) should elevate people's efforts to do so.¹ Hundreds of experiments conducted in a wide array of settings have offered

¹The reader is encouraged to consult Arndt et al. (2004) for an important discussion of the cognitive processes underlying mortality salience effects. The need for cultural worldviews and self-esteem primarily occurs when thoughts of death are accessible but not in focal conscious attention.

strong convergent support for this hypothesis. For example, experimental inductions that elevate death-relevant thoughts (compared to a host of alternative control topics) have been shown to increase derogation of and aggression towards worldview threatening others (worldview defense; e.g., Greenberg et al. 1990; McGregor et al. 1998), as well as increase strivings to fulfill cultural standards of value (e.g., Routledge et al. 2004). These studies are complimented by another body of work testing the alternative *anxiety-buffer hypothesis*, which states that bolstering the integrity of cultural worldviews and enhancing self-esteem should attenuate the consequences of death-relevant cognitions. Accordingly, affirming one's beliefs and bolstering self-esteem prior to a mortality salience induction reduces its impact on subsequent death-thought activation and worldview defense (e.g., Schmeichel and Martens 2005; Harmon-Jones et al. 1997; Routledge et al. 2010b). Research assessing a third hypothesis, the *death-thought accessibility hypothesis*, has further shown that undermining people's faith in their cultural worldviews and threatening their self-esteem spontaneously increases the cognitive accessibility of death-relevant thoughts (see Hayes et al. 2010). Taken together, the body of TMT work converges to demonstrate that maintaining the integrity of cultural worldviews and self-value is critical for people's ongoing efforts to manage concerns about death.

More broadly, however, terror management theory and the research it has generated highlights how our precarious existential dilemma underlies, to a large extent, people's efforts to maintain a form of meaning found nowhere else in nature. All animals require some basic, micro-level form of meaning to effectively navigate their environments. To survive and reproduce, animals must perceive that predators, mates, and other aspects of their environments will conform to previously acquired expectations. The various camouflaging and mimicry skills that many species have developed to avoid predators and consume prey evidence this. Spicebush swallowtail butterfly larvae, for example, appear as bird droppings early in their development and snakes later in development. This mimicry is effective because predators (e.g., birds) have an expectation that consuming dung or going toe-to-toe with a snake would most likely result in a suboptimal outcome. Those objects *mean* something other than an easy meal. Humans similarly employ a variety of social-cognitive strategies to organize environmental stimuli into orderly, stable, and predictable components. We form expectations about how objects in our environments and how our own actions will operate. Such strategies promote effective action and allow people to view their incredibly complex realities as coherent and meaningful. Just as birds know what the presence of a predator *means*, so do humans have expectations of what stimuli in our environments mean. Yet, from the perspective of TMT, this micro-level meaning grounded in structural relationships is only part of the meaning formula that humans follow. Humans not only need to know that objects in their environment will operate in expected ways but that their lives and actions are *significant* in a cosmic reality that transcends death.

Cultural worldviews fulfill this need by providing a stable context for understanding one's significance in and connection to a temporally enduring symbolic reality where death-transcendence is possible. The worldview delineates what is significant and thus forms a macro-level meaning structure from which personal

feelings of significance can be derived. However, while the cultural worldview offers the pathway to death-transcendent value, its operation is critically dependent on the micro-level structural meaning described above. Maintaining faith in the legitimacy of a symbolic belief system and one's significance within that belief system would prove most difficult if there were no stable and coherent standards for what is valued to begin with. One must perceive reality to be coherent, predictable, and stable in order to derive a sense that living up to certain cultural standards will be valued on some grand scale. TMT's conceptualization (e.g., Arndt et al. 2013; see also Park 2010) of meaning thus consists of structural knowledge and reliable expectations about the world (micro-level meaning), as well as broader perceptions that certain contingencies confer symbolic value to those who meet them (macro-level meaning of the cultural worldview). A *meaningful* life, from this perspective, is one in which the individual feels that he/she has a clear and stable route to culturally conferred death-transcendent value, or, in the words of Becker (1973), to know that his/her actions are "of lasting worth and meaning, that they [will] outlive or outshine death and decay" (p. 5).

An Individual Difference Approach to the Dynamics of Death and Meaning

The TMT conceptualization of multi-level meaning invites consideration of the interplay between micro- and macro-level meanings as people deal with heightened concerns about death. As noted above, the guiding analysis proposes that micro-level meaning – structural relationships that people use to process information – is a necessary foundation for maintaining broader macro-level perceptions of meaning predicated on the belief that clear contingencies for obtaining self-significance are in place. It might be impossible to feel that our actions have any real value if reality itself was devoid of orderly, stable, and predictable relationships. How would doing the "right thing" confer meaningful value if people who do the "wrong things" are equally rewarded or if rewards are simply doled out all willy-nilly? That the integrity of macro-level meaning depends on the integrity of structural relationships in the social world suggests that differences in the ways that people maintain those relationships may shape people's responses to mortality concerns and their ability to maintain broader perceptions that their lives are meaningful on some grand scale. That is, if meaning serves a terror management function, then differences in the ways that people maintain meaning should direct their responses to concerns about mortality. An emerging body of research that integrates TMT with lay-epistemology theory (Kruglanski 1989, 1990) speaks to these possibilities. Before visiting this research, however, let us take a brief detour to consider some of the core tenets of lay-epistemology theory and its relevance to the TMT conceptualization of multi-level meaning.

Lay-epistemology theory is in many ways a theory about micro-level meaning. It broadly focuses on the ways that humans form expected relationships and come to

understand the nature of reality (i.e., the process through which people acquire knowledge). According to the theory, people develop knowledge about the world through a process of hypothesis generation and validation. They consider explanations for the nature of reality, assess their explanations' plausibility in light of available evidence and preexisting inference rules, and finally arrive at a conclusion. The theory further emphasizes that situational and dispositional factors shape people's desire to interpret information in an unambiguous fashion and "close" on a clear conclusion as quickly as possible. At the individual difference level, people vary in the "need for closure." High need for closure represents a heightened need for simple, unambiguous, stable, and predictable knowledge about the world. Low need for closure, on the other hand, represents enhanced openness to novelty, unfamiliarity, and ambiguity. Whereas people high in need for closure rigidly rely on preexisting knowledge structures to interpret information and form quick conclusions, people low in need for closure are likely to consider multiple interpretations to avoid drawing conclusions that are premature.

The rigid orientation to information processing characteristic of people high in need for cognitive closure suggests that their sense of micro-level meaning may depend heavily on the expected relationships that they already possess. Indeed, chronic structuring tendencies assessed by the need for cognitive closure scale (NFC; Webster and Kruglanski 1994) and the conceptually similar personal need for structure scale (PNS; Neuberg and Newsom 1993) show reliable associations with outcomes consistent with this analysis. For example, NFC and PNS positively predict stereotype use (Kruglanski and Freund 1983; Neuberg and Newsom 1993) and reliance on accessible knowledge to form social judgments (e.g., Ford and Kruglanski 1995; Chiu et al. 2000). The more open and flexible orientations characteristic of people low in need for closure, in contrast, suggest that these individuals may form structural knowledge about the world through the integration of multiple perspectives. Rather than relying entirely on existing expected relationships, they may look to form new relationships by seeking out novel information. Evidence that these individuals are proficient at and motivated to integrate novelty into preexisting schemas supports this logic (Dijksterhuis et al. 1996). Thus, if differences in the need for simple interpretations of reality give way to fundamentally different approaches to the maintenance of micro-level meaning (structural relationships), then these differences may have important implications for the ways that people maintain meaningful views of their lives and protect themselves against existential concerns about death.

We can, in the spirit of "structuring" the ongoing discussion, derive three guiding hypotheses to assess the ways that differences in the need for simple structure shape people's pursuit for meaning in the face of mortality concerns.

- (a) First, and perhaps most directly, if micro-level meaning in the form of expected relationships serves a death-denying function, then heightened concerns about death should foster divergent responses from those high and low in the need for simple structure. They should respond based on the fundamentally different ways that they maintain and construct micro-level meaning (structural relationships).

- (b) Secondly, if micro-level meaning underlies broader perceptions that one's life is meaningful and significant, then these broad perceptions might be differentially influenced by death-relevant thoughts depending on people's preferences for simple structure. People who possess rigid and stable structural relationships should be particularly efficient in maintaining broad perceptions of existential meaning in the face of mortality concerns.
- (c) Finally, if differences in the ways that people form structural relationships influence the nature of their macro-level meaning sources, then engaging in the cognitive processes that people rely on to construct these relationships should restore broad perceptions that their lives are significant and meaningful when mortality concerns are elevated.

Each of these hypotheses will be considered below to better portray how individual differences in the need for simple structure inform the TMT analysis of multi-level meaning.

Death, the Need for Structure, and the Maintenance of Micro-level Meaning

As alluded to above, differences in the need for simple structure may be considered individualized approaches to obtaining micro-level meaning. Those who prefer unambiguous and stable views of the world obtain micro-level meaning from the preexisting knowledge structures that have already been developed. For example, they use stereotypes to form impressions and rely on accessible preexisting knowledge to make inferences about ambiguous information. People who are more open to ambiguity and seek out novelty, on the other hand, appear to maintain micro-level meaning through the revision of old knowledge in light of new information. One reason that low-PNS individuals might remember stereotype-inconsistent behavior is that they are attempting to revise their expected relationships (micro-level meaning) about the world (Dijksterhuis et al. 1996). These individualized approaches to meaning are consistent with TMT's broader analysis of the individualized worldviews that people invest in. Solomon and colleagues (1991; see also Landau et al. 2010) argued that people internalize unique components of the cultural worldview and thus differentially rely on certain aspects of the worldview for security. Personality characteristics and differing value orientations may reflect this. While one American might find death-transcendent value through individualism, another American might find that conforming to the latest fashion trends of Hollywood offers a pathway to personal worth. Dispositional differences in the need for simple structure may similarly reflect individualized approaches to constructing and maintaining micro-level meaning in the form of expected relationships. Thus, following directly from TMT's mortality salience hypothesis, we might expect accessible

death-relevant cognitions to motivate efforts to solidify micro-level meaning by (a) increasing reliance on existing knowledge among people high in need for structure and (b) increasing novelty exploration among people low in need for structure.

Consistent with this analysis, multiple studies indicate that people who show strong preferences for simple, unambiguous, and stable interpretations of the world respond to death reminders with an increased reliance on preexisting knowledge structures. Schimel and colleagues (1999), for example, found that high-NFC participants evaluated a stereotype-inconsistent target more negatively following reminders of mortality than reminders of a control topic. Similarly, Landau et al. (2004) found that high-PNS individuals not only react negatively to people who are unpredictable but also show an enhanced motivation to seek out information that conforms to preexisting notions of the world (i.e., that bad things happen to bad people). Moreover, a series of studies (Landau et al. 2006) found that reminders of death increased distaste for modern abstract art among high-PNS people, unless that art was framed in an easily interpretable way (e.g., given a meaningful title). This exaggerated reliance on preexisting knowledge can also explain why high-PNS individuals show greater dislike for nontraditional ideas (Routledge et al. 2010a) and amplified defense of things they value (e.g., their University; Juhl and Routledge 2010) under conditions that elevate mortality concerns. Such studies clearly indicate that people who desire unambiguous interpretations of the world respond to elevated mortality concerns with an increased reliance on stable and preexisting structural relationships, suggesting that their strategies for maintaining micro-level meaning function to alleviate existential distress.

Relative to those high in the need for simple structure, people low in need for structure show an affinity for novelty and look to flexibly integrate new knowledge with existing understandings of the world. These individuals should thus respond to mortality salience with greater flexibility and openness to novel information. Dechesne et al. (2000) offered the first clues that this may be the case. They found that low-NFC individuals subliminally primed with the word death showed greater disengagement from negatively portrayed group identities than low-NFC individuals primed with a neutral concept. Rather than clinging to preexisting group identities, low-NFC participants primed with death appeared to form new understandings of the group and flexibly distanced themselves from this new representation. Such readiness to adopt new perspectives is also consistent with data showing that low-PNS individuals exposed to death-relevant threats express less interest in information consistent with preconceived notions of the world (Landau et al. 2004; Study 5), an increased liking for nontraditional ideas (Routledge et al. 2010a), and an amplified desire to seek out novelty and culturally unfamiliar information (Vess et al. 2009). These effects presumably occur because low-PNS individuals maintain and construct micro-level meaning by integrating novel information into preexisting knowledge. Thus, the strategies for maintaining and constructing micro-level meaning that is characteristic of people high and low in need for simple structure become engaged to a greater degree when concerns about death are heightened.

Death, the Need for Structure, and Macro-level Perceptions of Meaning

Recall that the TMT analysis of multi-level meaning conceptualizes micro-level meaning as the critical foundation for maintaining the integrity of macro-level meaning conferred by the cultural worldview. The ability to perceive one's life as meaningful and significant depends on the integrity of the structural relationships that lend coherence, order, and stability to our social worlds. Responses to death-relevant cognitions characteristic of those high and low in need for simple structure may therefore have important implications for the resilience of these broader perceptions of meaning when mortality concerns are active. For people high in the need for simple structure, mortality-related cognitions may have little impact on the perceived meaningfulness of life because these individuals rely heavily on preexisting and well-solidified expectations about the world. Their broader perceptions of meaning should reflect this rigidity and remain stable in the face of existential threat. Perceptions of life's meaningfulness for people low in the need for simple structure, in contrast, may be less resilient to death-relevant threats. These individuals seem to construct and maintain micro-level meaning through the consideration and exploration of novel perspectives. In the absence of such exploration, the integrity of macro-level perceptions of life's meaningfulness may be compromised in the face of mortality concerns. Studies by Vess and colleagues (2009) support both possibilities. Across four studies, high-PNS participants reported similarly high levels of meaning in life regardless of whether death-relevant cognitions were active or docile. Low-PNS participants, on the other hand, experienced significant decreases in the feeling that their lives were meaningful when death-relevant cognitions were active.

Death, the Need for Structure, and the Link Between Micro- and Macro-level Meaning Maintenance

That people low in the need for simple structure experience meaning deficits in the face of mortality concerns suggests that their foundation of micro-level meaning may be less solidified than the micro-level meaning of people high in the need for simple structure. Low-PNS (or NFC) individuals do not rely entirely on preexisting knowledge to form and maintain expected relationships about the world but instead look to form conclusions based on the consideration of multiple sources of information. This leads to a very straightforward hypothesis. If the consideration of novel perspectives facilitates the maintenance of micro-level meaning, then doing so in response to mortality concerns may help people low in the need for structure reaffirm the broader meaningfulness of their lives. This would explain why reminders of mortality prompt these individuals to seek out novel interpretations of the world and why death-relevant thought undermines meaning in the absence of such exploration. In accord with this hypothesis, Vess et al. (2009) showed that low-PNS individuals who considered the knowledge that could be gleamed from exploring an

unfamiliar culture, relative to a familiar one, reported higher levels of meaning in life following reminders of death.

To summarize, across a number of interrelated studies, differences in the ways that people construct and maintain micro-level meaning have been shown to elicit remarkably diametrical responses to concerns about death. People high in the need for rigid and stable expectations about the world respond to mortality concerns with an increased reliance on preexisting knowledge, a response which presumably explains why their broader perceptions of life's meaningfulness are unaffected by death-relevant ideation. People low in the need for simply structured interpretations of reality show a different pattern of responses. They seek out novel and unfamiliar perspectives to a greater degree following death-thought activation and, perhaps as a consequence of this less stable micro-meaning, experience declines in the perceived meaningfulness of their lives. However, when given the opportunity to consider novel information, broad perceptions of life's meaning are restored.

Need for Simple Structure and the Deterioration of Meaning Foundations

The TMT conceptualization of a meaningful life as one in which clear routes to self-value are available underscores the importance of self-esteem for people's terror management efforts. Self-esteem indicates that one is adequately living up to the culturally derived standards of value that confer the promise of immortality. The foregoing analysis can thus be viewed as an elucidation of how the need for clear routes to self-value (i.e., meaning) is fueled in large part by existential concerns about death.² Heightened death concerns prompt people to engage the cognitive processes that help them maintain and construct meaning. Given their critical existential importance, another way to think about these issues may be to consider what happens to people when their foundations for meaning crumble. A number of life situations can foster disruptions to stable meaning foundations. Consider significant life transitions into novel psychological terrains. We start high school, go to college, relocate to new communities, and even adapt to declining physical abilities. Such transitions introduce many complex challenges, but a critically important one may be the upheaval of people's preexisting foundations for meaning. Existing pathways to self-value (meaning) may no longer be relevant or achievable in novel contexts, raising questions about the meaning-relevant consequences of these periods of instability. One likely outcome is that people may begin to experience compromised well-being, given that terror management processes are posited to keep people psychologically protected from the harmful consequences of death awareness (Routledge et al. 2010b). An interesting study by Edmondson et al. (2008) supports

²Death is certainly not the only reason why people seek meaning, but, from the present perspective, death is a critically important and unique reason.

this possibility by finding that deteriorating religious faith increases depression among the terminally ill because it increases concerns about death. Thus, if left unchecked, disruptions to one's foundation for meaning can lead to psychological dysfunction by increasing people's vulnerabilities to death concerns.

The responses to death-relevant thoughts that are characteristic of people low in the need for simple structure may also offer clues to how people deal with compromised meaning foundations. These individuals possess a less solidified sense of micro-level meaning and require novelty exploration to restore broad perceptions of meaning that buffer against death concerns (Routledge and Juhl 2010; Vess et al. 2009). This suggests that disruptions to people's meaning foundations may, perhaps not surprisingly, promote an enhanced search for meaning and a loosening of people's investment in current understandings of the world. Supporting this logic, Rogers et al. (2013) recently found that metacognitive perceptions of difficulty generating American values led to greater search for meaning under conditions of heightened death-thought. The implication is that weakened foundations for meaning may prompt people to seek out new forms of meaning in order to deal with concerns about death.

It seems likely, then, that people who are more comfortable with ambiguity may be better equipped to face the pressures of life transitions because they create micro-level meaning through the integration of novelty. Research has indeed shown that tolerance for ambiguity positively predicts well-being during the initial phases of a transition (Bardi et al. 2009), suggesting that individuals low in the need for simple structure are proficient at constructing micro-level meaning in novel contexts. Moreover, that these individuals *integrate* new structural relationships into existing ones implies that, even when large portions of their meaning foundations are changing, there may still be some remaining consistency to their meaning networks. They are therefore likely to have stable perceptions of macro-level meaning and self-worth during significant life transitions because they are disposed to flexibly integrate new information into existing knowledge about the world.

People who rely entirely on preexisting knowledge to construct micro-level meaning, in contrast, may have substantial difficulties when their foundations for meaning become compromised. Their tendencies to cling to prior knowledge may leave them vulnerable to well-being deficits when that knowledge is no longer applicable to the context in which they find themselves. Indeed, there is considerable evidence that people high in the need for cognitive closure adjust poorly to change (e.g., Kruglanski et al. 1993, 2007). Yet, to the extent that life transitions continue to render preexisting micro-level meaning irrelevant, high-PNS individuals may also become susceptible to whatever interpretations of the world are most accessible. This introduces a potential risk. While deteriorating meaning foundations may make these individuals momentarily open to new perspectives (Vess et al. 2011), their enhanced need to quickly "seize and freeze" on some acceptable form of meaning may make them equally vulnerable to contextual pressures. Some evidence of this can be found in studies linking need for closure to adherence to salient social norms (Kruglanski and Webster 1996) and in the work of Landau et al. (2006) showing that high-PNS individuals reminded of mortality quickly latch on to

whatever meaningful frame of reference is provided for ambiguous stimuli. Such findings suggest that, when high-PNS individuals' meaning foundations crumble, the existential need to find new stable structure in the world may increase their susceptibility to the loudest and most accessible macro-meaning frameworks available. This analysis could have important implications for understanding an array of psychological outcomes, ranging from gang and cult initiations to excessive dependency on the standards of others. More research is certainly needed, but the extension of an existentially informed multi-level meaning perspective on people's navigation of significant life transitions may yield exciting possibilities.

Conclusion

This chapter began with a discussion of the unique existential dilemma that humans face. We are on one hand oriented towards survival like all creatures, yet on the other hand uniquely aware that death is unavoidable. This precarious position underlies the uniquely human construction of multi-level meaning frameworks consisting of micro-level structural relationships and macro-level pathways to death-transcendent value. Though all humans share this existential dilemma, there are critically important differences in the ways that people construct, maintain, and rebuild this multi-level meaning framework. Some people rely rigidly on preexisting structural knowledge about the world, while others look to form new knowledge through the consideration of alternative perspectives and information. These differences direct people's responses to death-relevant thought and dictate how such thoughts impact the perceived meaningfulness of their lives. That death seems to be so intricately linked to these processes supports the TMT analysis of why people need multi-level meaning to begin with. From this perspective, people need micro-level meaning, in part, because it is the foundation for macro-level meaning. People need to view the world as orderly, stable, and predictable in order to maintain beliefs that living up to cultural standards will connect them to a temporally enduring structure (cultural worldview) more permanent than their physical existence. They need to construct meaning in life in order to deal with concerns about death.

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Part IV

Culture and Interpersonal Processes

Chapter 22

Attachment Orientations and Meaning in Life

Mario Mikulincer and Phillip R. Shaver

In recent years, attachment theory (e.g., Bowlby 1973, 1980, 1982, 1988), which was originally formulated to describe and explain infant-parent emotional bonding, has been applied, first, to the study of adolescent and adult romantic relationships and then to the study of individual-level psychological processes, such as emotion regulation, goal pursuit, identity formation, career development, and religiosity (Mikulincer and Shaver 2007a). To distinguish Bowlby's child-oriented attachment theory from our elaborated version of the theory, which has been supported by hundreds of studies of adolescents and adults, we use the term "adult attachment theory." In this chapter, we extend the theory to contribute to the field's understanding of individual differences in the experience of life's meaning – the central issue of the present volume. Our main claim is that attachment security – a felt sense, rooted in one's history of close relationships, that the world is generally safe, that other people are generally helpful when called upon, and that I, as a unique individual, am valuable and lovable, thanks to being valued and loved by others – provides a foundation for an authentic sense that life is coherent, rewarding, and meaningful. That is, attachment security encourages beliefs and feelings that contribute to life's meaning, such as feeling that one's life has a purpose and direction; that one has a stable, coherent identity; and that one's life is anchored in a philosophically or spiritually coherent framework.

We begin with a brief overview of attachment theory and of our theoretical model of the activation and functioning of what Bowlby (1973, 1982) called the attachment behavioral system (Mikulincer and Shaver 2007a). We then apply the model to individual differences in perceptions of life's meaning. We review research

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showing that, like other kinds of threats, the possibility that life has no meaning activates the attachment system, increasing one's desire for proximity to a trusted "attachment figure" as a way of reestablishing a sense of safety, security, and personal value. We also review studies showing that the availability of a loving and supportive external or internalized (remembered or imagined) attachment figure, and the resulting feeling of security, sustains one's sense that life has meaning. We also show how different attachment orientations (defined in terms of security, anxiety, and avoidance) shape psychological processes that augment or erode the sense of meaning – processes such as personal goal pursuit, identity formation, career development, and religious faith.

Attachment Theory: Basic Concepts

In his books on attachment theory, Bowlby (1973, 1980, 1982) proposed that human infants are born with a repertoire of *attachment behaviors* (e.g., vigilance, crying, clinging) "designed" by evolution to assure proximity to supportive others (*attachment figures*) in times of need. These psychological and behavioral responses increase the chances of being protected from physical and psychological threats, and they also encourage the development of coping skills related to emotion regulation, interpersonal communication, and healthy exploration of the physical and social environment. Although the attachment system is most essential to survival and well-being early in life, because of human infants' extreme immaturity and dependence on others, Bowlby (1988) claimed that it is active throughout life and is manifested in thoughts, emotions, and behaviors related to proximity- and support-seeking in the service of a fundamental sense of safety and security. This idea has been greatly elaborated by social-cognitive research (e.g., Mikulincer et al. 2002) showing that various kinds of threats to adults (dangers, troubles, disappointments) automatically activate mental representations of attachment figures, with cognitive and emotional effects that depend on the nature of these historically based memories and expectations.

Although all human beings are born with the capacity to seek proximity, support, and comfort from protective others in times of need, important individual differences arise in the context of relationships from birth on. According to Bowlby (1973), these individual differences are shaped by reactions of attachment figures to one's bids for support in times of need and from representing these reactions in *attachment working models* of self and others. When attachment figures are reliably available when needed, sensitive to one's attachment needs, and willing and able to respond warmly to one's bids for proximity and support, a person of any age feels more secure and self-efficacious and is more able to explore the physical and social environment curiously and enjoy life's many challenges and opportunities. However, if one's key attachment figures have not been reliably available and supportive, this sense of security is not attained, doubts about one's lovability and worries about others' motives and intentions are raised, and affect-regulation strategies other than healthy proximity-seeking are formed (*secondary attachment strategies* characterized by *avoidance* and *anxiety*).

In social-psychological studies of adolescents and adults, tests of attachment theory have focused on a person's *attachment orientation* or *style* – a systematic pattern of relational expectations, emotions, and behaviors conceptualized as psychological residue of each person's unique attachment history (Fraley and Shaver 2000). Beginning with Ainsworth et al.'s (1978) studies of infant attachment, and followed up in hundreds of adult attachment studies, researchers have found that attachment orientations can be measured along two orthogonal dimensions: attachment-related *avoidance* and *anxiety* (Brennan et al. 1998). Attachment-related *avoidance* is rooted in a person's distrust of relationship partners' goodwill, which causes him or her to maintain behavioral and emotional independence and distance from others. Attachment-related *anxiety* is based on self-doubt and worries that relationship partners will not be available in times of need. In contrast, people who score low on these two dimensions are said to be secure with respect to attachment or to have a secure attachment style. The two dimensions can be measured with reliable and valid self-report scales (e.g., Brennan et al. 1998) and are associated in theoretically predictable ways with relationship quality and affect-regulation strategies (see Mikulincer and Shaver 2007a, for a comprehensive review of hundreds of studies).

We have proposed that the two-dimensional space defined by attachment anxiety and avoidance is important for understanding the different strategies people use to deal with threats and stressors (Mikulincer and Shaver 2007a). Those who score low on these dimensions hold more positive beliefs about self and others, use more effective affect-regulation strategies, and enjoy higher levels of psychological well-being than people who score high on either avoidance or anxiety (Mikulincer and Shaver 2007a). Secure individuals generally appraise stressful events in less threatening terms (e.g., Mikulincer and Florian 1995), possess more optimistic expectations about being able to cope effectively (e.g., Berant et al. 2001), hold more favorable views of human nature (e.g., Collins and Read 1990), describe relationship partners in more positive terms (e.g., Feeney and Noller 1991), have more positive expectations regarding their partners' behavior (e.g., Baldwin et al. 1993, 1996), and report higher self-esteem (e.g., Mickelson et al. 1997). Secure people often cope effectively with stressful events by relying on others' support and adopting problem-focused strategies rather than less effective emotion-focused defenses, such as denial, suppression, or extreme, dysregulated expression of emotions combined with demands for help (e.g., Mikulincer and Florian 1998; Simpson et al. 1992). Secure individuals experience more frequent and prolonged bouts of positive affect, compared with insecure individuals, and are more resilient in times of stress (e.g., Berant et al. 2001; Mickelson et al. 1997).

People who score high on measures of either attachment anxiety or avoidance differ from their more secure peers in using less effective coping strategies, and they differ from each other in adopting different affect-regulation strategies that we, following Cassidy and Kobak (1988), call "hyperactivating" or "deactivating" (of their attachment behavioral system). Those who score high on attachment anxiety typically adopt *hyperactivating attachment strategies* – energetic attempts to achieve proximity, support, and love combined with a lack of confidence that these resources will be adequately provided and with feelings of intense sadness or anger when

what is wanted is in fact not provided. These reactions originate in relationships in which an attachment figure was sometimes responsive but not reliably so, placing the needy person on a partial reinforcement schedule that rewards emotional exaggeration and persistence in proximity-seeking because these strategies sometimes succeed (Ainsworth et al. 1978). Hyperactivation of the attachment system includes increased vigilance to threat-related cues and quick detection of real or imagined cues of attachment-figure inadequate availability. As a result, the attachment system is chronically activated, psychological pain related to attachment-figure unavailability is frequent, and doubts about the chances of achieving relief from anxiety and a reliable sense of security are heightened (Mikulincer and Shaver 2007a).

In contrast, people who score relatively high on attachment-related avoidance tend to adopt *attachment-system deactivating strategies*, manifested in distancing themselves from stimuli and occasions that activate the attachment system and preferring to handle distress alone. These strategies develop in relationships with attachment figures that disapprove of and punish frequent bids for closeness and open expressions of need (Ainsworth et al. 1978). They involve dismissal of threat- and attachment-related cues, suppression of threat- and attachment-related thoughts and emotions, and repression of threat- and attachment-related memories. These tendencies are reinforced by adopting a self-reliant stance that decreases dependence on others and discourages acknowledgment of personal faults, weaknesses, or needs.

Here, we wish to explore the possibility that attachment security and the different kinds of attachment insecurity color the ways in which people experience meaning or a lack of meaning in life.

Attachment Orientations and the Experience of Meaning

Because attachment security is associated with various kinds of positive affect (feeling valued by others, feeling competent in various domains), it is also likely to be associated with a sense of meaning in life, since positive affect seems to lead directly (perhaps not cognitively or rationally; King 2012) to meaning. Moreover, because attachment security contributes to the formation and maintenance of satisfying close relationships (see Mikulincer and Shaver 2007a, for a review), and because such relationships are important contributors to a sense of life's meaning (e.g., Baumeister 2005; Williams 2001), security should be positively related to meaning.

Unresponsive, unsupportive attachment figures and the insecurities they arouse can leave a person vulnerable to doubts and worries about life's meaning and pessimism about future developments and experiences. Moreover, attachment insecurities can interfere with meaning-making systems, such as a coherent framework of ambitions, ideals, and goals; the formation of a stable and positive self-identity; and the adoption of an encouraging, sustaining philosophy or spiritual perspective. Fortunately, there is substantial research support for this line of reasoning.

Concerns About Life's Meaning

Having a solid sense of coherence and meaning in life is crucial for emotional balance and psychological well-being (e.g., Steger and Frazier 2005; Updegraff et al. 2008), and people react defensively when their sense of meaning is threatened or shattered by life circumstances (e.g., Solomon et al. 1991). From an attachment perspective, we would expect threats to one's sense of meaning, like any other serious threat to one's welfare, to trigger a search for comfort, love, and reassurance from attachment figures. As a result, the availability of supportive attachment figures, in actuality or in one's mind (imagination or memory), and the resulting sense of attachment security, should contribute to a resilient sense of life's coherence, value, and meaning. In contrast, attachment insecurities are likely to leave a person vulnerable to threats of meaninglessness and in desperate need of ways of creating meaning.

The Threat of Meaninglessness and Attachment-System Activation

Although adult attachment research has not focused intensively on meaninglessness or on the effects of meaninglessness on attachment-system activation, we (Shaver and Mikulincer 2012) conducted a study to examine the influence of meaninglessness on proximity-seeking. In this study, Israeli undergraduates were randomly assigned to one of three experimental conditions: high meaning, low meaning, and neutral control. Participants in the high-meaning and low-meaning conditions wrote a brief essay about how the statement "Human life is purposeful and meaningful" might be viewed as either true or untrue, respectively. Participants in the control condition wrote an essay on a neutral topic (shopping at a drugstore). Immediately after writing the essay, participants completed a self-report scale assessing their desire for honesty, spontaneity, and closeness in relationships. Those in the low-meaning condition reported a stronger desire for romantic intimacy than those in the high-meaning or the neutral control condition. There was not a significant difference between the latter two conditions. Thus, raising the possibility of life's meaninglessness led to an increased wish for closeness and intimacy. This preliminary finding needs to be followed up with studies that include behavioral or implicit psychological measures (of the kinds we have used in other attachment studies; Mikulincer and Shaver 2007a), not just self-report measures.

Attachment Orientations and the Perception of Meaning in Life

Adult attachment researchers have not yet examined whether people differing in attachment orientation also differ in their experience of meaning in life. However, there is good evidence that feelings of closeness and social support (which are aspects of the sense of attachment security) are associated with a heightened sense

of life's meaning (e.g., Hicks and King 2009; Steger et al. 2008). Similarly, Lambert et al. (2010) reported that perceived closeness to family members and support from them was associated with greater meaning in life among young adults, even when self-esteem, feelings of autonomy and competence, and social desirability were statistically controlled. Moreover, implicit priming of relational closeness increased the perception of life's meaning when participants were in a bad mood (Hicks and King 2009). In contrast, experimental manipulations of rejection, social exclusion, and loneliness (which are related to attachment anxiety and avoidance) reduce people's sense that life is meaningful (e.g., Hicks et al. 2010; Stillman et al. 2009; Williams 2007, 2012).

We (Mikulincer and Shaver 2005) conducted a preliminary study to examine the association between attachment insecurities and meaning in life. Participants who had previously completed a self-report attachment measure were primed with representations of either a security provider (we asked them to think about a supportive other) or a person who did not serve attachment functions. They then completed a self-report measure of the extent to which they perceived the world as understandable and life as "making sense" (Antonovsky 1987). Lower scores on attachment anxiety and avoidance (i.e., greater attachment security) were associated with higher levels of meaning and coherence in life. Moreover, as compared to neutral priming, security priming increased the sense of meaning and coherence even among dispositionally insecure participants, showing that their experiences of meaning can be improved.

Attachment Orientations and Meaning Systems: Sense of Purpose

Attachment orientations can also affect perceptions of life's meaning by contributing to other thoughts, beliefs, and feelings that add to or bolster the sense of meaning. One such belief concerns the purpose and direction of one's life – that is, believing that one has a stable, valued, and congruent set of ambitions and goals, combined with the belief that one is able to accomplish these goals. People often derive meaning from setting personal goals and striving to achieve them (Emmons 2003, 2005). These personal strivings provide structure, unity, and purpose to one's life (Baumeister 1991), especially when one experiences traumatic losses (e.g., Emmons et al. 1998).

Attachment insecurities have been shown to interfere with goal-setting, means-ends organization, and goal attainment. Anxiously attached individuals are unusually afraid of rejection, failure, and loss. As already mentioned, they suffer from self-doubts about their abilities and worth, and they easily succumb to pessimism and hopelessness about attaining important personal goals (see Mikulincer and Shaver 2007a, for a review). Held back by these self-defeating beliefs, anxious individuals focus on protecting themselves from real or imagined pain rather than striving toward growth-promotion goals. In the case of attachment-related avoidance, defenses against getting involved with other people or having to admit defeat in goal-pursuit

can cause a person to choose safe activities and interaction strategies that then lead to boredom (Tidwell et al. 1996), result in missed opportunities for personal growth and self-expansion, and constrict the sense of purpose and direction in life.

These theoretical ideas have received research support. First, several studies have shown that attachment security (with respect to parents, teachers, or a romantic partner) is associated with a stronger desire for challenge and mastery in achievement settings and weaker fear of failure and less frequent adoption of avoidance goals (e.g., Elliot and Reis 2003; Learner and Kruger 1997; Lopez 1997). Elliot and Reis (2003) also found that avoidant attachment was associated with a weaker need for achievement and less frequent adoption of mastery goals. It was also associated with downplaying the excitement involved in achievement activities and with disengaging prematurely from these activities when encountering even minor difficulties. Attachment anxiety was associated with greater fear of failure, exaggeration of achievement-related threats, and a tendency to avoid challenging goals.

Second, there is evidence that attachment insecurities bias the formation and organization of personal goals (Mikulincer and Shaver 2007b). Attachment anxiety is associated with pessimistic appraisal of goal pursuit (lower ratings of success and higher ratings of difficulty in goal pursuit) and relatively high inter-goal conflict (i.e., the extent to which being successful in one area of striving had a harmful effect on another striving). Avoidant attachment is associated with low commitment to goal pursuit and lower levels of abstraction (higher-level organization) in framing personal goals. Moreover, both forms of insecure attachment are associated with reduced goal integration (i.e., the extent to which two strivings were perceived as parts of a single broader purpose in life). In other words, both attachment anxiety and avoidance seem to prevent people from perceiving different goal strivings as coherently integrated into an overall sense of purpose and direction. (These associations between attachment dimensions and features of people's goal organization are not explained by other measured variables such as trait anxiety and self-esteem.)

Third, attachment insecurities can impair effective goal pursuit by restricting exploration, openness to new information, and the learning of new means-ends associations and stimulus-response contingencies. For example, avoidant people score lower on self-report measures of novelty seeking (e.g., Chotai et al. 2005), trait curiosity (Mikulincer 1997), and exploratory interest (Aspelmeier and Kerns 2003; Green and Campbell 2000), and they have more negative attitudes toward curiosity itself (Mikulincer 1997). Attachment-anxious people report fewer exploratory interests, exaggerate the potential threats involved in exploration (e.g., discovering painful things, jeopardizing relationships), feel less joy during exploration, and engage in exploratory activities for curiosity-irrelevant reasons, such as distracting oneself from distress or seeking others' love and approval. Similar findings have been obtained in observational studies assessing actual exploratory behavior (e.g., Aspelmeier and Kerns 2003).

Attachment insecurities are also associated with cognitive closure, dogmatic thinking, intolerance of ambiguity, and rejection of information that challenges the validity of one's beliefs (e.g., Green-Hennessy and Reis 1998; Mikulincer 1997). For example, Mikulincer (1997) and Green-Hennessy and Reis (1998) found that

attachment anxiety and avoidance were associated with the well-known “primacy effect” – the tendency to make judgments based on early information and to ignore later data. Mikulincer (1997) also found that attachment insecurities, either anxiety or avoidance, are associated with stereotype-based judgments – the tendency to judge a member of a group based on a generalized notion about the group rather than on exploration of specific information about the member. Based on these findings, Mikulincer and Arad (1999) examined attachment-style differences in revising knowledge about a relationship partner following behavior on the part of the partner that seemed inconsistent with prior conceptions. Compared to secure people, both anxious and avoidant people displayed fewer changes in their perception of their partner after being exposed to expectation-incongruent information about his or her behavior.

Fourth, there is preliminary evidence that attachment insecurities can impair goal pursuit by preventing effective task organization and self-regulation. We (Mikulincer and Shaver 2007a) found that anxious and avoidant people score lower on self-report scales measuring problem analysis, plan rehearsal, task concentration, task persistence, and behavioral reorganization, and they score higher on procrastination. Attachment anxiety, but not avoidance, is associated with higher scores on self-report measures of pessimistic rumination and difficulties in concentrating, goal prioritizing, and decision making, perhaps reflecting a tendency to devote time and attention to attachment-related worries. Beyond these correlational findings, Mikulincer and Shaver (2007a) also found that experimental priming with representations of attachment security (visualizing a supportive, caring relationship partner) leads people to concentrate harder and to be more persistent in reasoning tasks than the priming of neutral mental representations (visualizing a drugstore clerk). In contrast, an insecure attachment prime (visualizing a rejecting, unsupportive relationship partner) leads to lower task concentration and less persistence than the neutral priming.

Fifth, attachment insecurities can cause people to make poor decisions about goal disengagement. As explained earlier, avoidant individuals often react defensively to obstacles by disengaging prematurely from goal pursuit. In contrast, anxiously attached individuals may continue to pursue unattainable goals, perhaps because they learned years before to strive for love and reassurance in a relationship that they perceived as not adequately or reliably supportive. This often produces a chain of self-fulfilling prophecies and “Oh-woe-is-me” experiences in couple relationships (Mikulincer and Shaver 2007a). The payoff for this strategy, if there is one, is that it allows a person to continue to feel that he or she has suffered unduly and deserves greater sympathy and support.

In a series of studies, Jayson (2004) obtained evidence for these theoretical musings. Participants read about hypothetical scenarios in which they had invested money in a new anticancer drug. They were then told that development of the drug was not going well. They were given an amount of money and were asked to allocate it as they wished for further development of the questionable drug or creation of an alternative product. The amount they chose to invest in the as-yet-unsuccessful drug was interpreted as indicating continued commitment to the original investment.

Jayson also experimentally manipulated participants' expectations of success in further developing the questionable drug (low, high). He observed the expected inverse association between attachment-related avoidance and goal persistence: The higher a person's avoidance score, the less money he or she allocated to the troubled project. There was also some evidence concerning anxious individuals' typical difficulties: When expectations about continuing to develop the original drug were portrayed as favorable, attachment anxiety was not associated with goal disengagement. But when participants thought that the goal of successful development might be unattainable, attachment anxiety was associated with a paradoxical escalation in the amount of money allocated to the poor investment. They seemed to find it difficult to disengage from an unattainable goal.

In sum, these five lines of research highlight the problems that insecure people have with goal setting, goal commitment, organization of a goal hierarchy and goal-oriented activities, and pursuit and attainment of goals. These problems can raise serious doubts about one's life plans and life direction, making it less likely that life will be perceived as meaningful.

Attachment Orientations and Meaning Systems: Personal Identity

Another meaning system that can be affected by attachment orientation is self-identity – the set of personal qualities, traits, values, and beliefs that provides a person with an inner sense of sameness and continuity (Erikson 1968; Marcia 1980). In his lifespan theory of psychosocial development, Erikson (1968) considered the process of identity formation (and the overcoming of role confusion and identity diffusion) to be the central task of adolescence and young adulthood and a source of personal adjustment and subjective well-being. According to Marcia (1980), identity formation involves both exploration and commitment. Exploration, as used in this context, is an active quest for personal meaning that involves a search for information about alternative life styles, beliefs, and values. Commitment is based on integrating the different possibilities, deciding which fits better with one's unique personality, and implementing this decision in a variety of personal projects. As such, these two processes can optimally end in the formation of a unique self-identity that provides personal meaning to one's life (e.g., Hartung and Subich 2011; Hogg 2000; Sedikides and Gaertner 2001).

We suspect that attachment security facilitates the formation of a stable and coherent self-identity. As shown earlier, secure individuals feel confident when examining alternatives and exploring opportunities, and they generally have sufficient resources and abilities to organize new information and effectively pursue personal goals. They feel loved, valued, and accepted by others, even if they question familial or cultural worldviews and do not automatically incorporate these worldviews into their identity. Moreover, their positive self-regard, rooted in prior unconditional love from relationship partners, often beginning in childhood, confers upon secure individuals a strong sense of self-direction and autonomy. This psychological bedrock makes it

easier to commit to a chosen ideology, philosophy, role, career, or occupation without feeling shame, guilt, or remorse for having violated other people's expectations. In contrast, insecure people tend to experience problems in exploration generally and in the search for a personal identity in particular, and this can result in identity diffusion or foreclosure (i.e., early personal commitment to a certain identity that is achieved with little or no exploration for personal meaning).

In support of these hypotheses, several studies have shown that adolescents' secure attachment to parents is associated with higher scores on identity achievement and lower scores on identity diffusion (e.g., Schultheiss and Blustein 1994; Zimmermann and Becker-Stoll 2002). Self-reports of attachment security in romantic relationships have also been found to be associated with identity achievement (e.g., Hoegh and Burgeois 2002; although Schultheiss and Blustein 1994, found the beneficial effects of attachment security on identity achievement to be more pronounced among women than men).

Attachment orientation is also related to another component of identity – gender-role identity or one's basic sense of femininity or masculinity. According to Bem (1981), one important developmental task of adolescence is to explore femininity (expressiveness, interpersonal communion) and masculinity (agency, instrumentality) and to integrate them in a mature, flexible, and adaptive gender-role identity while resisting rigid, sexist, or restrictive gender roles that may be encouraged by family or culture. The successful resolution of this task often results in a unique, personalized mixture of femininity and masculinity – an androgynous gender-role identity that allows a person to engage flexibly in expressive or instrumental behavior when situationally appropriate. It seems possible that insecure individuals' cognitive closure and reliance on stereotypic thinking may favor endorsement of traditional gender roles, thereby discouraging exploration of less conventional ideologies and the development of psychological androgyny. In particular, we might expect anxious individuals' doubts about their self-efficacy and mastery to interfere with "masculine" agency and avoidant individuals' preference for interpersonal distance and their tendency to suppress emotions to interfere with "feminine," expressive qualities.

Indeed, research indicates that secure attachment to parents correlates with psychological androgyny in both adolescent boys and girls (e.g., Kenny and Gallagher 2002). Moreover, Shaver et al. (1996) found that people who were secure in romantic relationships scored higher on psychological androgyny than anxious or avoidant people. Other findings indicate that attachment anxiety is associated with lower scores on measures of masculinity, and avoidance is associated with lower scores on femininity (e.g., Alonso-Arbiol et al. 2002; Shaver et al. 1996). In addition, some researchers have found that insecure men are more likely than secure men to feel stressed by failing to live up to masculine ideals and to report stronger conflicts regarding the "feminine" trait of emotional expressiveness (e.g., Schwartz et al. 2004).

Attachment orientation has also been connected to another component of identity— career selection and commitment (Erikson 1968). These processes involve exploring one's skills, abilities, preferences, and external opportunities as well as committing oneself to specific career goals and plans (e.g., Super et al. 1996).

Effective resolution of these tasks results in effective, reality-attuned career plans and formulation of coherent career goals that are well integrated with an emerging sense of personal identity (Super et al. 1996). Research shows that secure attachment to parents is associated with more complete exploration of career alternatives and career-related skills (e.g., Felsman and Blustein 1999; Lee and Hughey 2001), a stronger sense of self-efficacy in career exploration (e.g., Ryan et al. 1996), more frequent engagement in thinking about and planning a career (e.g., Lee and Hughey 2001), and a reduced inclination to commit to a particular career without sufficient exploration (e.g., Scott and Church 2001). In addition, adolescents who are more securely attached to parents make more progress in committing to particular career goals (e.g., Felsman and Blustein 1999; Scott and Church 2001), report greater self-efficacy in career decision-making, and make more realistic career choices (e.g., O'Brien et al. 2000). Finally, attachment anxiety and avoidance in romantic relationships are associated with indecisiveness about a career path and reduced satisfaction with one's choice (e.g., Roney et al. 2004).

Most of these studies have been based on cross-sectional, correlational research designs and therefore do not reveal the direction of causality between attachment orientations and the formation of career-related identities. However, O'Brien et al. (2000) found that secure attachment to parents during adolescence contributed to greater self-efficacy in career decision-making and higher career aspirations 5 years later. Moreover, Roisman et al. (2000) found that attachment security in infancy uniquely predicted more complete career exploration and planning during adolescence.

Overall, it seems likely, based on both theory and the extant evidence, that attachment security facilitates various components of identity (e.g., gender roles, careers) and that attachment insecurity can interfere with a person's attaining a coherent personal identity, which may, in turn, make it more difficult to sustain a sense of meaning in life. Insecure individuals may ask themselves, "Who am I?", "Are my activities a reflection of my true self?", "Why I'm spending energy and time in this particular activity?" This kind of rumination almost certainly interferes with a sense that one's life has meaning, although the implied causal model has not yet been empirically tested.

Attachment Orientations and Meaning Systems: Philosophy and Faith

One of the most common and powerful meaning systems, present throughout recorded history, is religion (e.g., Zinnbauer and Pargament 2005). According to Hood et al. (2005), religions are well-suited to provide a powerful source of meaning in life, because all religions provide people with answers to questions about human nature, stories about the purposeful creation of the world, expectations about an afterlife, guidelines for selecting and pursuing goals, ways to distinguish good from evil, and rewards for proper behavior as well as severe punishments for bad

behavior. In addition, religions connect people with something greater than their own individual, biological existence, which can contribute to an ultimate sense of meaning in life.

Research confirms that religiousness is related to meaning in life (e.g., Steger and Frazier 2005; Tomer and Eliason 2000), with intrinsic spirituality being more strongly related than socially oriented, extrinsic religiousness (e.g., Francis and Hills 2008). Moreover, studies indicate that religiousness contributes specifically to maintenance and restoration of meaning during and after stressful life events (e.g., Pargament 1997).

An attachment perspective leads us to expect that security can contribute to more mature forms of religiousness. Secure individuals' cognitive openness should allow them to explore spiritual possibilities and engage in what Batson (1976) called a religious "quest" – an exploration of existential questions and the development of an autonomous, individualized faith that includes tolerance of the ambiguity, uncertainty, and confusion inherent in an open-minded quest. In addition, secure individuals' positive mental representations of others and their caring and compassionate attitudes toward others' suffering (Mikulincer and Shaver 2007a) may help them sustain the humanistic values (e.g., the Golden Rule) embodied in most world religions.

This does not mean that insecurely attached people have no religious experiences or religious beliefs. In fact, they sometimes attempt to compensate for their frustrating human attachment experiences by directing their unmet attachment needs to God (see Kirkpatrick's 2005, "compensation" hypothesis). However, whereas secure people's religiousness may result from exploratory, growth-oriented, self-expansion motives, insecure people's religiousness may include defensive efforts to overcome mundane frustrations and pains. Moreover, insecure people may project the insecurities and negative working models acquired in other attachment relationships onto God. In addition, cognitive closure motivated by insecurity may prevent a comfortable religious quest and interfere with the attainment of autonomous religiosity. Insecure people may be especially prone to dogmatic, fundamentalist beliefs, which portray God as an angry, sometimes arbitrary, judgmental figure who needs to be obeyed and placated lest he explode in violent rage.

In line with these ideas, studies have found that people who report greater attachment security to parents or romantic partners are more likely to report having a personal relationship with God ("I feel that I have a relationship with God") and to believe in a personal God ("God is a living, personal being who is interested and involved in human lives and affairs") (e.g., Granqvist 1998; Granqvist and Hagekull 2000; Kirkpatrick and Shaver 1992). In addition, attachment security has been associated with a more intrinsic (autonomous) religious orientation (e.g., Kirkpatrick and Shaver 1990), greater commitment to religious beliefs and practices (e.g., Kirkpatrick and Shaver 1990, 1992), and higher scores on a measure of mature spirituality (TenElshof and Furrow 2000).

With regard to the religiosity of insecurely attached adults, research has shown that attachment insecurities are associated with sudden religious conversions – i.e., increases in religiousness characterized by a sudden and intense personal experience

(see Granqvist and Kirkpatrick 2004, and Granqvist et al. 2010, for reviews of the literature). In fact, whereas people who were, or are, securely attached to parents report gradual changes in religiousness, the changes experienced by insecure people are more sudden and emotionally turbulent. In addition, secure people's increases in religiosity are characterized by themes of affiliation and correspondence with significant others' religious standards, such as becoming more religious in connection with close friendships with believers (e.g., Granqvist and Hagekull 2001). In contrast, insecure people's religious changes are characterized by themes of compensation, such as becoming more religious in response to problematic close relationships, personal crises, and mental or physical illness (e.g., Granqvist 2002; Granqvist and Hagekull 2001). Furthermore, whereas secure people are generally more religious if their parents were religious, insecure people are generally more religious if their parents displayed low levels of religiosity (e.g., Granqvist 1998). These findings imply that religiosity associated with attachment insecurities may be a defensive attempt to distance oneself from parents and compensate for insecurities and personal crises rather than identifying positively parents' values and beliefs.

Attachment-related differences have also been found in people's conceptions of God. More secure individuals are more likely to view God as a loving, approving, and caring figure (e.g., Kirkpatrick and Shaver 1990, 1992), a finding that has been conceptually replicated using a less explicit measure of God images. Gurwitz (2004) found that whereas secure individuals reacted to subliminal exposure to the word "God" (as compared to a neutral word) with faster reactions to positive trait terms (e.g., loving, caring) in a lexical decision task, insecure individuals reacted faster to negative trait terms (e.g., rejecting, distant). Researchers have also found that people with less secure attachments in human relationships are more likely to have an insecure attachment to God (e.g., Kirkpatrick and Shaver 1992; McDonald et al. 2005; Rowatt and Kirkpatrick 2002).

Concluding Remarks

From a scientific perspective, life has no inherent meaning, except for whatever meaning is involved in biologically prepared motives and activities. Given that humans evolved, like other creatures, from earlier animal forms, there is no more inherent meaning in a human life than there is in the life of a lizard, dog, or monkey. But humans are notable for their symbolic abilities, their extreme sociality, and their awareness of eventual death (e.g., Baumeister 1991; Becker 1973; Solomon et al. 1991). Less complex animals have inherent goals and capacities, and they seem to live well and be "happy" enough while pursuing those goals and exercising those capacities, as long as they are not overly stressed (including by the loss of key relationship partners) or physically incapacitated.

In the human case, the possible goals are essentially infinite and the eventual loss of relationship partners and one's own life is guaranteed. Humans need to organize their personal goals in relation to the goals of others, and their goals include

maintaining a symbolic sense of internal coherence and social value. Given those conditions, social acceptance and familial scaffolding from the very beginning matter a great deal to a person's sense of coherence, competence, and value – and hence to his or her deep sense of meaning.

Attachment theory is, at present, the best and most evidence-based conception of how close relationships build a person's sense of coherence, safety, and value. Being secure, socially – and eventually within oneself, bolstered by positive social experiences – makes it easier to feel that life is meaningful and rewarding. It makes it easier to form healthy relationships and to strive coherently, and without debilitating doubts, for sensibly chosen goals. It makes it easier to have what Erikson (1993) called "basic trust" – in other people and in the universe more globally. Part of this basic trust, for religious individuals, is trust in a beneficent God. For secure people who are not religious, it may include trust that life is valuable and that the world is interesting, exciting, and challenging without a god.

"Meaning" is a complex construct, partaking of cognition, emotion, and motivation. Attachment research has established in detail how a person's beliefs, feelings, motives, and goals are affected by security and, in different ways, by the different forms of insecurity. Not surprisingly, therefore, the sense that life is meaningful, which is interwoven with other important beliefs and feelings, is partly a product of a person's attachment history.

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Chapter 23

The Bidirectional Relationship of Meaning and Belonging

Tyler F. Stillman and Nathaniel M. Lambert

Meaning in life has become the subject of much research, and efforts to identify what gives meaning to people's lives have been fruitful. For instance, engaging in eudaimonic activity (such as volunteering or setting goals) can increase the degree to which life is perceived as having meaning, relative to engaging in hedonic activity (such as spending on self) (Steger et al. 2008). Likewise, a strong religious commitment and positive mood have been found to enhance the sense that life is meaningful (Hicks and King 2008). Our program of research has focused on one variable that seems to be strongly linked to the belief that life is meaningful, namely, interpersonal relationships. It makes some intuitive sense that people who have warm and satisfying interpersonal relationships are more likely to conclude that life is meaningful than people who have cold and unrewarding relationships. However, we propose that the connection between interpersonal relationships and the belief that life is meaningful is more complex than this. We argue that the connection between the belief that life is meaningful and close relationships is reciprocal: The belief that life is meaningful not only follows from having rewarding interpersonal relationships, finding meaning in life actually aids in the formation of interpersonal bonds. In short, our assertion is that interpersonal relationships increase the belief that life is meaningful, and the belief that life is meaningful aids in formation of new relationships.

This chapter will unfold as follows. First, we will consider definitions of some key terms. Next, we will cover research indicating that one of the primary sources of meaning in life is social relationships. Last, we will consider evidence for the (more speculative) claim that meaning in life has a positive effect on interpersonal relationships.

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Key Terms

Meaning

It is important to clarify how we understand the term *meaning in life* because there is not unanimity of opinion among scholars regarding what is meant by the term. Literally, *meaning* refers to a nonphysical reality inherent in the relationship between a symbol or representation and that to which it refers. By meaning of life, however, people typically intend not a dictionary definition of life—but rather a way to make sense of their existence. This subjective evaluation of one's life is how meaning in life is often assessed (e.g., Crumbaugh and Maholick 1964; Mascaro and Rosen 2006). For example, a commonly used measure (the Meaning in Life Questionnaire) invites individuals to rate their level of agreement with statements such as “My life has a clear sense of purpose” (Steger et al. 2006). In short, we understand a life to be meaningful when the individual believes she has found a way to make sense of her existence.

Belonging

We understand *belonging* to mean the experience of relational intimacy or group membership. Several theorists have proposed that the human desire for belonging reflects an innate tendency, such that forming and maintaining social bonds is adaptive and essential for survival (Ainsworth 1989; Axelrod and Hamilton 1981; Barash 1977; Baumeister and Leary 1995; Bowlby 1969; Buss 1990; Moreland 1987). A review of the literature on interpersonal attachments by Baumeister and Leary (1995) documented a litany of physical and mental health repercussions of failing to form interpersonal attachments, such as depression and poor cardiac health. They concluded that people have a fundamental *need to belong*. The research they reviewed included a wide variety of ways of operationalizing belonging, including marital status (single vs. married), subjective feelings of inclusion (loneliness), and experimentally manipulated social rejection. In like manner, the research discussed in this chapter includes a variety of ways of operationalizing belonging, which we detail later in this chapter.

Belonging Increases the Belief That Life Is Meaningful

Why might the degree to which one has satisfied the fundamental need to belong affect the perception that life is meaningful? According to Baumeister (2005), nature selected for humans with the ability to function in large cohesive groups, and functioning in groups required the cognitive capacity to handle large systems of meaning. Said differently, the capacity for meaning and the desire for social bonds are inextricably linked in the human psyche. Although not explicitly stated by

Baumeister (2005), one implication of the interrelatedness of meaning and belonging is that a change in one domain could entail a similar change in the other.

Other analyses also conclude that interpersonal relationships are closely linked to a sense of meaning. Lifton (1979) argued that close relationships offer a symbolic promise of lastingness and continuity that provide individuals with a sense of symbolic immortality. That is, having and maintaining interpersonal relationships help one transcend the meaninglessness of death. Similarly, Aron and colleagues (2001) proposed that close relationships allow people to feel a part of a larger symbolic entity (e.g., couple or group or society) that transcends the limitations of their own body and expands the capacities and boundaries of their own self. In sum, prominent researchers and thinkers have hypothesized that interpersonal relationships are important for feeling like life is worthwhile and meaningful. Below, we consider empirical studies which have found support for the idea that belonging enhances the belief that life has meaning.

Deficits in Belonging Decrease the Belief That Life Is Meaningful

One way of testing whether social belonging contributes to the belief that life is meaningful is to reduce or eliminate the sense of belonging and measure the effect on meaning in life. If belonging is an important contributor to the belief that life has meaning, then one would expect that a deficit in belonging would bring about a deficit in the belief that life has meaning. Experimental rejection studies—in which participants who are led to believe they are unwanted as social interactants are compared with control participants—offer insight into the relationship between belonging and meaning in life. One set of experiments assessed the effects of social rejection on cognition (Twenge et al. 2003). Results indicated that participants who experienced social rejection sought refuge in a state of cognitive deconstruction, characterized by decreased meaningful thought, as well as increased lethargy, altered time flow, the avoidance of emotion, and decreased self-awareness. In one study, participants who were told they were exceptionally well-liked and popular responded more favorably to a question about finding meaning in life than participants who were socially rejected, which is consistent with the notion that a deficit in social belonging detracts from the belief that life has meaning.

Williams (1997, 2002) proposed that being socially ostracized impairs four important human needs, one of which is the need for a meaningful existence (the others needs being belongingness, control, and self-esteem). Williams and his colleagues have provided convincing empirical evidence that being ostracized by one's peers reduces the meaningfulness of specific events (Sommer et al. 2001; Van Beest and Williams 2006; Williams et al. 2000; Zadro et al. 2004). In particular, when participants are not included in a computer game called *Cyberball*, they tend to rate their participation in the game as relatively less meaningful than participants who are included in the game. These findings are evidence that social exclusion reduces meaningful thought, supporting the notion that social exclusion decreases one's overall sense that life has meaning.

The authors of this chapter and colleagues conducted a formal test of the hypothesis that social exclusion reduces one's overall belief that life has meaning in four studies (Stillman et al. 2009). The first study used an experimental rejection manipulation in which participants were led to believe they would exchange videotaped introductions with a study partner. In reality, there was no study partner. Participants made videotaped introductions of themselves which were ostensibly viewed by their study partner. Next, the experimenter gave feedback to the participant according to condition. Participants in the rejection condition were told that their partner had refused to meet with them after watching their videotaped introduction, whereas participants in the control condition were told that their partner would be unable to meet with them due to an appointment. Hence, all participants were informed that they would not be meeting their study partner, but only rejected participants believed they were unwanted as social interactants. Last, participants completed a global assessment of meaning in life (e.g., "Right now, how meaningful does your life feel?") (Steger et al. 2008). Results indicated that participants who had experienced social rejection viewed life as less meaningful than those in the control condition.

A second study sought to replicate and extend the first study using different measures of social exclusion and meaning. Participants played the group computer game Cyberball, as used in Williams' program of research. By random assignment, some participants were included in the game (players threw them the ball), whereas other participants were gradually but thoroughly excluded (eventually no one threw them the ball). Next, participants completed a questionnaire to assess the degree to which life was viewed as utterly meaningless (e.g., "It does not matter whether I live or die" and "Life is a cruel joke" Kunzendorf et al. 1995). Results indicated that not being involved in the group Cyberball game was sufficient to make people more willing to believe that life was absurd and meaningless.

The third and fourth studies sought to assess the relationship between naturally occurring individual differences in social exclusion and meaning in life. That is, the expectation was that people who were lonely would view life as less meaningful than people who were not lonely. As expected, loneliness was a strong predictor of the belief that life had little meaning (e.g., "I understand my life's meaning" Hays and DiMatteo 1987). Indeed, loneliness was a better predictor of finding little meaning in life than variables such as depression, negative mood, and pessimism. In sum, empirical evidence illustrates that deficits in belonging—as operationalized by an experimental manipulation and individual differences in loneliness—have a potent negative effect on the belief that life has meaning.

Belonging Increases the Belief That Life Is Meaningful

If our contention is correct, and social relationships are an essential element in finding life meaningful, then one would expect that the presence of close relationships would enhance one's sense that life is meaningful. We consider some evidence that belonging increases the belief that life has meaning.

When asked what constitutes a central meaning in life, the most frequent response refers to personal relationships (Ebersole 1998; Klinger 1977; Little 1998), which suggests overlap between social relationships and meaning. Among the elderly, higher levels of social support predict greater meaning in life (Krause 2007). Experimental studies also suggest that personal relationships are an important source of meaning, as bringing to mind how one acts around “close others” promotes a sense of meaning in life, relative to thinking about how one acts around “most others” (Schlegel et al. 2009). These findings were not intended to be a strict test of the hypothesis that belonging contributes to meaning in life, but they do support it. Next, we consider some research that has specifically sought to establish the effects of belonging on meaning in life.

Family Relationships Create Meaning in Life

Family relationships are less transitory than friendships and workplace relationships. Consequently, such relationships are well suited for satiating the human need to belong—and a relationship that satiates the need to belong should be ideal for enhancing meaning in life. Recent research has endeavored to understand the impact of family relationships on meaning in life (Lambert et al. 2010).

Across five studies, data indicated that family relationships are a potent source of meaning in life. In study 1, participants were simply asked to state what gave their lives meaning. Results indicated that 68 % of participants reported family to be the one thing that brought the most meaning to their life, while the next most commonly cited source of meaning (friendships) was endorsed by 14 % of respondents. (Hence, for 82 % of respondents, interpersonal relationships were the single most important source of meaning in life.) When allowed to mention three sources of meaning in life, 90 % of participants mentioned family as contributing to meaning in their lives. These data indicate that family relationships are among the most important sources of meaning in people’s lives, at least for the young adults in our sample.

In study 2, the authors hoped to increase the breadth of their findings by comparing the family relationships with 11 likely alternative sources of meaning (e.g., friends, happiness, personal achievements, religious faith, helping others). Results indicated that participants ranked family as a more important source of meaning in life than any of the alternatives. Taken together, studies 1 and 2 indicated that family relationships are a powerful source of meaning in life.

However, people’s family relationships vary in many dimensions, and it seems likely that people with close and supportive family relationships would find life more meaningful than people with distant and unsupportive family relationships. Study 3 tested whether people who felt close to their family experienced more meaning in life than people who felt more distance with their families. Distance was assessed using an adapted version of the inclusion of self with others measure (Aron et al. 1992). This was a single items measure in which seven pairs of two increasingly overlapping circles are presented to participants—starting with very little overlap and ending with almost complete overlap. One circle represents the “self”

and the other represents “family.” Participants who depicted their relationship with highly overlapping circles were presumed to have a closer relationship than people who represented their relationship with distant circles. Results indicated that greater closeness to the family corresponded to more meaning in life, as measured by questionnaire (e.g., “I feel like I have found a really significant meaning in my life”). Study 4 built on this finding and found that people who indicated that they had highly supportive families (e.g., “I get the emotional help and support I need from my family”) scored higher on a meaning in life questionnaire than people who received social support from other sources. In sum, family relationships are an essential source of meaning in life, and people with close and supportive family lives derive even more meaning from life than people lacking this relational resource.

The Subjective Experience of Belonging Creates Meaning in Life

It is possible for a person to be surrounded by friendly people, yet still not feel that one has attained social acceptance. In other words, satisfying a general need for positive social relationships—for instance, by participating in a fraternity or sorority—does not guarantee the subjective experience of belonging. To determine how the subjective experience of belonging, termed *sense of belonging*, affects meaning in life, researchers conducted four studies (Lambert et al. *in press*). The first study was correlational, and results indicated a robust relationship between sense of belonging (e.g., “There are places I go where I feel like I belong”) and self-ratings of meaning in life ($\beta = .58$, “I understand my life’s meaning”).

In a second study, the authors sought to go beyond self-ratings of meaning by asking participants to write an essay about the meaning of life. Those essays were subsequently evaluated by independent raters who scored each essay according to whether the participant had a strong sense of meaning in life. There was a high degree of agreement among the independent raters regarding the essays that indicated a high degree of meaning in life and those that indicated little meaning in life, suggesting that there were clear and discernable differences in participants’ essays. Results indicated that initial sense of belonging (measured by questionnaire) predicted how participants responded to an essay about the meaning of life, as participants reporting a stronger initial sense of belonging wrote essays that independent raters judged as more indicative of having found meaning in life. Sense of belonging did not simply affect the numbers participants write next to statements. Rather, sense of belonging affected the ability of participants to state what makes life meaningful in a way that is readily identifiable to independent observers. Additionally, this study lends credibility to the use of impartial evaluators as a means of measuring meaning in life.

In the final two studies, the authors sought to move beyond correlational designs and determine whether sense of belonging caused increased meaning in life. One possible study design would be to compare participants primed with a sense of belonging to a neutral control condition. However, it would be unclear whether any differences between conditions were due to the subjective experience of belonging

specifically or simply due to thinking about social relationships generally. The authors opted to compare participants primed with sense of belonging to participants who were primed with other variables related to social relationships. Specifically, participants in the social support control condition were asked to write about their relationship with a person who had helped them, and participants in the social value control condition were asked to write about their relationship with a person who had given them a compliment. Participants in the experimental condition—the sense of belonging condition—were asked to write about a relationship from which they derived a sense of belonging. All participants then responded to three questions about meaning in life (e.g., “How much do you feel that your life has meaning right now?”). Results revealed that people primed with a sense of belonging evidenced higher meaning in life than those primed with other variables associated with social relationships. This design allowed the inference that the higher meaningfulness scores reported by those in the sense of belonging condition were due to a sense of belongingness, rather than simply due to any general effects of thinking about social relationships. In short, study 3 demonstrated that a sense of belonging caused higher levels of meaning, over and above the meaning that stems from positive social relationships and interactions generally. In study 4, we assessed participants’ level of belongingness following this same manipulation and found that individuals who increased in belongingness also increased in perceived meaning. In fact, belongingness mediated the relationship between experimental condition and perceived meaning. Thus, a sense of belonging seems to be the crucial aspect of the contribution of relationships to meaning in life.

Summary

There is robust empirical support for the notion that belonging contributes to the belief that life has meaning. When people experience acute social rejection, they find that life has little meaning. Likewise, when people have ongoing feelings of loneliness, they see little meaning in life. The inverse also seems to be true: The presence of social relationships seems to increase the belief that life has meaning. This is demonstrated by findings indicating that family relationships are a primary source of meaning in life and that people who have close and supportive family relationships experience an especially firm sense that life has meaning. Additionally, the subjective feeling of belonging is an important contributor to meaning in life.

The Belief That Life Is Meaningful Enhances Belonging

The authors’ contention is not only that belonging increases the belief that life has meaning but that finding meaning in life also enhances belonging. The favorable effect of belonging on finding meaning in life has more empirical support than the

benefits of meaning in life on belonging, but there is emerging evidence for our position. We expect that the way in which meaning in life benefits interpersonal relationships is almost certainly complex. Our focus is restricted to how meaning in life affects the initial impressions one forms of others (rather than, for instance, how meaning in life affects the trajectory of a relationship). We contend that people are drawn to people who have a strong sense of meaning in life. Said differently, people who have found a purpose in life will find it easier to form relationships with others because others are drawn to them.

Viktor Frankl (1946/1963, 1969) proposed that people have a *will to meaning*, which is to say that people are strongly motivated to find meaning in life. If Frankl's contention is correct and people are driven to find meaning in life, it seems plausible that they would seek to form relationships with those who have found meaning in life, in part to satisfy the will to meaning. Hence, our argument that people are drawn to those who have found a strong sense of meaning in life is consistent with an extension of Frankl's concept of *will to meaning*.

An analysis of revolutionary religious leaders is also consistent with our proposition that meaning in life enhances belonging. One conclusion was that developing a personal mission in life was important to gaining religious followers (Oakes 1997). In other words, perceiving oneself as having an important mission in life was associated with garnering adherents and followers, at least among religious people. One can also point to research on politicians as supportive of the notion that meaning can have a beneficial effect on belonging. Charismatic people tend to draw others to themselves socially, and charismatic politicians are those that instill in followers a desire to be connected with the leader. Some researchers examined the 2008 US presidential election and found that one important element in leadership is the capacity to make events meaningful to followers (Bligh and Kohles 2009). Thus, political leaders who are able to communicate the meaning of significant events are well positioned to garner supporters. In sum, a firm sense of meaning seems to help politicians and religious leaders form relationships with followers.

How does meaning in life affect the formation of relational bonds among ordinary people? In two studies, researchers sought to understand how meaning in life affects the initial impressions people form of each other, with the expectation that people would seek to affiliate with those who had found meaning in life (Stillman et al. 2011). In the first study, participants (who had previously completed a questionnaire regarding meaning in life) were unobtrusively videotaped for 5 min while they interacted with a friend. Those interactions were subsequently viewed by a group of independent observers who were unaware of participants' meaning in life scores. Indeed, the independent observers were completely unaware of study aims and hypotheses. For each participant, raters assigned a numerical quantity to the question "How much would you like to be friends with this person?" Results indicated that participants who had previously reported that they had found meaning in life were perceived as more appealing friends than others. It is interesting to note that self-esteem was unrelated to whether participants were viewed as appealing friends, demonstrating that the effect of meaning in life was not simply a proxy for feeling good about oneself.

In the second study, participants made 10-s videotaped introductions of themselves. As in study 1, a group of independent observers evaluated each participant and scored them according to how much they (the raters) desired to interact with that participant. Again, participants who had previously indicated a strong sense of meaning in life were found to be those whom raters found desirable as social interactants. In this study, the effect of meaning in life was above and beyond variables such as happiness, religiosity, and the Big Five personality dimensions—including extroversion. One might expect that happy or extroverted people would be viewed as especially appealing friends. Results indicating that meaning in life surpassed the effect of these variables indicate that meaning in life is a potent predictor of interpersonal appeal, even relative to other compelling constructs.

The difference in method between the two studies is revealing. In the first study, participants were videotaped while interacting with a friend. This is similar to observing someone at a social gathering without interacting with them. In the second study, participants made a videotaped introduction of themselves, which is similar to meeting someone for the first time. Despite these very different contexts, people who had found meaning in life were considered substantially more appealing potential friends than people who had yet to find a purpose in life. The similarity in results across different methods lends additional credibility to the notion that meaning in life aids in the formation of interpersonal bonds.

In sum, having a sense of purpose and meaning to one's life makes a person a more appealing social interactant. Data from these studies do not speak to whether meaning in life actually translates into a large number of social relationships and the subjective experience of belonging; however, it stands to reason that people who are desired as social interactants probably have a better chance of satiating the need to belong.

Those skeptical of the view that meaning in life can have implications for the formation of interpersonal bonds are likely to see meaning in life as a strictly intrapsychic process. It is worth noting that many important concepts in psychology that were once viewed as solely inner processes have been shown to have important interpersonal implications. For instance, self-esteem, self-control, morality, self-deception, and guilt all play important roles in interpersonal relationships (Tice and Baumeister 2001). Hence, many seemingly intrapsychic processes have important implications for social relationships. We consider meaning in life to be another process that, like guilt, might seem to be primarily intrapsychic but that has tremendous interpersonal importance.

Summary

Evidence that meaning in life facilitates belonging is emerging. For politicians and religious leaders, developing a sense of meaning is important to gaining adherents and followers. Likewise, ordinary people who have found meaning in life are quickly—within 10 s—perceived as being a valued interpersonal connection.

Belonging and Meaning Future Directions

We have just begun to scratch the surface in the potential relationship between belonging and meaning, and several interesting avenues exist for future research. For example, our research has focused on family relationships as a source of belonging and meaning. Future research might examine how belonging to volunteer organizations, clubs, religious groups, political parties, etc. might foster meaning in life.

Also, most of the findings cited in this chapter pertained to young adult college students. Future research should seek to extend this work beyond campus to see how belonging affects meaning in people of differing ages and backgrounds. For example, some research shows that elderly individuals struggle with depression once they retire (e.g., Reitzes et al. 1996). It could be that severing ties from the workplace diminishes a sense of belonging leading to lower meaning in life and depression. This could be fruitful ground for research for years to come.

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Chapter 24

Culture: The Grand Web of Meaning

Melody Manchi Chao and Pelin Kesebir

Meaning and culture mutually constitute each other. Culture rests on meaning, whereas meaning exists and is propagated in culture. The uniquely human quest for meaning transpires against the background of culture and is simultaneously recreating culture. The current chapter aims to explore different aspects of this dynamic relationship between meaning and culture. We begin by defining meaning and culture, and elaborating the nature of their intricate relationship. Then, we analyze the universal and relative aspects of meaning systems across cultures. Finally, we examine meaning in the backdrop of multiculturalism to illuminate how individuals navigate through different cultural webs of meaning and its implications to cultural competence.

Meaning and Culture

Meaning can be defined as “shared mental representations of possible relationships among things, events, and relationships” (Baumeister 1991, p. 15). Central to meaning, thus, are relationships, symbols, and shared understandings. A shared network of meaning that is produced, distributed, and reproduced among a group of interconnected individuals constitutes culture (Chiu and Hong 2007). Culture, as a web

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of meaning, facilitates adaptation to a given ecology (Fiske 2000). This web of meaning includes norms, values, beliefs, scripts, and schemas of a community, and serves as symbolic resources (Baumeister 2005; Chiu and Hong 2006, 2007; Kitayama et al. 2006). The meaning constituting culture is sustained by the members of the culture, as well as instantiated in different external media, such as cultural institutions and practices. Dominant cultural ideas are often encoded in the news, fairy tales, urban legends, personal space, architecture, art, and cultural icons; these carriers of culture play a critical role in propagating the meaning embedded in a culture.

It is the human ability to create, share, and transmit meaning that allows the accumulation of culture. This capacity for symbol-based culture is what has allowed humankind to achieve an unparalleled level of intelligence and progress, setting it apart from other animals (Tomasello 1999). Unlike other animals, meaning pervades in each and every human act and transforms it in the process. Although some animals may be able to transmit behaviors from one generation to another (e.g., sweet-potato washing by Japanese macaques; see Nakamichi et al. 1998), the extent of complexity of such animal cultures is far from that of human. Mice or monkeys, for example, do not have marriage or sex tourism, Romeo and Juliet or the Harlequin Desire series, Valentine's Day, or Taj Mahal—a shrine erected to lost love. Human cultures, on the other hand, have their own sets of meaning frameworks, cultural practices, and artifacts associated with sex and love. As we discuss later, these meaning frameworks may differ across cultures—Americans and Italians, for example, tend to see love as an intensely positive, happy experience, whereas Chinese conceive of it as an experience related to sadness, sorrow, and nostalgia (Shaver et al. 1991). Yet cross-cultural differences are never as stark as the cross-species differences that separate humans from non-cultural animals.

Meanings Embedded in Culture

The webs of meaning interwoven by culture can be characterized broadly in two ways (also see Janoff-Bulman and Yopyk 2004). One, which we may call small-m-meaning, revolves around the notion of *comprehensibility*—around detecting and expecting certain patterns, associations, or outcomes. This type of meaning facilitates individuals' understanding of their social, physical, and phenomenal world. When we know and expect snow to be white, Thursday to follow Wednesday, or the word “yes” to indicate affirmation in English, it is this type of meaning we are referring to. Meaning, in this sense, is “ubiquitous and effortless” (King 2012). Our everyday lives are saturated with these relatively simple small-m-types of meaning, and as a result, things automatically make sense to us most of the time. This is fortuitous, because people seem to need (and to want) things to make sense. As evidenced by the fact that stimuli that make sense trigger a short, mild positive affect (Topolinski and Strack 2009; Winkielman and Cacioppo 2001) and that even 5-month-old infants look longer at impossible events to reconcile the nonsensical

(Baillargeon et al. 1985), people have innate desire to make sense of things around them. As research inspired by the meaning maintenance model reveals, perceptions of violated expectations instigate an attempt to restore meaning through a variety of compensatory strategies (Heine et al. 2006).

Another type of meaning imparted by culture, which we may call capital-M-meaning (see Mascaro et al. 2004), has to do with questions of *significance and worth*, with explorations into how something fits with larger systems of value and meaning. When people contemplate about the meaning of life in general and their lives in particular, it is this broader type of meaning that is in question. A tradition of existential and humanistic scholars, such as Albert Camus (1955), Jean Paul Sartre (1964), Viktor Frankl (1963), and Irvin Yalom (1980), have delved into the question of capital-M-meaning. These authors wrote about the dilemma the inherently meaning-seeking individual faces in a universe that does not come furnished with preordained meaning and the necessity to construct one's own meaning system. Meaning embedded in cultures, in this larger sense, provides individuals with connection to entities larger than oneself.

If the essence of meaning is connection (Baumeister and Vohs 2002), small-m-meaning involves simpler, lower-level, relatively more concrete associations (e.g., a word and its referent, certain behavioral scripts and rules), whereas capital-M-meaning connects more complex, higher-level, abstract entities (e.g., values, beliefs, the self, and the universe). Culture and its attendant phenomena, such as language, institutions, and norms, serve as repositories of meaning, in the small as well as the grand sense of the word. Meaning and culture mutually constitute each other: Meaning resides in culture, while the perpetuation of culture depends on its meaning-providing function.

Meaning-Providing Functions of Culture

In order to perpetuate themselves and endure, cultures need to serve some adaptive functions. Scholars have underlined the role of culture in helping with the survival of the species, enhancing the optimal functioning of the society, and conferring psychological benefits to the individual (Baumeister 2005; Lehman et al. 2004; Schaller and Crandall 2004). Doubtlessly, the cultural ability to use, communicate, and transmit meaning helps to fulfill basic human needs and grants evolutionary advantages. Cultures also provide psychological benefits, such as a sense of self-worth (Wan et al. 2011), along with the epistemic and existential security that accompanies this sense (Chao and Chiu 2011; Kesebir 2011). Cultures fulfill these functions by furnishing their members with meaning in both the smaller and broader connotations. In this section, we briefly review the role of culture in providing meaning.

Cultural meaning frameworks segment the world into intelligible parcels. They organize the world into a larger, relatively coherent system for the individual, thereby serving a decided epistemic function. As such, culture is a territory of

meaning, and it is simultaneously the compass. The rules, norms, standards, ideals, and ideologies, which are indispensable elements of any culture, serve as compasses of how to live and how to live well. Some cultures are more insistent on their members following the culture's compass than others. Such cultures, called *tight cultures*, are relatively homogenous with norms and values that are clearly imposed (e.g., Japan), whereas *loose cultures* (e.g., the United States) are relatively heterogeneous and tolerate deviation from norms to a larger extent (Triandis 1989). Regardless of whether a culture is tight or loose, its prescriptive, guiding function affords a sense of epistemic meaning and security to its members, or the feeling of having answers to questions (Fu et al. 2007).

Since cultural meaning systems imbue the world with a sense of order, predictability, and controllability, and impart a sense of self-worth and significance to individuals, people tend to adhere to their cultural worldviews more fervently when their meaning system and the accompanying epistemic and existential security are under threat. Research conducted under terror management theory (Greenberg et al. 1997), uncertainty management theory (van den Bos et al. 2005), and meaning maintenance model (Heine et al. 2006) provides ample evidence in support of this, though the specifics of the accounts differ to some degree. By conforming to the rules, norms, and practices of their culture and by aspiring to its ideals, individuals not only obtain a sense of epistemic and existential security but also feelings of worth, significance, and ultimate meaning.

Individuals construct the meaning of their lives through a dialogue with their culture, negotiating personal inclinations with the possibilities offered by the culture. The desire to supply life with meaning is partly motivated by the awareness of our existence as a microscopic speck on the cosmic scale of time and space. As Yalom (1980) notes, "meaning, used in the sense of one's life having made a difference, of one's having mattered, of one's having left part of oneself for posterity, seems derivative of the wish not to perish" (p. 465). People thus seek meaning in endeavors that promise some sort of continuance across time and space. Meaning embedded in culture, in this larger sense, is instrumental in connecting individuals to entities larger and longer-lasting than the self, thereby offering the hope of transcending transience and enduring in the world (Kesebir 2011). Spheres of life in which people typically seek and find meaning—religion, politics, science, or art—are uniquely human, uniquely cultural. Emmons (2003), for example, proposes a "Big 4" taxonomy of personal meaning, which lists the domains in which people strive for a sense of meaning. These four domains are achievements/work, relationships/intimacy, religion/spirituality, and self-transcendence/generativity. All these domains are products and producers of culture. And in each of these domains, individuals construct a connection between the selves with some broader context—others, life, the future, or the transcendent. All these domains of meaning, which contain "a glimpse of eternity" (Emmons 2003, p. 113), can become potent antidotes to the fears of meaninglessness and ultimate insignificance.

The pursuit of meaning, in short, takes place within the context of culture. Thus far, we have examined meaning systems that are embedded in cultures and how cultures impart a sense of meaning for individuals to pursue. Culture and its

meaning-providing functions are inherently social in nature. They are knowledge representations that are shared, albeit incompletely, by members within a given ecology (Chiu and Hong 2007). It is this quality of sharedness that we will turn to next.

Culture as a Shared Web of Meaning

Bruner (1990) elaborates the importance of sharedness. He discusses the “public and communal” nature of meaning, as opposed to the “private and autistic,” noting that “our culturally adapted way of life depends upon shared meanings and shared concepts and depends as well upon shared modes of discourse for negotiating differences in meaning and interpretation” (p. 13). A collective in which people do not possess shared meaning systems would have a marked disadvantage in coordinating and solving problems the group faces (Fiske 2000; Heylighen and Campbell 1995). By the same token, an individual who is oblivious to the shared systems of meaning of a group would have serious difficulties in functioning and thriving within that group.

Language, a meaning system of its own and the foremost tool for using meaning, serves as an excellent example of how publicly shared understandings are crucial to the effective functioning of both the culture and the individual: A culture in which people use different words to denote the same concepts would be disadvantaged in solving the problems it is facing. Similarly, an individual who cannot speak the language of the surrounding community would be destined to a lonely, and most likely miserable, existence. *A Table Is a Table*, a short story by Swiss author Peter Bichsel (1995), serves as a case in point. It tells the story of an old man, who invents a new language by starting to call things by different names: He calls the bed “picture,” the table “carpet,” and the mirror “chair.” Soon enough, nobody else can understand him anymore, nor is he able to understand anyone else. He has to laugh when he hears someone say, “it has been raining for 2 months now,” for example, because it sounds so nonsensical to him. Eventually, he stops talking altogether, except to himself, and is doomed to a pitiful existence. As this story illustrates, shared meaning systems are central to communicating with others, thereby fostering social coordination and harmony, and propagating cultural knowledge in a collective.

The assemblage of meaning systems, small and large, surrounds us and affects our thoughts and actions even if we might be largely unaware of its presence, like fish in the water. We see the world through the lenses of cultural meaning. Shared cultural meaning and practices hence tend to be invisible, taken for granted, “undoubted and often even undoubtable” (Kitayama and Markus 2000, p. 116). At the same time, though, a culture is not a homogenous, monolithic, internally consistent, stable system. On the contrary, it is markedly diverse and dynamic. Culture evolves continuously. Its meaning systems are constantly under construction, being produced and reproduced. People use, search, and construct meaning ceaselessly, thereby participating in building and changing culture (Shweder 1991).

Thus far, we have examined the intricate relationship between meaning and culture. We posit that meaning and culture mutually constitute each other. Cultures are systems of meaning that are shared, albeit incompletely, among a group of individuals. The distinctly human capacity to make sense of the physical and social world, to go beyond the immediate world to imagine alternatives, and to communicate these meaning systems to each other has led to the formation and accumulation of culture. At the same time, culture is where people derive their systems of meaning from. Meaning systems are embedded within cultures and are passed along to new members (Baumeister 1991).

Cultural Differences in Meaning

Cultures can be seen as evolved coordinating devices that enable the individual, as well as the collective, to adapt to different physical and social ecologies (Campbell 1990, 1994; Barkow et al. 1992; Heylighen and Campbell 1995). Cross-cultural research that examines fundamental aspects of human psychology (e.g., self-enhancement, emotions) suggests that although the specific patterning of meaning is culture-dependent (see Lehman et al. 2004), they reflect universal psychological foundations (Chiu and Chao 2009). That is, while the pursuit of meaning and value is a human constant, the source of meaning can vary across cultures. As a case in point, studies reveal that North Americans self-enhance on individualistic characteristics, whereas Asians self-enhance on collectivistic qualities. Both groups self-enhance, yet on different, culturally sanctioned attributes, suggesting that the motivation to seek meaning and positive self-regard is a universal, though its manifestation differs across cultural contexts (Kurman 2003; Sedikides et al. 2003).

Research on culture and emotion further illustrates the universal and culture-dependent aspects of meaning. For instance, although the facial expression of basic emotions appears to be universal (Ekman 1980), emotion display rules—rules about when, where, and how emotions should be expressed (Ekman and Friesen 1969)—vary across cultures (e.g., Matsumoto and Ekman 1989). A study that investigated the microexpressions of the 2004 Olympic Games athletes revealed that universal facial expressions are produced spontaneously in response to victory (e.g., joy) and defeat (e.g., sadness, contempt); however, after the initial emotions are evoked, display rules regulate the subsequent communication of these emotions (Matsumoto and Willingham 2006). Compared with individualistic cultures, collectivistic cultures are associated with display rules that emphasize strict emotion regulation and discourage expressivity (Matsumoto et al. 2008). This suggests that while the pursuit of meaning and communication of emotional meaning are human universals, their particulars are contingent on the cultural context.

The observed variations in cultural meaning systems can be traced to the different adaptation problems that have been faced by the individual and the collective in the given ecologies. Analyses that examine regional prevalence of infectious diseases, for example, suggest that disease prevalence is associated with cross-cultural

differences in parenting practices (Quinlan 2007), personality characteristics (Schaller and Murray 2008), and collectivistic values (Fincher et al. 2008). Presumably, some meaning systems, values, and attitudes associated with collectivism (e.g., obedience, conformity) are better suited to prevent and control the spread of infectious diseases. These studies illustrate how different adaptive problems can result in the creation of different cultural meaning systems.

Multiculturalism: Multiple Webs of Meaning

Culturally shared norms and values tell people how to act, what to strive for, how to make sense of the events that happen to them and others, and how to make value judgments (Baumeister 1991). As remarked earlier, however, these effects of culture are typically taken for granted and are invisible to the individual. Exposure to different cultural knowledge traditions (e.g., through a sojourning experience or immigration) can increase individuals' awareness of the imprint of culture in their thoughts and behaviors. Exposure to and mastery over different cultures would also help individuals to navigate more successfully through the different meaning networks. Multicultural individuals, for example, who have acquired mastery over diverse cultural meaning systems, are capable of interpreting their world through different cultural lenses (DiMaggio 1997; Shore 1996) and acting accordingly (Wong and Hong 2005). Multiculturalism, in this sense, corresponds to the ability to switch between different meaning systems, just as a multilingual person can switch between different languages.

Multicultural individuals interpret and respond to situations differently depending on the cultural meaning system they are presently operating from. For example, compared with North American culture, Chinese culture emphasizes maintaining ingroup harmony and the sense of duty toward the ingroup (Gelfand et al. 2001; Leung 1987). Thus, activating the Chinese or the American meaning network could make Chinese-American bicultural individuals interpret a situation differently and respond based on the corresponding behavioral script. A study (Wong and Hong 2005) in which Chinese-American bicultural individuals took part in a Prisoner's Dilemma game with their friends has shown that when their Chinese meaning network was activated through exposure to Chinese cultural cues (e.g., the Great Wall), bicultural participants anticipated their friends to act more cooperatively than when their American meaning network was activated (through exposure to American cultural icons such as the Statue of Liberty). Therefore, these bicultural participants were more likely to make cooperative moves when their Chinese meaning system was activated as opposed to their American system. These findings testify to the notion that multicultural individuals can switch between the different webs of meaning, depending on the context, leading to differential responses to stimuli.

Importantly, multicultural individuals do not switch between different meaning frames in an indiscriminant, "knee-jerk reflex" fashion. Rather, they use their cultural devices strategically and display qualified reactions, depending on the

relevance and applicability of the meaning framework. In other words, their reactions to cultural cues are not passive and predetermined, but are rather shaped in a context of meaning and motivation (Kesebir et al. 2010). In the Prisoner's Dilemma study discussed above, for instance, when their Chinese meaning network was activated, the Chinese-American bicultural participants behaved more cooperatively only if the interaction partners were friends, but not if the partners were strangers, because the cooperative meaning frame was applicable to ingroup members, but not to strangers (Wong and Hong 2005).

In addition, multicultural individuals might also strategically adopt different meaning frames to assert valued attributes. As elaborated earlier, cultural meaning systems imbue the world with a sense of order and predictability and provide individuals with a sense of significance and worth. Thus, when one of the important meaning networks from which individuals derive their sense of significance and worth is threatened, multicultural individuals might seek to reassert its importance. For example, a study that examined the effect of experimenter language usage on value endorsement among Hong Kong Chinese students found that when the experimenter provided experimental instructions in Mandarin (the official language of Mainland China but not Hong Kong at that time), the Hong Kong Chinese participants endorsed Western values more strongly, presumably in an attempt to assert their westernized Hong Kong identity and distance themselves from their more traditional Chinese identity (Bond and Cheung 1984).

Subjective perceptions or beliefs also influence how individuals switch between the different webs of meaning. Essentialism is the belief that a social category, such as race or culture, possesses immutable underlying qualities that determine the abilities and traits of its members (Haslam et al. 2000). Research has shown that bicultural individuals who endorse essentialist beliefs perceive different cultural meaning systems as discrete entities with rigid boundaries (see Hong et al. 2009). Although people can acquire multiple meaning structures through exposure to various cultural knowledge traditions, those who endorse essentialist beliefs experience more difficulty in reconciling and integrating the apparently discrete meaning systems (Chao et al. 2007). Thus, rather than adopting and accommodating to the multiple meaning systems, they react against those that are perceived as foreign to them. A study examining emotional projection among bicultural Korean Americans illustrated this phenomenon (No et al. 2008). Previous research reveals that when interpreting interaction partners' emotional expressions, North Americans tend to project emotions felt by the self onto others (egocentric projection; e.g., I feel angry and others feel angry as well), whereas East Asians tend to project complementary emotions (relational projection; e.g., I feel angry and others are fearful; Cohen and Gunz 2002). The study on emotional projection among bicultural Korean Americans has shown that those who endorsed stronger essentialist beliefs responded with less egocentric and more relational projection when their American meaning network was cued (No et al. 2008). This finding suggests that multicultural individuals who perceive different meaning networks as discrete and incompatible tend to turn away from the meaning frame they deem as relatively foreign and assert their valued meaning system.

Taken together, the webs of meaning equip multicultural individuals with different cultural lenses and enable them to interpret and understand situations from diverse perspectives. These meaning structures are analogous to tools in a toolkit (DiMaggio 1997). In an increasingly multicultural society, being equipped with diverse cultural knowledge allows individuals to pick and choose from a wide variety of tools to achieve important life goals. However, as discussed, under some circumstances (e.g., when one's sense of identity distinctiveness is threatened or when the different webs of meaning are perceived as incompatible), individuals might hold on to a certain meaning frame more strongly, while reacting against the other. Although adherence to a valued meaning system can serve as a source of worth and significance, rigid devotion to a single meaning system might hinder individuals, as well as the collectives, from adapting to the evolving ecologies. It might preclude them from being able to benefit from diverse knowledge perspectives at best and lead to miscommunication and conflicts at worst. The question, then, becomes: How to foster receptiveness to diverse perspectives in this increasingly interconnected world? The answer lies in the concept of "cultural competence," to which we turn next.

Navigating Through Different Webs of Meaning

Culture facilitates adaptation to a given ecology (Fiske 2000). Cultural competence, accordingly, can be defined as the extent to which an individual has mastered the intricate webs of meaning, small and large, that is necessary to live and thrive in a particular ecology in which the individual regularly participates (D'Andrade 1987). With the rapid increase in exchanges across national and cultural boundaries, cultural competence has also come to denote the ability to navigate effectively between different cultural meaning networks and to function in a culturally diverse social environment (Chao et al. 2011). As societies become more interconnected than ever, the concept of cultural competence has drawn increasing attention (Ang et al. 2007; Earley and Gibson 2002; Straussner 2001; Sue 1998; Sue et al. 2009; Tsui and Gutek 1999).

Knowledge, awareness, and skills constitute the pillars of cultural competence (Sue et al. 1982). They highlight the need to understand different meaning systems, to be aware of the assumptions and embeddedness of one's own cultural milieu, and to act and react appropriately when navigating across different cultural meaning systems (also see Brown 2009). Knowledge obtained through exposure to diverse meaning networks is an important initial step towards multicultural competence; however, as illustrated by the studies on experimenter language usage (Bond and Cheung 1984) and emotional projection (No et al. 2008) discussed above, knowledge does not necessarily translate into behavior. Awareness bridges knowledge and skills; it transforms knowledge to action. Critical awareness is an indispensable component of cultural competence. It involves reflexive introspection on one's valued cultural meaning system, recognition of the strengths as well as biases associated with its attributes and assumptions, and appreciation of the potential to learn

and benefit from other meaning networks. To promote readiness to reflect on one's cultural heritage and to explore the meaning systems embedded in other cultures, it is important to (1) foster a sense of security towards one's own culture and (2) highlight the potential to learn and master different cultural meaning systems.

Sense of Security

We have already noted that culture serves as an important source of epistemic and existential security. Culture can provide a secure base for individuals to explore an unfamiliar environment (Hong et al. 2006). Similar to infant attachment to a primary caregiver (Bowlby 1973), attachment to culture can furnish individuals with a sense of protection and support. For a securely attached infant, the caregiver serves as a secure base for the child to explore the surroundings and as a safe haven in times of distress, whereas an insecurely attached infant shows signs of ambivalence and avoidance. In a parallel fashion, secure attachment to a valued culture provides individuals with a secure base to explore foreign cultural meaning systems. However, when individuals' sense of security is threatened, it might hinder them from being open to other cultures (Hong et al. 2006). For instance, individuals strive to connect with and to differentiate themselves from others simultaneously in order to maintain optimal distinctiveness (Brewer 1991); situations that threaten people's sense of connectedness with a valued culture and distinctiveness from another culture can thus undermine their sense of security. The study that examined the effect of experimenter language on value endorsement among Hong Kong Chinese students (Bond and Cheung 1984) illustrated the dynamics of this cultural process again. When instructed by a presumably Mainland Chinese experimenter in Mandarin, the participants' distinctiveness from traditional Chinese culture and connectedness towards their westernized Hong Kong identity were threatened. Rather than fostering their openness to explore the traditional Chinese meaning system the Hong Kong Chinese respondents attempted to restore their sense of security towards their westernized Hong Kong identity by adhering to its associated meaning frames more strongly. As this example illustrates, a perceived threat to individuals' sense of optimal distinctiveness to and from different meaning systems can undermine their secure base for exploration (Hong et al. 2006). To encourage critical awareness and exploration in a multicultural environment, it is important to bestow individuals with a secure cultural base through acknowledging and affirming the importance of their valued meaning system. With a secure cultural base, individuals may proceed toward exploring and navigating the diverse webs of meaning around them.

Sense of Mastery

A mastery orientation fosters the acquisition of knowledge and development of competencies (Dweck 1986, 1992). In the domain of academic achievement, an incremental view that intelligence is a malleable attribute that can be improved with

effort can enhance individuals' sense of mastery to learn and to deal with setbacks; contrarily, a view that intelligence is fixed and inalterable undermines the motivation to learn. Students with a fixed view of intelligence tend to be less persistent and show less task enjoyment in the face of academic setbacks (Mueller and Dweck 1998). Generalizing this principle to cultural learning, we argue that the essentialist belief that cultural meaning systems are fixed entities with rigid boundaries may hinder the development of cultural competence. Essentialist beliefs about culture might lead individuals to perceive cultural attributes and their associated behavioral manifestations as inherent and immutable qualities possessed by the respective cultural group members (Hong et al. 2009). Rather than enabling individuals to reflect on the embeddedness of their own culture and fostering an appreciation of cultural diversity, essentialist beliefs might result in reactance against meaning frames that are deemed as foreign (No et al. 2008) and reduce the desire to interact with different others (Williams and Eberhardt 2008). Thus, an essentialist view of culture might pose a challenge to the development of cultural competence: The perceived difficulty in reconciling the apparently discrete, at times incompatible, meaning systems can make intercultural boundaries salient and undermine the motivation in mastering and integrating knowledge from multiple cultural perspectives (Chao et al. 2011). Consistent with this argument, scholars across different fields (e.g., Brown 2009; Kashima 2009) have criticized the attempts by researchers to distill different meaning networks into discrete non-overlapping entities and to characterize observed cultural differences into essence-like antagonistic constructs (e.g., individualism vs. collectivism). To promote critical reflection on one's own cultural meaning system and an appreciation of the potential to learn and benefit from multiple meaning networks, it is important to foster a mastery learning orientation towards the different webs of meanings and highlight the possibility for growth and change in a multicultural environment.

In sum, individuals can master diverse meaning systems through exposure to different cultural traditions. Knowledge, awareness, and skills are crucial ingredients of cultural competence. Awareness can translate knowledge to skills, from knowing to acting flexibly across diverse environment. It involves critical reflection about one's valued cultural meaning system and exploration into other webs of meaning in order to learn and benefit from multiple meaning networks. Being culturally competent enables individuals to navigate different meaning systems and to interpret different aspects of life through multiple cultural lenses.

Conclusion

We began this chapter by examining the reciprocal relationship between meaning and culture. Culture and meaning are inseparable; they together make up the structure on which the human way of life, as we know it, is erected. Cultures are made of meaning systems and providing meaning is an essential function of cultures. Culture, meaning, and the individual are in a constant state of co-creation: People

rely on culture to provide them with meaning, and they shape and reshape their culture in the process of seeking and constructing meaning. Cultural process is dynamic. Individuals can acquire multiple webs of meaning through multicultural exposure and can switch between different meaning frameworks. In an increasingly multicultural society, being able to integrate the constantly evolving and interconnecting webs of meaning would enable individuals to benefit from what diverse cultural meaning systems have to offer.

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Chapter 25

Is Happiness a Moving Target? The Relationship Between Residential Mobility and Meaning in Life

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I think everybody should get rich and famous and do everything they ever dreamed of so they can see that it's not the answer. ~Jim Carrey (Quotable Quotes 2006, p.81)

You will never be happy if you continue to search for what happiness consists of. You will never live if you are looking for the meaning of life. ~Albert Camus (cited in Pollan and Levine 2006, p.4)

From its founding, the United States has been characterized by the willingness of its citizens to uproot themselves and relocate across large distances in search of opportunities, happiness, or even just adventure (Oishi et al. 2009b; Tocqueville 1835/2003; Van Minnen and Hilton 2002). This rate at which individuals make residential moves is called residential mobility. For individuals, this is often operationalized as the number of times a person has relocated during a given time frame (for instance, from ages 5 to 17, Oishi et al. 2007a). The present chapter explores the potential link between residential mobility and meaning in life.

Nationally representative data collected by the Pew Research Center indicates that about 62 % of Americans relocate to a new community at some point in their lives (2009), and 45 % of individuals would rather live in a type of community different from the one in which they currently reside (2008). To achieve this high mobility rate, millions of Americans spanning all age groups move each year. For example, recent Census Bureau data show that approximately 12.5 % of Americans moved between 2009 and 2010, with young adults representing an especially large proportion of this total (e.g., 26.7 % of individuals in the 20–24 age group reported moving during that year) (United States Census Bureau 2011). Mobility is not just limited to individualistic, Western nations such as the U.S. but represents a growing trend worldwide. Recent reports from the International Organization for Migration (2011) indicate that the number of international migrants increased by almost 43 % in the 10-year span from 2000 to 2010 and that migrants currently make up just over 3 % of the world's population at 214 million persons (equivalent to the fifth most populous nation in the world).

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Despite the long-standing history of mobility in the U.S. and the increasing frequency of migration and relocation internationally, surprisingly little research attention has been directed at identifying the personal, interpersonal, and societal impacts of this phenomenon in psychological science. However, a small number of researchers have begun to examine the impact of geographic relocations on individuals and communities in today's mobile society (see Adam 2004; Jolleyman and Spencer 2008; Oishi 2010 for review). Research on this topic has found that residential mobility, especially during childhood, impacts a wide variety of outcomes for the individual including personal identity, interpersonal relationships, and physical and emotional health. And the effects of mobility are not limited to individuals. Residential mobility has also been found to influence the characteristics of entire communities and cultures by affecting group cohesion and neighborhood characteristics such as crime rates (Sampson et al. 1997).

Residential Mobility and Meaning in Life

The concept of meaning in life has been multiply defined and, similarly to the concept of well-being, researchers have sometimes proposed that meaning should be a relatively open concept evaluated based on the individual's criteria (e.g., Steger et al. 2006). Others have attempted to identify certain key ingredients. Baumeister (1991), for instance, argues compellingly that the experience of meaning is determined by a person's ability to meet several fundamental needs: purpose, value, efficacy, and self-worth. McGregor and Little (1998) suggest that the belief that one is true to oneself is the key to meaning in life. Regardless of the precise definition, meaning in life is commonly held to be an important element of a good life (King and Napa 1998). Despite its perceived value, meaning in life is often excluded in research on the well-being of healthy populations. Because of this fact, previous research on the impact of residential mobility has so far overlooked the possible influence of mobility on this important dimension of human wellness.

To our knowledge, no existing research on residential mobility has directly considered the link between mobility and one's sense of purpose, value, or meaning in life. However, separate research on these two topics provides considerable evidence that the two should be related. Residential mobility is shown to be linked to many factors that are important and relevant to meaning in life, including identity development, relationship formation, a sense of community, and the experience of positive affect.

Because meaning in life is associated with identity (e.g., Kiang and Fuligni 2010; Schlegel et al. 2009; Chap. 14 by Schlegel et al., this volume; Takkinen and Ruoppila 2001), relationships (e.g., Lambert et al. 2010; Chap. 23 by Stillman and Lambert, this volume), community (e.g., Stokols et al. 1983; Chap. 19 by de St. Aubin, this volume), and affective experience (Oishi and Schimmack 2010), we will review the current evidence on the link between residential mobility and identity, relationships, community, and positive affect in turn.

Residential Mobility and Identity

According to Baumeister (1991; see also Chap. 1 by Crescioni and Baumeister, this volume), meaning in life cannot be understood independently of identity, as meaning cannot be found without understanding one's purpose, value, efficacy, and self-worth, all of which are central to one's identity. For instance, accessibility of "true" self-concept ("who you really are") was positively associated with the presence of meaning in life among American college students (Schlegel et al. 2009). Interestingly, Baumeister argues that this was not always the case. Most people in Medieval times based their identities on the collective aspects of one's life such as family lineage, the social rank and community in which one was born, and religion. To the extent that the importance of family lineage, social rank, and religion was virtually constant across one's life time in Medieval times, their identity was clear and relatively free of crisis. Likewise, most people in the Middle Ages seem to have had a clear sense of purpose, value, and a proper place in life. However, Baumeister (1986, 1991) observed that as family lineage, social rank, and religion became less central in life, many people in modern times started to experience identity crisis and finding meaning in life more difficult. Thus, individuals with a clear sense of who they really are in a modern society have a sense of purpose and meaning in life, but others do not (Schlegel et al. 2009). Considering that premodern societies were not residentially mobile compared to modern societies, then it could be hypothesized that residential mobility plays an important role in determining the sources of one's identity and meaning in life. In a residentially stable, traditional society, individuals are likely to view themselves from the perspective of their family origin, social rank, social roles, and religion. Not surprisingly, in such a society, people are likely to find meaning in life by recognizing their place in life, living their lives in accordance to their religion and/or social roles. In contrast, in a residential mobile society, individuals are on their own in finding the meaning of life. Thus, people in a mobile society might be more likely to be at loss finding meaning in life than those in a stable society.

There is some evidence for the thesis developed by Baumeister (1986, 1991). For instance, individuals who have moved frequently in childhood tend to define their identities in terms of their skills and traits rather than their family origin, social roles, or group memberships, whereas those who have not moved in childhood tend to define their identities both in terms of their personality traits and social roles (Oishi et al. 2007a, Study 1). This difference, in turn, predicts the outcome of novel social interactions. Individuals who had moved frequently in life felt happy about the social interaction when the interaction partner accurately guessed their personality traits and skills, whereas individuals who had never moved felt happy when the interaction partner accurately guessed their group membership. As long as we interact with someone who pays attention to and seems to understand the identity that is most important to us, we will have a positive interaction and feel good. But this means that movers and nonmovers will have different evaluations of the same interaction, which could affect their feelings both about themselves and about new

acquaintances. Certainly placing great importance on personal identity would affect which achievements and experiences are associated with an experience of meaning and purpose in life, possibly making it more difficult to achieve a sense of value and self-efficacy through membership in and identification with groups or family. However, individual accomplishments may experience an increased power to enhance the meaningfulness of a mobile individual's life, as indeed some research indicates that successful and famous individuals are much more likely to report their life's work as a source of meaning as opposed to relationships (Ebersole and DeVogler-Ebersole 1986). Although in the above instance it is unclear whether mobility would have any direct positive or negative effect on meaning in life, by influencing something as fundamental as our sense of identity, residential mobility surely has an impact on how we experience and evaluate life's meaning.

Residential Mobility and Relationships

When asked about the sources of meaning in life, people often list social relationships such as family as the number 1 source (Lambert et al. 2010). Indeed, individuals who have close, positive social relationships are also more likely to have a clear sense of meaning and purpose in life than those who do not (Keyes et al. 2002; Krause 2007; Ryff 1989). In contrast, individuals who are socially excluded have a hard time finding meaning in their own existence (Zadro et al. 2004), sometimes even deciding to end their lives (Williams 2001). The precise reason for this link between the presence of positive social relationships and meaning in life, however, remains unclear. One reason might be that the role provided by a certain relationship such as parent and caretaker could provide meaning in life because such a role presents a clear sense of self-worth, value, and efficacy. Another reason might be that the presence of someone who recognizes one's value provides a critical basis for a sense of purpose and meaning in life. Regardless of the precise mechanisms linking social relationships and meaning, to the extent that residential mobility of society and individuals shapes opportunities for various kinds of social relationships, residential mobility becomes relevant in the discussion of meaning in life.

A move to a new city typically results in a greater psychological distance from "old" friends (Shklovski 2007). Although movers' relationships with old friends become less close after the move, movers create new friendships in a new location. Therefore, a residential move does not always result in a shrunken social network in the long run (Kroger 1980). However, repeated moves in childhood are typically associated with difficulty in creating stable friendships even in adolescence and adulthood (Adam 2004; Oishi 2010 for a review). The evolutionary psychologist David Buss (2000) even argues that having a deep life-long friendship is extremely difficult in a modern time compared to the evolutionary past in part because close friends at one point in time are likely to be dispersed to different geographical areas at a later point in time to pursue their respective career goals, whereas in the evolutionary past, individuals were able to spend their entire lives in a close proximity

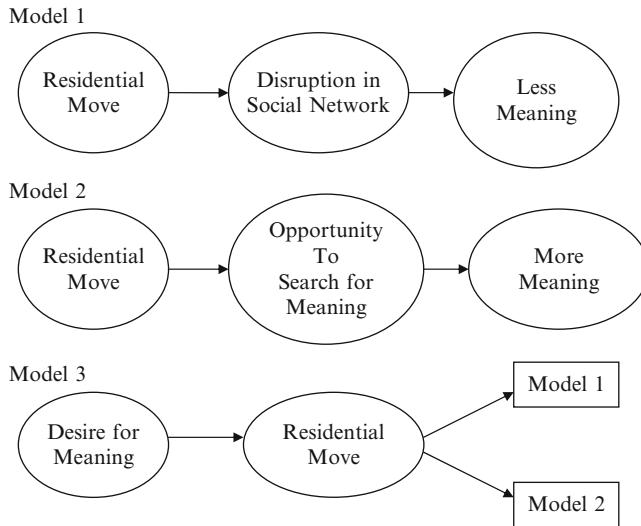


Fig. 25.1 Three models of the relationship between residential move and meaning in life

with a small number of close friends and family members. Thus, as seen in Model 1 of Fig. 25.1, residential mobility could lead to lower levels of meaning in life due in part to the difficulty in forming and maintaining intimate social relationships.

Besides the link between residential mobility and the quality of social relationships, there is considerable evidence that mobile individuals employ different social strategies than nonmovers (see Oishi 2010 for a review). For example, recent research has found that highermobility individuals are more likely to engage in “duty-free” or low-cost friendships with a large number of individuals, rather than becoming embedded in a few deeply committed relationships (Oishi et al. 2011). Similarly, it has been found that individuals who recently moved far away from family compensated for reduced family social exchanges by engaging in an increased number of social exchanges with friends (Magdol and Bessel 2003). It has also been demonstrated that movers who used e-mails to keep up with “old” friends were able to maintain closeness to “old” friends than those who did not use e-mails as frequently (Shklovski 2007). It is possible, then, that residential mobility has a minimum impact on the quality of social relationships overall and meaning in life. However, while “duty-free” relationships may require less personal investment and having a large network of friends might compensate for family ties in most everyday circumstances, the social strategies of the highly mobile may not provide them with sufficient support in the event of a major life crisis (Oishi 2010 for review), particularly for certain types of individuals. As in the connection between residential mobility and subjective well-being discussed above, whether residential mobility is negatively associated with meaning in life could depend on one’s personality and interpersonal skills.

Residential Mobility and Community

People often derive their sense of meaning in life, purpose in life, and values from their roles in community (Baumeister 1991; Keyes 1998). Thus, it is important to consider the relation among residential mobility, community, and meaning. Keyes (1998) found that a sense of belonging to community (social integration) and a sense of societal contribution (social contribution) are strongly associated with life satisfaction and happiness. To the extent that life satisfaction and happiness are correlated with the presence of meaning in life (Steger et al. 2006), a sense of belonging to community and a sense of societal contribution are likely to be associated with the presence of meaning in life. In two daily diary studies, Steger et al. (2008) also showed that engaging in eudaimonic behaviors such as volunteering were positively associated not only with the meaning in life and life satisfaction felt on that day but also the meaning in life and life satisfaction felt a day later.

Although a sense of belonging to community and societal contribution are based on subjective feelings, some neighborhood characteristics are likely to encourage more involvement in community. For example, numerous studies have shown that people feel a stronger attachment to community when they have lived in that community for a long period of time (Sampson 1988). Individuals who have moved frequently in the past experience less sense of community compared to more stable individuals (Stokols et al. 1983). Interestingly, new comers feel a stronger attachment to community in a residentially stable community than a mobile community (Sampson 1988; see Sharkey and Sampson 2010 for other “destination” community effects).

The famous sociologist Robert Sampson and his colleagues also found that residentially mobile communities have higher rates of crime than stable communities, even after controlling for various other community characteristics such as median income, unemployment rate, and racial composition (Sampson et al. 1997). Furthermore, they found that collective efficacy (the sense that community can handle various problems) was lower in a residentially mobile community than stable community, and this difference in collective efficacy explained why crime rates are generally higher in a mobile community than in a stable community.

Beside collective efficacy, residential stability also seems to encourage individual community residents to care about their community. For instance, residents in a stable city (e.g., Philadelphia, Pittsburgh, Boston) were more likely to attend a Major League Baseball home game even when their home team was not doing so well, whereas residents in a mobile city (e.g., Atlanta, Phoenix, Denver) were less likely to attend the home game when their home team was not performing well (Oishi et al. 2007b, Study 2; see a replication in Japanese professional baseball teams in Oishi et al. 2009a). Likewise, residents in a stable neighborhood were more likely to purchase a “critical habitat” license plate, which supports a local environmental cause, than those in a mobile neighborhood, even when the median income and political donation patterns of neighborhood were statistically controlled (Oishi et al. 2007b, Study 1). Importantly, when residential mobility and stability were experimentally manipulated, participants in a stable group were also more likely to

offer help to other group members than those in a mobile group. Furthermore, the causal effect of residential mobility/stability on pro-community behavior was mediated by a sense of belonging to the group (Oishi et al. 2007b, Study 3). Thus, residential stability seems to nurture residents' involvement in community matters, encouraging them to act in a pro-community manner, which might in turn result in a stronger sense of purpose, self-worth, value, and meaning in life. Simultaneously, residents of a stable community might derive a sense of meaning in life from community involvement, whereas residents of a mobile community might derive a sense of meaning in life from other sources such as personal accomplishments.

Residential Mobility and Positive Affect

While personal identity, relationships, and community can all be sources of both meaning in life and positive emotional experiences, it also seems possible that there is a more direct link between positive affect itself and the perception of meaning in life. That is, being happy at any given moment may actually enhance experiences of meaning and vice versa. Assuming that residential mobility has the potential to influence one's enduring affective experiences, it may also directly impact the experience of MIL in this way. Although the link between residential mobility and MIL via positive affect described above may be somewhat tenuous, there is already existing evidence to support both the hypotheses that MIL and positive affect are highly related, perhaps even causally, and that mobility can have long-term implications for emotional well-being and mental health.

For example, Carol Ryff and colleagues have repeatedly found that purpose in life is positively associated with life satisfaction and positive affect (e.g., Ryff 1989; Ryff and Keyes 1995). Likewise, meaning-in-life researchers have consistently found that the experience of meaning in life is positively associated with life satisfaction (e.g., Steger et al. 2006) and positive affect (e.g., Steger et al. 2008; Zika and Chamberlain 1992) and even physical health (e.g., Steger et al. 2009). Additionally, a combination of survey and experimental data gathered by King and colleagues indicates that positive affect directly impacts MIL ratings. Daily positive emotions, for instance, were found to be better predictor of general MIL ratings than day-to-day ratings of life's meaningfulness (King et al. 2006). These authors further demonstrated that positive mood induction is sufficient to enhance meaning in life and that individuals who are in a positive mood are better at distinguishing between meaningful and meaningless activities. This suggests that positive affect does not simply artificially inflate MIL but actually helps individuals to be more attuned to the purpose and value available in their everyday lives. Thus, it seems likely that any factor which impacts emotional experience may affect meaning in life by making information about the value of daily experiences more or less accessible.

There is considerable evidence that residential mobility is one such emotion-influencing factor, particularly for certain types of individuals. Residential mobility research has shown that personal history of residential moves is linked to lower

levels of life satisfaction and positive affect (Oishi and Schimmack 2010) and higher levels of negative affect such as depression (Magdol 2002). For children especially, frequent moves are associated with various negative outcomes, including suicide attempts (Potter et al. 2001), drug use, teen pregnancy, and school dropout, even controlling for risk factors commonly associated with high mobility such as low income or an unstable home life (e.g., DeWit 1998; see Jolleyman and Spencer 2008 for review). It is likely that much of the negative effect on behavior and mental health among children has to do with the disruption of social networks and the stresses of a new environment (South et al. 2007).

There is also some evidence that women experience more stresses associated with moving (Magdol 2002). Magdol also finds that weak social ties affected women more negatively than men. It is important to note, however, that some of the mental health differences identified among mobile adults could be the result of self-selection, such that more depressed or less agreeable individuals might simply be more likely to move to a new city (Jokela et al. 2008; see however, Jokela 2009 that did not find a relationship between neuroticism and future moves). However, self-selection is unlikely to fully explain the incidence of ill-effects among mobile children who do not choose when and how often to move. Indeed, the typical correlations between big five personality traits and residential moves are very small (rls from .01 to .05 in Oishi and Schimmack 2010). Individuals who moved frequently might have had parents with particular personalities. However, the typical parent-offspring correlations in big five personality are also small, often ranging from .00 to .15 (Loehlin 1992). Thus, the potential effect of parents' personality on children's moves is minuscule. Nevertheless, it is important to examine the self-selection effect to advance our understanding of the pure effect of residential moves on various psychological phenomena, including meaning in life, in the future.

In addition to its relationship with mental health, residential mobility has also frequently been identified as a predictor of physical health (e.g., Stokols et al. 1983) and even mortality (Juon et al. 2003; Oishi and Schimmack 2010). For example, individuals who have moved frequently in life reported more illness symptoms than other participants as adults (Stokols et al. 1983). Frequent movers in childhood also reported lower levels of general health than those nonmovers as adults (Bures 2003). Although negative life events and illnesses can provide an opportunity to find greater meaning in life (King and Hicks 2009; McKnight and Kashdan 2009; Park et al. 2008), it seems unlikely that minor illnesses resulting from the stress and decreased social support of moving would encourage the type of soul searching incited by major crises. As mentioned earlier, the very experience of reduced positive affect may make meaning less accessible (King et al. 2006), although it may result in increased *search* for meaning. Though search for meaning has sometimes been considered a component of meaning in life, it has been linked to depression, sadness, and fear (Steger et al. 2006), presumably because of the types of situations that instigate the search for meaning. While it could be the case that a search for meaning prompted by the mental and physical trials of moving results in long-term increases in meaning and purpose in life, it seems more likely that the health outcomes of mobility are symptoms of the reduction of social stability and well-being,

both of which have been linked to meaning in life (Zika and Chamberlain 1992), experienced by frequent movers. Generally, it seems sensible to expect that any experience which reduces positive affect, increases depression and other mental health problems, and causes declines in physical health would have an overall negative impact on the experience of meaning in life.

Modeling the Relationship Between Mobility and MIL

Taken together, the above evidence suggests that residential mobility and meaning in life may in fact be related, such that increased residential mobility predicts lower MIL (see Model 1 in Fig. 25.1). Oishi and Schimmack (2010) speculated that the association between residential mobility and lower levels of subjective well-being (SWB: satisfaction with one's life in general, the frequent experience of positive affect, and the relatively infrequent experience of negative affect) was due to the disruption in social networks and the difficulty in forming and maintaining intimate social relationships that result from moving. If the negative association between residential mobility and meaning in life is indeed due to the disruption in social networks, then some personality traits and skills might mitigate the negative effect of residential moves. For instance, the number of residential moves in childhood was not associated with SWB among extraverts and non-neurotics, whereas it was strongly associated with lower levels of SWB among introverts and neurotics. Like the relation between residential mobility and subjective well-being, then, residential moves might not result in difficulty in finding meaning in life among those who can connect with people in a new neighborhood.

Alternatively, because SWB and meaning in life are distinct (Keyes et al. 2002; Ryff 1989), there might *not* be a negative association between residential mobility and meaning in life. For instance, people might decide to move to a new city to start a new life and find a new meaning in life. Individuals who have moved in childhood or adolescence might have had more opportunities to think deeply about their lives, who they really are, and by early adulthood might have found a stronger sense of purpose and meaning in life (Model 2 in Fig. 25.1). A residential move might escalate the process of finding meaning in life because it is a major life event, and a major life event (especially a stressful one) is likely to elicit meaning construction (King and Hicks 2009). Yet another possibility is that residential mobility increases variability in meaning in life. Namely, among individuals who moved frequently, there might be a larger degree of variance in meaning in life; some movers have found a deep sense of meaning, while other movers have lost their sense of meaning in life due to repeated moves. In contrast, variance in meaning in life might be smaller among those who have never moved. If nonmovers experience on average fewer major life events to elicit the meaning pursuit process, which produces either a boost or reduction in MIL, then perhaps this group would have more consistent levels of reported meaning in life.

Finally, it is important to note that the presence or absence of meaning in current life might instigate a residential move (Model 3 in Fig. 25.1). The two quotes presented at the beginning of this chapter most directly relate to this model, both seeming to warn that success in finding meaning through mobility depends on *what* one is pursuing rather than the pursuit itself. Carrey argues that typical aspirations of fame and fortune which might be promoted by high residential mobility do not provide the sense of purpose that humans crave, while Camus states that meaning cannot be pursued directly but is a secondary product of a life well lived. However, it is probable that many voluntary moves are motivated, at least in part, by the desire to enhance meaning by making a new beginning, pursuing valued goals, or maintaining important relationships. It is important then to examine both causal pathways between residential moves and meaning in life. It is also critical to separate the search for meaning and the presence of meaning (Steger et al. 2006), as mobility might be associated with one aspect of meaning (e.g., people move in search of meaning) than another. In sum, there are a variety of ways in which residential mobility could affect meaning in life, and vice versa.

Conclusion

Taken together, the evidence outlined above highlights several potential pathways for a link between residential mobility and meaning in life. Previous research indicates that residential mobility shifts identity from the collective realm to the personal realm, changes social network strategies, negatively impacts interpersonal support, increases the incidence of mental and physical health problems, and decreases identification with the community and the experience of collective efficacy. Given the strong correlation between SWB and meaning in life (Steger et al. 2006), residential mobility might be associated with lower levels of meaning in life. However, as discussed above, there is a possibility that residential mobility creates opportunities to search for new meaning in life, which in the long run might translate into higher levels of meaning in life. It is critical to empirically examine these two potential pathways (Models 1 and 2 in Fig. 25.1) in the future. In addition, the reverse causal pathway should be explored. Namely, the relative lack of meaning in life could encourage individuals to move to a new city to start a new life (Model 3 in Fig. 25.1). Thus, it is important to explore the longitudinal association between meaning in life at one point in time and residential moves at a later point in time. Finally, the effect of residential mobility at the level of neighborhood, community, city, and state should be examined in the context of meaning in life. What are the characteristics of society that encourage individuals to search for and find meaning in life? With the advancement of empirical research on meaning in life (this book) and social ecology (e.g., Oishi and Graham 2010), this is no longer a philosophical question.

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Part V

Applications

Chapter 26

Multilayered Meanings in Health Decision Making: A Terror Management Health Model Analysis

Simon McCabe, Kenneth E. Vail III, Jamie Arndt, and Jamie Goldenberg

Contemporary research on the link between health and meaning has typically considered meaning as a coping resource or endeavored to predict the maintenance of meaning in the face of health problems and disease (e.g., Jim et al. 2006). Although such perspectives have generated important insights, there is need for more nuanced appreciation of how meaning operates in health contexts (see Park 2010). In this chapter, we speculate that multiple layers of meaning resonate deeply and are critical for understanding how people make everyday decisions that may ultimately impact their health. Using the terror management health model (TMHM; Goldenberg and Arndt 2008), we suggest that recognizing the motivational impact of conscious and nonconscious awareness of death affords key insights in the context of health decisions, by distinguishing orientations toward two important types of “macro-level” systems of meaning.

Meaning as Multilayered Behavioral Guidance

Following Baumeister (1991), many researchers view meaning as an organism’s perception of the environment, and the objects within it, as operating according to a clearly defined, reliable, and thus predictable set of contingencies (see also Heine et al. 2006; Chap. 4 by Proulx, this volume). All forms of meaning rely on an epistemic knowledge base, outlining the ways objects and events relate to each other. From our perspective, this forms the basic “micro-level” of meaning (see Arndt

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et al. 2013; Chap. 21 by Vess, this volume). Certainly, each of the world's creatures must be able to expect and react to basic principles to effectively navigate their environment, escape hazards, and precipitate desirable outcomes—humans are no exception. People recognize, for example, that they need to eat to satisfy hunger, to open the bottle if they want to pour out the sunblock, and to swing the bat if they want to hit the baseball. Thus, humans and other animals share a fundamental reliance on the perception of predictable mechanical environmental properties and behavioral contingencies.

But, although this micro-level system of meaning can help people understand the basic mechanics of behavior-environment interaction, it offers little information about the reasons people become involved in lifelong pursuits of symbolic projects, goals, and aspirations (see Arndt et al. 2013). *Why* would anyone want to pour out sunblock or hit a baseball in the first place? To understand this, it is important to at least briefly consider the cognitive abilities that allow humans to comprehend situations that are beyond the present and do not yet immediately exist.

Whereas animals like the platypus or the lizard, or even one's pet dog, are generally limited to relying on sets of expected relations within their immediate physical environments, the emergence of self-awareness allows humans to more abstractly conceptualize themselves across time and space. Only humans can envision what it would have been like to live in the Indus Valley 7,500 years ago, or what it will be like tomorrow or even 60 years from now. Using these cognitive faculties, people can also recognize the impact current behaviors and environments will have on future selves: for instance, that cultivating farms and gardens may eventually give us steady sources of food, that batting practice may help win more baseball games, and that a sunburn may eventually contribute to skin cancer. Thus, the cognitive ability for abstract thought allows humans to plan for the future and more comprehensively understand and manipulate their environment. People develop and abide by well-structured “macro-level” systems of meaning, which function in part to guide their present behaviors in ways that will systematically impact an abstract conceptualization of their future self. It is at this level of meaning, the macro-level, on which this chapter will focus.

Awareness of Death as Influencing Trajectories of Meaning

The ability to mentally project the self through time, despite its merits, presents a thorny psychological problem: it renders humans aware of the fact that they will eventually die. Of course, so will one's pet dog. But what separates humans from their canine companions is that whereas humans can recognize the inevitability of their own ultimate demise long in advance, denizens of the canine realm appear to lack this capacity. On this note, terror management theory (TMT; Greenberg et al. 1986) builds on the work of cultural anthropologist Ernest Becker (1973; also see Rank 1936), to posit that people are motivated to quell the potential anxiety that would otherwise arise from the unmitigated awareness of their impending demise.

People manage this psychological problem by using macro-level strategies of maintaining meaning that rely on the relational foundation of the micro-level systems. Moreover, research specifies that people utilize two classes of relatively macro-level meaning structures (i.e., relatively abstract sets of expectations) to manage death awareness depending on whether the thought of death is directly in focal attention (see Pyszczynski et al. 1999). Compared to micro-level meaning systems, the first of these operates on a moderately more abstract level, relying on construals of potentially unseen, unexperienced, and often temporally distant behavioral and environmental health consequences. Specifically, when people are consciously aware of death, they employ threat-oriented defenses to remove death thoughts from focal attention. Thus, as we will later elaborate, conscious death thoughts can motivate efforts to take advantage of *health-oriented* macro-level structures, which can serve as a guide to taking meaningful steps toward death-denial. For instance, once recognizing that popping the cap and applying sunblock represents a meaningful step toward the prevention of sunburns and skin cancer, a beachgoer reacting to conscious thoughts of death may attempt to forestall death with a more liberal application of sunblock. However, because the goal triggered by conscious death thoughts is to remove them from focal attention, people may also suppress or otherwise distract themselves from death-related thoughts (e.g., Arndt et al. 1997; Greenberg et al. 1994).

The second type of macro-level meaning systems operates on an even more abstract level, involving behavioral guidelines dictated by symbolic cultural beliefs and values rather than concrete, physical rules. When death thoughts are accessible, yet not in focal consciousness (i.e., nonconscious), people employ these symbolic, self-oriented systems of meaning to guide behavior. Specifically, TMT posits that the internalized cultural worldview imbues one's social world with a *self-oriented* macro-level system of meaning and thus outlines the behavioral criteria for transcending the ultimate threat to the self: death. In this light, the self-oriented behavior-environment contingencies serve to guide efforts to attain self-esteem, which reflects the degree to which the self successfully qualifies for either literal (e.g., heaven or afterlife) or figurative (e.g., lasting accomplishments, progeny, or other mementos of one's self) immortality. Individuals are thus motivated to maintain faith in their cultural worldviews and strive to meet or exceed the associated criteria for personal value. People responding to nonconscious death thoughts rely on their cultural systems to outline meaningful steps toward achieving at least a modicum of death-denying personal value, perhaps by enhancing one's baseball skills, religious piety, or any number of other socially valued endeavors (see Pyszczynski et al. 2004 for a review).

Meaning Structure, Health, and the Emergence of Dual Motivations

The assumption that a particular action has *meaning* is of course central to any health-relevant decision, though the scope of these meanings can be quite different and depend on the individual's internalization of certain socially constructed abstract

rules and contingencies. Consider two broad motivational themes revealed by research on health decision making: health- and self-relevant motivations.

Clearly, people are motivated to maintain their health. Effective responses to one's conscious health concerns require a moderately abstract construal of the mechanics of the body and beliefs about how one's health can be affected by environmental stimuli and/or by adjusting one's own behavior. A concerted effort to care for one's health therefore depends on perception of the behavioral and environmental contingencies that can directly or indirectly influence one's health. Thus, suitably motivated individuals can take meaningful action to adjust their lifestyle or environment to best improve their health. Indeed, two prominent streams of research on health-related decision-making (the health belief model, M. H. Becker 1974; protection motivation theory, Rogers 1983) have shown that when people are made aware of risks to their health, or their ability to effectively care for themselves, they tend to respond with health-enhancing decisions.

However, because salient health risks pose a personal threat, they can sometimes instigate a biased processing of health-related information (e.g., Liberman and Chaiken 1992; de Hoog et al. 2007). One explanation for this apparent discrepancy stems from parallel processing frameworks (e.g., Leventhal 1970; Witte 1998), suggesting that salient threats to one's health initiate defensive efforts designed to reduce (a) the health risk and/or (b) the associated distress caused by the awareness of the risk. Here, we can learn much about how the presence of a health-oriented macro-level system sets the stage for meaningful threat-reducing behaviors by observing reactions to salient health risks when people either do, or do not, perceive their health situation as predictable (or see an effective course of action). For example, more efficacious (Fry and Prentice-Dunn 2005) or optimistic (Scheier and Carver 1985) attitudes reflect individuals' evaluations that their health situations are reasonably predictable and within their realm of influence. In general, when exposed to a severe health threat, those with greater perceptions of health-related efficacy take meaningful steps to improve their health (e.g., Sturges and Rogers 1996; Witte 1992), whereas those with low efficacy beliefs not only lack such motivation but also defensively avoid their vulnerability (e.g., Fry and Prentice-Dunn 2005; Rippetoe and Rogers 1987).

Other research, however, has suggested that there are conditions under which health-related decisions reflect less of a direct concern with one's health, but rather are driven by the psychological implications for an abstract sense of the self. For example, responses to anti-smoking messages were better predicted by participants' self-identification as smokers than their current health risks due to smoking habits (Freeman et al. 2001). Here, we suggest that a more deeply symbolic meaning system is at work in guiding responses, one focused on personal worth and self-oriented value. In western culture, these contingencies of worth are often based on appearance and social status (Crocker and Wolfe 2001). People are thus more likely to take health risks when they hold positive prototypes of those who typically engage in such behavior (e.g., the "cool" smoker; Gibbens and Gerrard 1995; NCI 2008) but are less likely to take those risks when the behavior has negative consequences for their appearance value (Gibbens et al. 2005; Wakefield et al. 2003), illustrating

how health-related decisions can be driven more by efforts to enhance self-value than by efforts to reduce risk per se.

Thus, health decisions become subject to macro-level implications for the *self* when, for example, people perceive that smoking cigarettes will make them look cool or help them join the in-crowd or when they perceive that tanning, exercising, or purging food will help them achieve a desired skin tone or physique. Indeed, the personal value derived from positive affirmations of the self (Sherman et al. 2000) and the positive portrayal of abstract self-concepts to others (Leary et al. 1994) is based on perceptions about how the self is valued and has a critical influence on health-related decisions.

In sum, health decisions and outcomes are under some circumstances guided by relatively abstract macro-level appraisals of one's health situation. When people perceive a looming health issue to be subject to reasonably systematic influences, they can make meaningful adjustments to their behavior or environment to improve their health. When people are less optimistic about the efficacy of their health-relevant behaviors (or view their health outcomes as relatively unsystematic or arbitrary), they instead defensively bias their evaluation of explicit health risks. However, in at least some circumstances, people are guided less by reducing risk and more by psychological implications for the abstract, symbolic self, with health-related behaviors being governed most notably by the motive for self-enhancement and personal value.

Meaning and Health: A Terror Management Health Model Perspective

Given the diversity of meaningful attitudes and behaviors, how can we understand whether individuals will rely on health-oriented or self-oriented meaning systems when making decisions that impact their health? The recently developed TMHM (Goldenberg and Arndt 2008) integrates the dual-process model of terror management and dual health-related motivations to provide some insight. Although the connection between health and death may seem obvious, the implications of death awareness on health behaviors are more nuanced. We suggest that recognizing the motivational impact of death awareness is critical to understanding the adherence to health-oriented and self-oriented patterns of behavior contingencies.

Conscious Thoughts of Death and Health-Oriented Meaning Structures

People are frequently involved in circumstances that evoke thoughts of death, especially in a health context. For example, conducting breast self-exams or reading a brief piece of information about cancer can increase the accessibility of death-related

thoughts (Arndt et al. 2007; Goldenberg et al. 2008). The TMHM suggests that when death thoughts enter focal consciousness, people become especially motivated to push them out. Toward that goal, people can employ health-oriented meaning structures to guide behaviors designed to reduce (perceptions of) vulnerability and enhance health, such as increasing their intentions to exercise or buy higher sunscreen that offers greater sun protection (Arndt et al. 2003; Routledge et al. 2004).

But the employment of such a response critically depends on expectations about what constitutes an efficacious route of action. Health models have highlighted a number of such behavior-outcome expectations in the form of active coping strategies, perceived response efficacy, and health optimism. According to the TMHM, such strategies should moderate the effect of conscious thoughts of death on health decisions. And research verifies that immediately after a reminder of one's mortality (mortality salience [MS]), individuals who had more adaptive coping strategies, or greater health optimism, tended to increase their health-related behavioral intentions (Arndt et al. 2006). Moreover, Cooper et al. (2010) showed that MS motivated those who viewed sun protection as effective against the onset of cancer to increase their sun-protection intentions; this effect did not emerge among those who did not perceive sun protection as effective. Thus, in health-relevant circumstances specifically, perceptions of future health-oriented contingencies allow people to take meaningful action (or implement intentions) designed to cope with the threat of death by improving their health.

But given that the principal goal activated by conscious thoughts of death is to remove such cognition from focal awareness, this motivation can also produce threat-avoidance, or threat-denial, responses. For example, people can suppress thoughts of death associated with explicit reminders of personal risk of cancer (Arndt et al. 2007) or deny vulnerability to those factors associated with a short life expectancy immediately after MS (Greenberg et al. 2000).

This research thus indicates that individuals engage health-enhancing behaviors if they are able to perceive meaningful steps to reduce vulnerability, but engage in behaviors designed to deny their vulnerability if that perception is absent, biased, or clouded. Arndt et al. (*in press*) recently explored these competing motives by considering the influence of common psychological pressures, like the craving for a cigarette, on the risky behavior of smoking. Although current smokers generally tend to discount future health risks (Odum et al. 2002), the intensity of smokers' cravings has a notable impact on the extent of this bias. Individuals with weak cravings can more easily see themselves taking meaningful steps toward quitting (Nuria et al. 2002), whereas stronger cravings motivate a focus on the more positive aspects and consequences of smoking (Sayette and Hufford 1997; Sayette et al. 2005).

Arndt et al. (2011) hypothesized that because individuals with a strong craving to smoke are more apt to discount risk and deny vulnerability by focusing on the positive consequences of smoking, MS should motivate those with stronger cravings to increase smoking vigor. In contrast, because those with weak cravings are better able to recognize risk and perceive meaningful paths to quitting—thereby addressing their vulnerability to death by reducing health risks associated with smoking—MS should reduce smoking intensity. After MS (vs. control topic), participants in

these studies smoked a cigarette while their puff topography was electronically recorded. MS motivated smokers with stronger cravings to smoke more intensely, whereas those with weaker cravings smoked less intensely.

In sum, whether the impact of conscious awareness of death on health decisions reflects health enhancement or threat denial depends on the perception of meaningful health-enhancing behavior-outcome contingencies. When people are able to perceive they can have a meaningful impact on their health (response efficacy, health optimism, low craving biases, etc.), conscious thoughts of death motivate them to take steps to reduce health threats and enhance their physical well-being.

The Perceptual Shift from Health-Oriented to Self-Oriented Macro-meaning Systems

So far, we have considered how behaviors triggered by conscious death thoughts depend on the development and maintenance of health-oriented systems of meaning. In contrast, the nonconscious accessibility of death-related cognition triggers a shift in perceptual focus toward the symbolic value of the self. Thus, people need to adjust their construals of the world such that they can effectively traffic in self-oriented, symbolic systems of meaning. Research supporting this reasoning suggests that, compared to conscious death thoughts, nonconscious death thoughts produce a shift from viewing one's actions in terms of local details to viewing them in a more social and cultural context (e.g., Landau et al. 2011; Vail et al. 2013). This helps explain why Routledge and colleagues (2004) found, for example, that conscious thoughts of death increased intentions to use sunblock (i.e., reflecting a more proximal focus on health), whereas nonconscious thoughts decreased intentions to use sunblock (i.e., reflecting sensitivity to the cultural attractiveness of tan skin).

Further research in the health domain helps to clarify this distinction. Like Routledge and colleagues (2004), McCabe et al. (2013) reasoned that conscious death thoughts would produce an attentional sensitivity to health-relevant information but that nonconscious death thoughts would shift perceptual sensitivity toward information relevant to gleaning personal value according to one's self-oriented, cultural meaning system. American participants were first reminded of either death or a control topic. Then, either immediately (while still consciously aware of death) or after a brief delay (once death thoughts presumably faded out of focal consciousness yet remained nonconsciously active), participants viewed an advertisement for an ostensibly new brand of bottled water and indicated how much they would be willing to pay for it. In one condition, the advertisement featured an endorsement and photo of a female medical doctor in a white lab coat (offering cues about the health value of the product) and in a second condition featured the endorsement and photo of a famous American celebrity (Jennifer Anniston; offering cues about the cultural value of the product). In line with predictions, participants reminded of death were willing to pay more for the doctor-endorsed (but not the celebrity-endorsed) water in the no-delay condition and were willing to pay more for the

celebrity-endorsed (but not the doctor-endorsed) water in the delay condition. Notably, delay and advertisement conditions had no influence among non-MS-induced participants. An additional study conceptually replicated this pattern, but instead found such effects on amount of water consumed when participants were asked to sample water from bottles to which these endorsements were affixed.

Nonconscious Thoughts of Death, Self-Oriented Meaning Structures, and Health

The above research helps to elucidate how explicit death thoughts instigate health-oriented responses. But once they fade from consciousness, they implicate a meaning system that enhances the symbolic value of the self and the cultural beliefs on which its value depends.

The Impact of Efforts to Pursue Self-Esteem

One of the hallmarks of TMT research is that nonconscious thoughts of death motivate efforts to obtain personal value by adhering to the beliefs and value contingencies prescribed by self-oriented systems of meaning (e.g., culture; Pyszczynski et al. 2004). By considering the impact of particular dominant or accessible standards of self-worth (c.f., Crocker and Wolfe 2001), we can further understand the impact of self-relevant existential motivation on health-related decisions. For example, when people derive their sense of self-worth from engaging in high-risk behaviors, non-conscious death awareness motivates people to take more risks in those domains (e.g., Taubman Ben-Ari et al. 1999). Research generated by the TMHM demonstrates that nonconscious death thoughts motivate people who base their self-esteem on being tan or fit to report increased intentions to tan or exercise (Arndt et al. 2003; Routledge et al. 2004). Similarly, when graphic cigarette warning labels conjured up thoughts of death outside of conscious awareness, smokers who base their self-worth on smoking increased smoking intentions (Hansen et al. 2010). Importantly, as the self exists within cultural meaning systems—largely socially constructed and relying heavily on perceived social consensus—people often base their standards for valued behavior on extrinsic social cues (c.f., Berger and Luckmann 1967). As a result, people may be particularly likely to make health-related decisions based on efforts to present themselves in socially valued ways. Supporting this idea, Arndt and colleagues (2009a) found that when people rely on external social standards for personal value, MS increased desire to tan, presumably reflecting strivings for the social value placed on tan skin.

By this same token, when people invest in external standards, social information about valued behavior can alter the landscape of meaningful self-oriented behaviors. Thus, individuals adjust their behavior in more healthy or unhealthy ways depending on conditional social value placed on certain health-related activities.

For example, after MS, people who smoked for extrinsic reasons increased their intentions to quit if they were first exposed to anti-smoking messages that portrayed smoking as socially negative (not “cool,” Arndt et al. 2009a, b; or leading to social exclusion, Martin and Kamins 2010).

This also implies that when esteem contingencies are oriented toward healthy behaviors, existential strivings for self-esteem can be health promoting. For instance, although nonconscious death thoughts increase tanning intentions when extrinsic cues suggest the social value of tanned skin (e.g., fashion article titled “Bronze is beautiful”, Cox et al. (2009), photos of attractive tanned women, Routledge et al. (2004)), Cox et al. demonstrated that when the societal attractiveness of untanned skin was primed (e.g., fashion article titled “Pale is pretty”), MS decreased intentions to suntan. These findings highlight how the malleability of efforts to accrue meaningful personal value can impact health-related decisions.

There may also be times when self-esteem itself can be based on being healthy. Arndt et al. (2009a) found that, after MS, exposure to information describing a positive exercise exemplar (vs. non-exercising exemplar) induced people sensitive to extrinsic social standards to more strongly view exercise as important for self-esteem. Similarly, increased nonconscious death thought accessibility led women attending a mammogram clinic to increase their intentions to conduct breast self-exams (BSE) if they were also presented with a brochure framing BSEs as empowering (compared to practical instructions; Cooper et al. 2011).

Worldview Beliefs as Macro-level Guides for Decisions That Impact Health

One of the primary ways that people manage their awareness of death is living according to the blueprint of a culturally derived system of meaning, or worldview. And indeed, hundreds of studies have shown that reminders of death motivate efforts to defend such belief systems (see Greenberg et al. 2008). TMT helps to account for the (literal or figurative) death-denying content of these belief systems by positing that such beliefs serve the important function of mitigating concerns about mortality. Unfortunately, the motivation to protect the integrity of one’s cultural meaning systems can sometimes have negative implications for the health of oneself, as well as others. Consider, for instance, when defending one’s belief systems places one at odds with medically prescribed courses of action. Arndt et al. (2009b) found that nonconscious death thoughts (compared to a control topic) motivated Christian medical students to make higher (i.e., more cautious and protective) cardiac risk estimates for a fellow Christian patient (who supported their worldview) and lower (i.e., more careless) risk assessments for a Muslim patient (who threatened the veracity of their worldview).

This analysis not only informs how people treat others but how the reliance on a symbolic meaning system can compromise what many would otherwise regard as the most reasonable course of action for an individual’s own health. Vess and

colleagues (2009) hypothesized that nonconscious death thoughts would motivate an increased reliance on religious methods of healing among people with strong faith in their religious beliefs. Across a series of studies, among people scoring high on a measure of religious fundamentalism, nonconscious thoughts of death (vs. a control topic) motivated a preference for prayer as a substitute for medical treatment. This finding reflects the existentially enhanced reliance on fundamentalists' dominant system of beliefs as a guide for meaningful investment that attenuates underlying concerns about death. Indeed, after MS, when fundamentalist participants were allowed to affirm their preference for faith-based medical interventions (vs. not given such an opportunity), they decreased their desire to search for other sources of meaning in life.

Human Physicality as a Threat to Meaning in Health Contexts

One psychological obstacle in abiding by either macro-level system of meaning (i.e., to enhance health or the value of the self) is the recognition of the finite nature of one's physical body. Like all other animals, people are susceptible to injuries, disease, and deterioration, rendering the body an ever-present reminder of human mortality (Goldenberg et al. 2000). The natural trajectory of the body's "creaturely" vulnerability therefore stands as an affront to any meaning system that attempts to place humans in a privileged and healthy, if not enduring, position. The relevance of this problem can be seen in various health screening activities, such as physical checkups, x-rays, or screening exams, each requiring close contact with one's physicality.

Integrating this analysis of human creatureliness with the TMHM, Goldenberg et al. (2008, 2009) hypothesized that MS, in conjunction with reminders of the creatureliness of the body, should motivate the individual to avoid health procedures, like breast cancer screenings, that bring the individual into closer contact with the body. In accord with this hypothesis, for example, when female participants read an article that emphasized the overlap between human and animal nature (vs. arguing for human uniqueness or a neutral control essay), they had lower intentions to conduct BSEs when primed with death and spent less time conducting a "practice exam" on a breast model that naturalistically increased death thought accessibility.

As the above examples imply, the potential for concerns about the creatureliness of the body to threaten the macro-level symbolic meaning systems may, in many contexts, be especially potent for women. For example, women may face further health implications when considering the macro-meaning engendered by the cultural standards that women "should" be slim and beautiful. Such dietary restriction was evidenced when females reminded of mortality (vs. control topic) restricted their consumption of a nutritious, albeit fatty food (Goldenberg et al. 2005). Of course, being slim is associated with health benefits; however, when vital nutrients are sacrificed for the sake of aesthetics, concern may arise. Together, these findings help illustrate how the existential motivation to seek value and permanence by adhering to macro-level meaning systems can lead people to avoid health contexts that may arouse the potentially threatening awareness of one's creaturely existence.

Conclusion

In this chapter, we considered the link between meaning and health. In addition to a basic, epistemic micro-level system of meaning, the TMHM suggests that two relatively “macro-level” systems (a health-oriented system and a self-oriented system) of meaning guide attitudes and behaviors with respect to health. From the perspective of TMHM, when consciously aware of death, decisions reflect health enhancement or threat denial depending on the available perception of effective behavior-outcome contingencies. When people are able to perceive ways to meaningfully impact their health, conscious death thoughts can motivate them to take steps to become healthier. However, when thoughts of death are nonconsciously accessible, health decisions reflect efforts to enhance the *self* rather than health, potentially leading people to abide by value-providing worldviews that contradict health standards, or avoid medical practices that evoke the base creatureliness of one’s body. Yet, when the self-oriented meaning systems confer personal value based on healthy criteria, non-conscious death thoughts can contribute to decisions that are conducive to health. Consideration of meaning from the context of the TMHM thus provides a relatively nuanced framework for understanding the role of meaning in health, as well as additional opportunities for promoting better health.

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Chapter 27

Cultivating Meaningfulness at Work

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In the 1980s and 1990s, Lenny Dykstra was “Nails,” a gritty, hustling, tobacco-chewing center fielder, World Series hero, and three-time Major League Baseball All Star. In 2011, he was charged with grand theft auto (for using fabricated information to lease a high-end car) and drug possession (after cocaine, Ecstasy, and human growth hormone were found at his home). In between, he was a high-rolling business mogul. Sort of. He started a successful car wash chain in the 1990s, adding quick lube shops before moving on after a company dispute that culminated in Dykstra firing his brother and his uncle. Then in 2008, Dykstra started *The Players Club*, a magazine geared toward wealthy athletes, its glossy pages filled with articles about mansions, luxury cars, and his own financial advice. The plan was for his parent company, Players Club Operations, LLC, to lead the way in lifestyle creation, revealing to athletes the secrets to amassing wealth (to spend using a Players Club credit card), including buying into Dykstra’s annuity program, their ticket to the high life in perpetuity. At the time, Dykstra claimed—often, and to anyone listening—that he was worth \$60 million. He owned an \$18.5 million house once occupied by hockey legend Wayne Gretzky, drove a Rolls Royce Phantom, and hired pilots to transport him in his private jet. Dykstra’s motto: “It’s about living the dream, bro” (Fish 2009). Except that the dream became threatened by lawsuits—dozens of them—mostly from businesses and former employees claiming they were never paid for their work. In 2009 Dykstra filed for bankruptcy, claiming he owed

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\$31 million and had \$50,000 in assets. Things went downhill quickly after that. By summer of 2011, Dykstra had traded his mansion for a jail cell.

Dykstra's work *meant* something to him, in the sense that work means something to every worker, whether those meanings are consciously articulated or not. We might infer that Dykstra's work had a lot to do with accumulating wealth, or perhaps more accurately, accumulating the things that one can buy with wealth. This is in contrast to other meanings that work has for people—for example, a means to earn a living, a source of achievement and recognition, and a way to contribute to the common good. These kinds of basic beliefs, values, and attitudes that people and cultures have about their work constitute *work meaning* (Brief and Nord 1990a; MOW International Research Team 1987; Rosso et al. 2010). Despite the fact that they are often used interchangeably in the literature, the phrases *work meaning* and *meaningful work* are not synonymous. The former refers to the *type* of meaning people derive from or attribute to their work, whatever its content (Pratt and Ashforth 2003), whereas the latter refers to work that is both positive (especially in a eudaimonic sense) and highly significant for the person engaged in it (Rosso et al. 2010).

This chapter focuses specifically on meaningful work. The typical approach to writing a piece on meaningful work is to start with an inspiring story describing some kind of meaningful work paragon, like the humane society worker investing her life into saving animals from neglect, or the nurse who views his work as a critical part of the hospital's broader mission of healing the sick and ailing. We started this chapter with Nails, however, because his story raises critical yet-to-be-answered questions that challenge assumptions about meaningful work: Can meaningful work be fostered, encouraged, elicited, or increased? The common assumption is that it can. How, then, could someone have helped Lenny Dykstra make his work mean something more than a misguided, illusory ticket to lifestyles of the rich and famous?

We attempt to address such questions with a brief overview of research on meaningful work, drawing from Rosso and colleagues' (2010) excellent review of meaningful work's sources and mechanisms and adding a summary of links between well-being and meaningful work. We proceed to describe three theoretical frameworks to understanding meaningful work: Rosso et al.'s (2010) model, Steger and Dik's (2010) model of work as meaning, and Park's (2012) meaning-making model applied to work behavior. We then propose three steps drawn heavily from social psychological theory that one might take to experience increased meaningfulness in their work.

Research on Meaningful Work

Research on meaningful work to date has focused on sources, mechanisms (Rosso et al. 2010), and well-being correlates of the construct.

Sources

The Self

The self is a source of meaningful work, first of all, through an individual's work values, given that people often choose occupations that fit (e.g., Gandal et al. 2005) and reinforce (Locke and Taylor 1990) their values. Secondly, intrinsic or self-generated motivation for work often creates positive emotions (Oldham 1976) considered integral to the experience of meaningful work (Hackman and Oldham 1976). Work that is intrinsically motivating (i.e., work that is interesting or enjoyable; Sheldon et al. 2003) also tends to be more congruent with one's self-concept and thus is more meaningful (Cardador et al. 2006; Hackman and Oldham 1976; Shamir 1991), even in the absence of enjoyment (Shamir 1991). Third, peoples' beliefs about the role or function of work in life can be a source of meaningful work. Such beliefs have been indirectly assessed using measures of job involvement (Brown 1996; Lodahl and Kejner 1965; Kanungo 1982), work centrality (Baillie 1993; Douglas and Carless 2009; Price 2000), and work orientation (Wrzesniewski 2003). Job involvement and work centrality tend to be positively associated with work meaningfulness (Nord et al. 1990), and a growing body of research suggests that those who consider their jobs to be a calling experience work and life as more meaningful than those with other work orientations (Dik and Duffy 2009).

Others

Social relationships in the workplace increase meaningfulness of work when they create or reinforce congruence between work and the self (Kahn 2007), a result predicted by social information processing theory (Salancik and Pfeffer 1978). For example, organizational leaders also can be influential on employees' experience of work as meaningful, given that they are responsible for promoting their organization's mission and identity (Podolny et al. 2005; Smircich and Morgan 1982). Bono and Judge (2003) suggested that leaders who successfully encourage employees to focus on how their work links to the broader purpose of the organization are able to infuse work with more meaningfulness. Identification with groups within the workplace can also influence meaningfulness. For example, individuals' perceived value, either positive or negative, of their groups can impact meaningfulness accordingly (Pratt and Ashforth 2003; Pratt et al. 2006; Ashforth and Kreiner 1999). Finally, identification with the organization as a whole also can influence meaningfulness and has been demonstrated through creating (a) family-like dynamics (Pratt and Ashforth 2003) and (b) opportunities for their employees to make valuable contributions within the organization (Grant 2007; Grant et al. 2008; Kahn 1990; Morse and Weiss 1955).

Others outside of the work environment also seem likely to affect the meaningfulness of work, although little research has examined this. Brief and Nord (1190b) proposed that family can alter the level of meaningfulness that one derives from

work. For example, work may be more meaningful when perceived as providing a better quality of life for the family (Bhagat and London 1999; Bullock and Waugh 2005; Krau 1981, 1984) or when the family is supportive of the family member's job and/or occupation (Brief and Nord 1990b).

Work Context

Characteristics of the job itself can shape its meaningfulness. For example, a job's meaningfulness is positively associated with its level of skill variety, task identity, autonomy, and task significance (Fried and Ferris 1987; Hackman and Lawler 1971). Task significance can be strengthened when tasks are perceived as having purpose and making a positive impact on others (Grant et al. 2008). As hinted above, this perception of purpose often is shaped by the organizational mission. Several studies have suggested that congruence between an individual's values and those of the organization for which they work can serve as a source of meaningfulness (Besharov 2008; Pratt 2000; Thompson and Bunderson 2003). The effect can be reversed when the organization is perceived as going against an individual's ideals (Besharov 2008; Cha and Edmondson 2006; Thompson and Bunderson 2003).

The role of work in the context of other life domains and circumstances also plays an important role in shaping its meaningfulness. Different life domains (e.g., family, leisure) can either enhance or conflict with the work domain. Thompson and Bunderson (2001) coined the term "seamless meaningfulness," referring to the presence of identity-affirming activities across multiple life domains. Research has supported this idea by demonstrating that individuals attempt to imbue work with their leisure interests, thus allowing these domains to enhance one another (D'bate 2005; Sandelands 2003). However, the relative influence on meaningfulness of particular life domains can fluctuate. For example, during times of financial hardship, individuals tend to derive meaningfulness from tangible rewards rather than more latent gains such as social status or eudaimonic experiences (Brief et al. 1995, 1997; Brief and Nord 1990a; Jahoda 1982).

Spirituality

An entire subfield engaged in workplace spirituality research has emerged over the last two decades (e.g., Giacalone and Jurkiewicz 2010), highlighting the relevance of understanding spiritual aspects of work behavior. A consistent finding is that spiritually oriented individuals are able to derive a sense of meaningfulness from their work because they see it as serving a greater purpose beyond themselves (Lips-Wiersma 2002; Sullivan 2006; Wuthnow 1994, 1995). Similarly, accumulating evidence (Constantine et al. 2006; Dik and Duffy 2009; Steger et al. 2010) suggests that those who identify a sacred calling in their work, for example, being called to a vocation or enacting God's will in their work (Hardy 1990; Weiss et al. 2004), experience meaningfulness in carrying out this calling. To date, research on the role of

spirituality in meaningful work has often ignored the impact of religiousness, choosing instead to examine spirituality as a broader construct, although there are indications that this may be changing (e.g., Hill and Dik 2012).

Mechanisms

Going beyond the sources of work meaningfulness, there are several potential mechanisms through which people experience their work as meaningful. One postulated mechanism is authenticity, or acting in a way that is true to the self (Markus 1977; Ryan et al. 1995; Sheldon et al. 1997). Work experiences that promote a sense of congruence, or self-concordance, between employees' values/attitudes and their behaviors/tasks at work have been shown to increase meaningfulness of work (Shamir 1991). Authenticity also can be expressed and maintained through identity affirmation processes (Gecas 1991) in which individuals perceive their work tasks and job title to reflect their abilities, or through personal engagement (Deci and Ryan 1985; Kahn 1990), in which individuals are intrinsically motivated by, and affectively committed to, their work tasks.

Self-efficacy, the belief that one is capable of carrying out a certain act (Bandura 1977), also can foster a sense of meaningfulness at work through facilitating a sense of personal control or autonomy (Gecas 1991; Seligman 1975; White 1959; Wrzesniewski and Dutton 2001), personal responsibility and initiative (Baumeister and Vohs 2002; Wrzesniewski and Dutton 2001), or successful navigation of obstacles (Gecas 1991). Research has suggested that individuals feel more efficacious, and thus experience heightened meaningfulness, when they perceive themselves as creating positive, beyond-the-self change at work (Cardador 2009; Grant 2007; Grant et al. 2007; Rosso 2010). Although similar to self-efficacy, self-esteem is a distinct mechanism of meaningful work in that it originates from a feeling of personal value (Rosso et al. 2010). Self-esteem can be derived from experiences of accomplishment (Baumeister and Vohs 2002; Gecas 1991; Judge et al. 1997) or positive reinforcement (Gecas 1991) which, when they occur on the job, can lead to increased work meaningfulness.

A sense of purpose, conceptually related to meaningfulness but oriented more toward goal-directed action, is another important mechanism of meaningful work. Employees who perceive their jobs as moving toward a specific goal are more likely to experience meaningfulness (Bunderson and Thompson 2009). Meaningfulness can be derived from purpose whether it is rooted in spirituality (Grant 2008; Wrzesniewski 2003; Davidson and Caddell 1994) or in a sense of "doing what's right" (Baumeister and Vohs 2002). Purpose also can enhance meaningfulness at work when it is transcendent in nature through a sense of interconnection with others who are all working toward a greater goal (Lips-Wiersma 2002) or through self-abnegation (Rosso et al. 2010).

A considerable amount of research on meaningful work has focused on interpersonal relationships and belongingness (Rosso et al. 2010). Evidence suggests that individuals draw meaningfulness from an experience of community (Homans 1958;

White 1959). Identification with others (Hogg and Terry 2000), placing a premium on one's personal group (Tajfel and Turner 1979), and supportive interpersonal connectedness (Blatt and Camden 2007; Dutton and Heaphy 2003; Dutton et al. 2006; Kahn 2007; Rosso 2010) are forms of belongingness and can be experienced as meaningful. Research on cultural and interpersonal sense-making has attempted to explain how various work meanings are constructed through sociocultural influences (Wrzesniewski et al. 2003). Although this perspective has focused on the creation of work meanings, the same environmental cues that people use to construct meaning in their work could also shape the meaningfulness of work. For example, individuals in collectivist cultures are more likely to interpret work as serving a communal purpose, rather than meeting individual needs (England and Whitely 1990), and thus experience more meaningfulness when their work allows them to fulfill that purpose.

While most of these mechanisms of meaningful work are more obviously related to the self, many can come from external sources as well. For example, self-esteem can be formed by both individual and collective experiences (Crocker and Park 2004; Leary and Downs 1995), and authenticity can be influenced by organizational ideals (Rosso et al. 2010). As noted earlier, organizations can also play a critical role in creating a sense of purpose (Wiener 1988) and community through which meaningfulness can be experienced.

Meaningful Work and Well-Being

Meaningful work is consistently associated with psychological benefits. Employees who describe their work as meaningful, or as serving a greater social good, report better psychological adjustment and also display qualities that organizations find desirable. For instance, meaningful work is positively associated with overall well-being (Arnold et al. 2007), work centrality or importance (Nord et al. 1990), and job satisfaction (e.g., Kamdron 2005). Those who feel their work serves a higher purpose also report greater job satisfaction and work unit cohesion (Sparks and Schenk 2001). Similar results have been found when investigating perceptions of work as a calling; those who experience a sense of calling in their work have higher job satisfaction and report fewer days of missed work (e.g., Wrzesniewski et al. 1997). A sense of calling also is associated with more faith in management and better work team functioning (Wrzesniewski 2003), greater career decision self-efficacy, more intrinsic work motivation (Duffy and Sedlacek 2007), and a greater sense that life as a whole is meaningful (Dik et al. 2008; Dik and Steger 2008).

Meaningful Work Theory

Three theoretical frameworks have recently emerged that show promise in integrating findings from the empirical literature, while suggesting potentially fruitful areas for future research: Rosso et al.'s (2010) bidimensional model of meaningful work,

Steger and Dik's (2010) three-factor theory, and Park's (2012) theory of life meaning adapted to the work context.

Rosso et al.'s (2010) model pulls together research on sources and mechanisms of meaningful work and identifies underlying themes. This model is built around two psychological dimensions that differ according to (a) the direction of action (i.e., toward self or others) and (b) underlying motives (i.e., agency or communion). More specifically, the self/others dimension refers to the *target* toward which the effort to create meaningfulness is directed; for some it is internal to the self, for others it is external. In contrast, the agency/communion dimension, in representing people's *motives* for creating meaningfulness, differentiates those with agency motives who seek to create, assert, or divide elements (e.g., learning to play a musical instrument or spearheading an environmental sustainability initiative) from those with communion motives who seek to connect or unite extant elements (e.g., reconnecting with old friends or reflecting on life goals and values in the face of a tragic loss).

These two dimensions combine to describe four major pathways to meaningful work, occupying the quadrants of the two-dimensional model: individuation (i.e., agency/self, marked by control, competence, and self-esteem), contribution (i.e., agency/others, described by perceived impact, significance, interconnectedness, and self-abnegation related to work), self-connection (communion/self, identified with self-concordance, identity affirmation, and personal engagement), and finally unification (i.e., communion/others, expressed in value systems, social identification, and interpersonal connectedness). Rosso et al. (2010) note that the distinctions drawn between the four pathways are not mutually exclusive and even have the potential to be synergistic. Furthermore, the model differentiates the creation of meaningful work through activities directed toward the self or toward others, but the process of generating meaningfulness in their model necessarily implicates the self: "individuals are the ultimate arbiters of the meaning of their own work, as shaped through the lens of their unique perceptions and experiences" (pg. 115). The authors conclude that work environments, in order to be fertile ground for individuals to experience meaningfulness, should offer ample opportunity to enact the four aforementioned pathways. This model is an important contribution derived from the pattern of research results in the literature, but the authors have not yet presented a means to measure these dimensions; this represents one key need for future research.

Steger and Dik (2010) took another approach, proposing three main factors of meaningful work: work comprehension, work purpose, and serving the greater good. Their model suggests a reciprocal relationship between work comprehension and purpose such that work comprehension provides a foundation on which purpose builds, while purpose encourages a deepening comprehension. Together, comprehension and purpose give people the sense that their work is meaningful. Comprehension is itself informed by an understanding of the self, the organization in which one works, and the fit between the self and the organization, whereas purpose can be self-generated, influenced by the organizational mission, or encouraged by effective leadership. The model suggests that as comprehension and purpose work interactively and in tandem, people will develop a sense of

self-transcendence—that is, a desire for their work to serve the greater social good. Steger and Dik's model lends itself well to practical application, but one challenge is the distinction between comprehension and purpose—although clearly conceptually distinct, research participants do not approach items designed to tap each domain differently. For this reason, Steger et al. (2012) offered an alternative, but conceptually related, model postulating three additional facets: (a) the *experience of meaningfulness* in work, (b) the sense that work provides a path for *meaning-making*, and (c) *greater good motivations*.

The meaning-making component described by Steger et al. (2012) finds elaboration in a recent chapter by Park (2012), which applied her model of life meaning (Park 2005) to the work context. (More specifically, Park describes how the model applies to individuals with religious and spiritual beliefs and goals, but the model also is relevant for those with any particular worldview or meaning system.) Park's model describes how global meaning systems translate into daily meaning in the work role, through interpretations, strivings and projects, and life satisfaction and positive affect, and suggests that meaningful work is experienced to the extent that people experience congruence between the components of global meaning and their work experiences. The model also specifies a process through which employees experience meaningfulness as they pursue congruence between their global beliefs, goals and values, and their work activity.

Although as yet untested, the models described above each provide starting-point strategies for integrating the growing body of research on meaningful work with advancements made in research on related topics, such as meaning-making processes and the experience of meaning in life generally. Our hope is that these models serve to stimulate research on the fundamental questions of meaningful work, most notably those with which we started the chapter: Can meaningful work be fostered, encouraged, elicited, increased? If so, how? For example, research might test whether active efforts to invest in the sources of meaningful work increase the extent to which meaningfulness is experienced. Similarly, investigating the efficacy of increasing behavior related to the proposed mechanisms of meaningful work seems a fruitful strategy for understanding the malleability of meaningfulness. Typically overlooked by research and theory on meaningful work, however, is basic research in social psychology that points to additional strategies for making work meaningful. Building on contemporary research and theory related to meaningful work, but pushing beyond it to incorporate basic research in social psychology, we propose three steps to making work meaningful.

Three Steps to Making Work Meaningful: A Proposal

Although there is little research to speak of on interventions promoting meaningful work, much less identifying best practices, some themes emerge with enough consistency in the theoretical literature and correlational research to provide a starting point. Drawing on this literature, we believe there are three steps to making work

meaningful: (a) using individual strengths, (b) linking mundane work activities to broad, distal outcomes that are personally meaningful, and (c) infusing work with the capacity to benefit some greater good. Again, although they are rarely utilized in discussions of workplace phenomena—meaningful work in particular—social psychology provides numerous frameworks for understanding how to make work meaningful. We will provide some examples in the following discussion in the hopes of facilitating better cross-pollination between the fields.

Using Strengths

Psychological strengths have been characterized as a set of behavioral and psychological capacities for which people are recognized and lauded and which also make people feel good to use (Peterson and Seligman 2003). From this perspective, using strengths in the workplace may not only increase the pleasantness of work but also may garner positive attention from one's coworkers and supervisors. Very little research has connected the use of strengths to meaningful work, but one study found a consistent, positive link in several volunteer and working samples (Littman-Ovadia and Steger 2010). Some scholars have suggested that the path to meaning in life is through the use of strengths in the service of some greater good (Seligman 2003), but the theoretical justification for this assertion is rather underdeveloped. However, social psychology provides two models that support this argument. First, the behavioral concordance model proposes that people high in a personality trait should experience greater positive affect and well-being when they act in ways that are consistent with that trait (e.g., Côté and Moskowitz 1998). Research demonstrates consistent links between strengths and other established personality dimensions (Steger et al. 2007), thus suggesting that the behavioral concordance model may be applied to strengths. The second model comes from what might be called “true self theory.” This model suggests that people have mental representations of their true selves, that is, their true or authentic self-concepts. One function of this true self-concept is that it provides people with a source of meaning in life (e.g., Schlegel et al. 2011; Chap. 14 by Schlegel et al., this volume). This is consistent with meaning in life theory, which argues that a foundation of meaning in life is understanding one's self (Steger 2009). Thus, when people use their strengths at work, they are not only acting in accordance with their personal characteristics, which should create positive experiences and elicit positive social reinforcement; they also reinforce and access a source of meaning.

Linking Work Activities to Meaningful Outcomes

A key assumption in meaning in life theory is that pursuing highly valued, long-term purposes is critical to feeling that life is meaningful (Steger 2009). In the

workplace, this can be facilitated by aligning work with one's broader purposes in life. The rationale has often been cast in terms of a perceived necessity for meaningful work to draw some of its significance from its fit with a person's meaning in life (Michaelson 2005). However, a stronger case can be built by supplementing this perspective with two social psychology theories: self-concordance theory (Sheldon and Elliot 1999) and construal level theory (Trope and Liberman 2000). First, considerable research has supported the contention of self-concordance theory that people prosper when they pursue goal-directed activity that aligns closely with their interests and values. Goals typically are narrower in scope and are set for relatively short time periods in comparison to purposes, which tend to be overarching and long term in time frame. Construal level theory suggests that purposes, which besides being broad and long term are also distal and abstract, are best considered to be higher-level construals and therefore would be difficult to link to activity in the present moment. Linking work activities to purpose in life should give a person's purpose vitality in the present moment, by making the pursuit of purpose more concrete (e.g., implementation intentions; Gollwitzer and Brandstätter 1997). Thus, linking work activities to one's broader purpose in life should not only provide benefits associated with self-concordant goal pursuit but also help make one's purpose tangible rather than abstract.

Benefitting the Greater Good

The oldest ideas about meaningful work focused on the potential for one's labor to benefit some entity or entities beyond one's self. It seems to be in the nature of meaningful work to do some good. Motivations to serve some greater good have been linked empirically to meaningful work, with confirmatory factor analysis indicating the inclusion of these motivations as a subscale of a new measure of meaningful work (Steger et al. 2012). Group selection theory (Sober and Wilson 1998) argues that ancestral human groups comprised of members who acted in ways that decreased their own survival odds while enhancing survival of other group members (the biological definition of altruism) passed along an evolutionary willingness, if not desire, to help others. Although controversial, group selection theory suggests that we may be "made" to help. Thus, finding ways to help organizational members through work should seemingly raise the stakes of working and be supported to some degree by similar reward mechanisms as seen for other behaviors relevant to survival. Although some have theorized that empathy works to stimulate altruism (Batson 1991), it may be more likely that people's tendency to incorporate others into their self-image drives helping behavior (Cialdini et al. 1997). Others have argued that gratitude felt after being helped by others drives altruism via reciprocity norms (McCullough et al. 2008). Thus, a range of theories—drawing on drivers ranging from inherited survival strategy and empathy to inclusion of others in self and gratitude and reciprocity norms—all point to the possibility that trying to serve some good greater than one's self helps link a person's concerns to something

bigger. By trying to serve some greater good at work, people may be able to achieve some degree of self-transcendence, which is thought to be the apex of mature character (Allport 1961) and meaning in life (Reker 2000).

Could the Lenny Dykstras of the world experience work as meaningful by engaging in these three steps? This, obviously, is a question for research to investigate, and peoples' starting points, in terms of the diverse meanings they maintain with respect to their work, will be a key moderating variable to explore. It seems very likely that interventions designed to foster meaningfulness are more effective for some than for others, and we might guess that those long adhering to motives that oppose the dimensions of meaningful work, like Lenny Dykstra, would probably not be the candidates most likely to succeed in such an intervention. This raises other questions. To what extent is meaningful work a stable trait that guides behavior across situations, as opposed to a context-dependent state? How do persons and situations, but also genes and environments, interact to create a sense of meaningful work? What developmental factors predict or thwart a meaningful work orientation? Whether Lenny Dykstra types could be convinced to pursue these steps remains an open question as well. In pursuing answers to such questions, it is time that researchers, managers, counselors, and consultants look beyond the helpful contributions of sociology and management studies and begin to develop a truly psychological account of meaningful work. Such an account has the potential to enrich the lives of workers, families, and communities and thus is an important resource for psychologists and other professionals to contribute to the greater good themselves.

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Chapter 28

A Meaning-Based Intervention for Addiction: Using Narrative Therapy and Mindfulness to Treat Alcohol Abuse

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When the general public conjures up pictures of alcohol abuse or addiction, extreme images of men living on the street or of celebrities fallen from grace and on their way to the Betty Ford Clinic often come to mind. For many individuals, however, the toll that alcohol takes in their lives is much more subtle and gradual in its menace. Although their current difficulties with alcohol may not have produced glaring problems with employment, law enforcement, and physical health, its impact on their relationships, self-concepts, and the efforts to find meaning and purpose in life should not be underestimated. Since we have previously written about the struggle of individuals with chronic addiction to find a sense of identity and meaning in recovery (Singer 1997, 2001, 2006), the focus in this chapter is on individuals who periodically abuse alcohol but have not yet defined themselves as full-blown “alcoholics.” Critical to this volume, and similar to our previous work on chronic addiction, we seek to examine how alcohol has been incorporated into problem drinkers’ ongoing sense of *narrative identity* and how – from a mindfulness perspective – an addiction to their own negative cognitions becomes a significant impediment in these individuals’ ongoing struggles to achieve a sense of meaning and purpose in their lives.

By narrative identity (Bauer and McAdams 2004; King and Hicks 2006; McAdams and Pals 2006; Singer 2004), we mean the efforts that individuals engage in to find coherence and continuity in their lives by crafting together narratives from experiences, recounting these stories internally and to others, and “...ultimately [applying] these stories to knowledge of self, others, and the world in general” (Singer 2004, p. 438). Drawing on a case study of a highly successful professional woman in her

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early 30s, we illustrate how her narrative identity contains a significant repetitive “script” (Demorest 1995; Demorest and Alexander 1992; Demorest et al. 2011; Siegel and Demorest 2010; Tomkins 1979, 1987) organized around the disruptive role of alcohol in her most intimate relationships with family members and romantic partners. We argue that this contaminated script has been a problematic vehicle of self-understanding and meaning dating back to her first adolescent exposure to alcohol. It has continued through her current episodes of alcohol abuse, leading to critical self-judgment and lack of self-acceptance that minimize her ability to embrace a redemptive script of sobriety and emotional equanimity (McAdams 2006; Parry and Doan 1994). Using a two-pronged treatment strategy, combining narrative therapy (Madigan 2011; White 2004; White and Epston 1990) and mindfulness-based cognitive-behavioral therapy (Bowen and Marlatt 2009; Crane 2009; Marlatt and Witkiewitz 2005; Segal et al. 2004; Witkiewitz and Bowen 2010), we demonstrate how therapies based in meaning, nonjudgmental self-acceptance, and enhanced self-awareness can play a valuable role in refashioning this negative script and curtailing future episodes of alcohol abuse. Finally, we suggest that as the DSM-5 proposed revisions of the addiction diagnosis move away from placing a central emphasis on physiological characteristics of tolerance and withdrawal (American Psychiatric Association 2011), concern with the psychological and behavioral concomitants of alcohol abuse will be in ascendance. Efforts to understand and address the role that alcohol plays in both preempting and distorting meaning-making processes in individuals’ ongoing search for stable identity are likely to be of increasing importance for clinical practitioners.

Narrative Identity and Meaning-Making

One of the primary ways in which human beings confront the question of meaning and purpose in their lives is to craft narratives or stories from the events of their lives. As major figures in the field of narrative identity (Bruner 1986; McAdams 1988; Sarbin 1986) first articulated, stories provide continuity to the self, connecting and integrating past, present, and anticipated future into a meaningful whole. Confronted with raw experiences, individuals process these sensory events through the lens of a short-term working self and then, depending on their relevance to ongoing goals and concerns, consolidate these experiences captured in episodic memory as part of an enduring long-term self (Conway et al. 2004). These autobiographical memories contribute to a larger life story that individuals construct to bring the diverse events of their lives into a coherent narrative. At each of these levels, individuals strive to interpret narrative content in order to extract a sense of meaning and purpose to their lives (Blagov and Singer 2004; McAdams 2001; McLean 2008; Singer and Conway 2011). This combination of narrative processing (the story-making component of consciousness) and autobiographical reasoning (the capacity of the mind to draw inferences from the narratives it creates) defines the critical psychological mechanisms of narrative identity (Bluck and Habermas 2001; Hicks

and King 2007; McLean 2008; McLean and Fournier 2008; McLean et al. 2007; Singer and Bluck 2001; Staudinger 2001).

A key tenet of narrative identity theory is that individuals draw on these narrative capacities to respond to the demands of current affectively charged events (Conway et al. 2004). Confronted with new events, they can recruit specific memories that might bear similarity to the situation at hand and therefore provide them with context and information about previous actions or outcomes. We might consider this an example of putting *narrative content* to work in the service of making meaning out of a given set of circumstances. At the same time, individuals may invoke affective interpersonal schemas that dictate a more abstracted sequence of expectations, actions, outcomes, and affective responses. We can describe this as the recruitment of a *narrative process* to assist them in reasoning about the implications of an unfolding and emotionally evocative event (see also McLean and Fournier 2008). For example, McAdams and colleagues have studied extensively how individuals may draw on *redemption* (bad to good) or *contamination* (good to bad) sequences in the creation of narrative accounts (McAdams 2001; McAdams et al. 2001).

Within narrative identity theory, these schemas of event-affect-behavior sequences are known as *scripts* (Demorest 1995; Demorest and Alexander 1992; Demorest et al. 2011; Siegel and Demorest 2010) and can be defined formally as

...guides that form in order to anticipate and cope with [difficult and distressing] emotions in particular. Although affective scripts are originally constructed from specific emotional interactions, they become general rather than specific so as to function as a personal model for how to manage similar interactions in the future, indicating what the person should expect to occur... (Siegel and Demorest 2010, p. 3).

Significantly, scripts originally develop as quick adaptive responses to situations in which unexpected changes in the status of one's goals have taken place; however, over time some may become repetitive and inflexible reactions that lose their functional quality. Despite the fact that they have turned maladaptive and often lead to strong negative emotions, such as anger or suspicion, their activation may be reinforced since they serve to mask more painful feelings of anxiety or distress (Siegel and Demorest 2010).

Researchers have developed a coding system called FRAMES (Fundamental Repetitive and Maladaptive Emotion Structure) that allows one to extract scripts from a narrative transcript and code them according to standard categories and a sequence of interpersonal exchanges (Dahl and Teller 1994; Hoelzer and Dahl 1996; Siegel and Demorest 2010; Siegel et al. 2002). This method has been used to assess negative interpersonal patterns and track changes in these patterns over the course of psychotherapy (Siegel and Demorest 2010; Siegel et al. 2002). The categories consist of wishes, states of satisfaction or dissatisfaction with regard to wishes, and a dimension of activity/passivity. For example, a positive active wish – to love another person – or a negative active wish – to hurt another person – can lead respectively to the positive active state of joy or the negative active state of anger. Each sequence of wish, action, and resulting state, either within a narrative told by the client or as expressed in an exchange between client and therapist, can be coded and monitored over ensuing therapy sessions. Reductions in the client's activation of a familiar

negative script or a change in its dynamic structure signals a greater freedom of emotional response and corresponds to greater health and well-being, as expressed by the client and observed by the therapist (Siegel and Demorest 2010).

In addition to the possibility that individuals rely on negative scripts to ward off even more feared negative emotional states, another explanation for the persistence of scripts can be traced to a variant of terror management theory (Solomon et al. 1991a, b). Vess et al. (2009) have suggested that events that activate extreme anxiety due to mortality salience have differential effects for individuals who vary on their personal need for structure (PNS). Individuals who have a strong need for clear structure and unambiguous belief systems in their lives are likely to retreat to rigid schemas when faced with anxiety about mortality. In contrast, individuals who have lower levels of PNS are more likely to seek novel information and creative solutions to increased anxiety in the face of mortality salience. In the parlance of mindfulness, these individuals, when faced with threats to the self, overcome reactive sympathetic nervous system-generated behaviors in favor of “out of the box” adaptive responses made possible through a greater flexibility of cognitive processing (Kabat-Zinn 1990). It is possible then that individuals who are prone to invoke rigid or preexisting narrative scripts in response to anxiety-provoking situations are more likely to be lower in self-complexity, mindfulness, and degree of ego development (Fernandez et al. 2010; King and Hicks 2006; King et al. 2000; Loevinger 1976). They cling to a more simplified meaning system in the face of acute distress. A goal of treatment then is to encourage enhanced freedom in consideration of responses to situations of acute stress, as well as more nuanced and flexible thinking. In other words, the therapist seeks to aid the client to move from black and white either-or thinking to “both and” thinking that allows for ambiguity and multiple possibilities.

In the following case study, we illustrate how a client has developed a maladaptive script that leads her to engage in alcohol abuse as a rigid response to extreme feelings of anxiety and hopelessness. Once we have defined the narrative content and process of this script formation and its repetitive revival, we then turn to interventions based in narrative therapy and mindfulness relapse prevention. Although working within this narrative identity/cognitive-behavioral framework, the following therapy shares a similar perspective and is highly congruent with the existential-humanist approach of Wong and colleagues (Wong 2011; Wong and Fry 1998).

Case Study of a Client with a Narrative Script of Alcohol Abuse

Bryn (a pseudonymous amalgam of several clients from our practice with similar presenting problems) is an attractive white female in her early 30s from an upper middle class coastal New England town. Mention of her home community is relevant because its proximity to beaches and sailing clubs accentuates the “good

life – cocktail hour – bar-hopping” culture that affects many of its residents. Bryn has a Masters in Occupational Therapy, but currently works as a supervisor/administrator in the OT department of a regional hospital. She loves her work and has been quite successful in receiving promotions and responsibility at a very young age. However, she has had a history of unhappy relationships, as well as intermittent episodes of extreme drunkenness in which she blacks out and behaves in a volatile and aggressive manner. She entered therapy with the first author of this chapter, complaining of depressed mood, hopelessness about her love life, and concern about her drinking.

In presenting her history, Bryn described herself as coming from a “crazy family where even though we’re adults everyone is still attached at the hip.” She is the youngest of three with an older sister and brother. As far as she can remember, her parents presented extreme contrasts in personality types. Her mother was almost theatrical in her extremes of emotion; she was affectionate, temperamental, overbearing, fun-loving, and self-centered. Her father was quiet, cerebral, and socially withdrawn. Both of her siblings, though very bright in school, became involved with the adolescent partying scene and presented a variety of challenges and disappointments to their parents. Even after finishing high school and beginning their adult lives, they continued to display difficulties in settling down in their work and relationships.

As a young girl, Bryn excelled in school and did everything possible to be a “good little girl” and attract the attention of her parents. However, their focus was often on the ups and downs of the older children, and many times Bryn felt pushed aside or overlooked. She has vivid memories of her mother’s countless kitchen table dialogues with her older sister, both of them in tears, as they discussed the sister’s problems with her boyfriend and eventual husband. Similarly, her brother had some problems with the law around drug possession and a DUI, while still a minor.

Bryn’s most traumatic memory took place when she was 14 and her mother told her that she had kicked her father out and was going to divorce him. It turned out that he had quietly been having an affair with a coworker for the last couple of years. The divorce was messy and protracted and, since her older siblings were already out of the house, she was often the main support and sounding board for her mother.

Although not aware of it at the time, a pattern of actions and feelings began to take hold in Bryn’s life. Bryn found that she could hold her mother’s attention when she became a kind of “junior counselor” who would listen to her and console her about her problems with her ex-husband or with Bryn’s older siblings. Similarly, when Bryn herself began to act out by skipping school, drinking, and smoking pot, her mother would take notice and briefly put the spotlight on her. However, whenever Bryn took a positive step forward by improving her grades or making the transition to attending college, her mother and siblings seemed determined to pull her back into supporting them through the latest emotional (and sometimes financial) crises in their lives. In fact, as Bryn grew even more successful, generally slowing down her alcohol use, graduating both college and a Masters program, landing an excellent first job, and moving quickly up the promotion ranks of the hospital, her family would whisper about her “selfish” tendencies – how her focus on her

schoolwork and fixing up her own apartment were signs that she had begun to think that she was better than them or too busy with her own concerns to help her other family members.

Bryn found that a similar pattern repeated itself in the two significant love relationships that she had had in her adult life. Both boyfriends were charismatic and talented men; both had their share of problems with drinking. Neither boyfriend was particularly well educated and had little connection to Bryn's professional work or her interest in reading and art. In the early stages of the relationships, Bryn was overly attentive to their needs and they tended to idealize her as beautiful, kind, and giving. Over time, Bryn would increasingly feel her own voice and concerns were being stifled in the relationship; yet when she made tentative efforts to be more assertive, she met with resistance and comments about how difficult she was to satisfy. When the second relationship ended due to the boyfriend's string of unfaithful liaisons, Bryn found herself reluctantly going back to drinking. Once drunk, her anger and suspicion concerning the good will of any person in her life would overwhelm her. She often ended up in an argument or fight while in a blackout. In some recent brief relationships just before and after the therapy started, she had repeated this same pattern. Once she began to feel the possibility of caring for someone, she would perceive what seemed like selfish or callous behavior by the other person; this would lead to her drinking too much and initiating an angry confrontation, filled with accusations against the other person. These episodes of alcoholic abuse, followed by extreme feelings of depression and despair, were what brought her to enter therapy.

Narrative and Meaning Analysis of Bryn's Problem Drinking

From the standpoint of narrative identity theory, Bryn's alcohol abuse has been incorporated into a maladaptive interpersonal script that she imposes on her interactions with intimate others in her life. This script is activated in moments of extreme anxiety about her self-worth and her fears of rejection and abandonment by others. It provides a meaning structure, albeit a rigid one, that instantiates a course of action and protection from utter despair and acute self-loathing. In the language of FRAMES, we can distill the script into the following sequence:

I seek love by putting others first, serving as a loyal confidante and helper (Behavior that Expresses an Active Positive Wish)

I am accepted and given love (Passive Positive State Satisfaction)

I assert myself and seek to meet my own needs (Behavior that Expresses an Active Positive Wish)

I experience extreme sadness at anticipated rejection (Passive Negative State of Dissatisfaction)

I drink and express my anger at the perceived rejection of my needs (Active Negative State of Dissatisfaction)

Bryn's fundamental understanding of the meaning of her relationships and of how to have a healthy sense of interpersonal connection has become confused and convoluted. When seeking to understand the purpose of relationships in life, she

might expect that entry into and intimacy in relationships would lead to a sense of self-affirmation, of giving and receiving love in return. Instead, she has come to associate attempts at strong connection to others with self-abnegation and efforts at self-affirmation with condemnation and rejection. Moments in which she asserts her autonomy and freedom from these self-denying connections terrify her; she feels cut loose from any familiar self-understanding, and her anxiety and despair overwhelm her. Exactly at these moments, she recruits what Vess et al. (2009) would refer to as a rigid “pre-existing knowledge structure” (p. 730) – this structure tells her that she will only receive notice by giving up autonomy or acting out. In the grip of this script, any resolve to drink moderately is overcome, she says “F- it” and lets herself go. Once drunk and in a blackout, she unleashes her whole painful scenario of distrust and self-loathing, alternately belligerent and self-pitying. In a near panic state of anxiety, she reverts back to a familiar script that provides structure and a course of action, but by the next morning it has brought little relief and a mountain of remorse. It may indeed have pushed unhealthy partners out of her life, but it has left her no closer to a stable self-image and a genuine capacity for meaningful connection with others.

Clinical Intervention: Addressing the Narrative Content and Process of the Alcohol Abuse Script

Conventional outpatient treatment of alcohol abuse usually begins with questions based in motivational interviewing and self-monitoring (Miller and Rose 2009). Bryn kept a log of her alcohol use and chose to set a limit of no more than three drinks on a given night. Able to manage this routine for 2 or 3 weeks consecutively, she would inevitably reach a point of relational anxiety with a family member or romantic partner and go over her limit and then drink far too much. Through her log of feelings and thoughts immediately prior to these episodes, we were able to piece together the repetitive script described above. With this self-destructive narrative identified, we recruited the techniques of narrative therapy (Madigan 2011; White 2004; White and Epston 1990) to help Bryn see that her “problem-saturated” story did not exist *inside* her, but was a narrative created jointly by her family dynamics, social limits on positive female assertiveness, and culturally reinforced notions of alcohol as an escape value from anxiety and sadness. In the spirit of narrative therapy, she needed to “externalize” the problem and see the script of assertion-despair-alcohol abuse as an antagonistic and alien narrative to be isolated and defeated. Bryn and her therapist sought out further examples of this script’s infiltration in her life and counteracted these incursions by identifying “unique outcomes” or “sparkling events” (Nichols 2010, p. 271) in which she had not succumbed to the script, but instead showed restraint in her drinking and behaved in a healthy and self-loving manner. Working with these moments, Bryn began to “re-author” a new sequence of events that would allow her to associate moments of anxiety about relational rejection with a determination to practice self-care and restraint in alcohol use.

However, addressing the narrative content of her script and engaging in re-authoring practices would not be sufficient to disrupt the narrative process that short-circuits her more rational decision-making and superimposes the same familiar automatic script and its subsequent action sequence. In order to break this barely conscious process, the therapist introduced a series of mindfulness techniques.

Clinical Intervention: Addressing the Narrative Process Through Mindfulness

The past two decades have produced a growing body of literature on the application of mindfulness to a wide range of emotional and behavioral problems, including recurrent depression, anxiety, personality disorders, and substance abuse (Hoffman et al. 2010; Kingston et al. 2007; Linehan 1993; Witkiewitz and Marlatt 2005; Segal et al. 2002). Mindfulness, with its roots in the ancient Buddhist practice of *vipassana* (insight) meditation, has been defined as a state of nonjudgmental self-acceptance achieved through the act of paying attention to the present moment (Kabat-Zinn 1990). Meditation may be understood as the tool of mindfulness, akin to playing scales on a piano. Just as the goal of scale practice is to develop the ability to perform an intricate sonata at a recital, the goal of meditation practice is the development of a set of mindfulness skills, including awareness, intention, adaptability, and acceptance, that may be applied to the daily vicissitudes of life.

If it may be said that the cognitive component of cognitive behavioral therapy (CBT) focuses on evaluating certain thoughts in order to change one's faulty thinking (Beck and Beck 2011), then mindfulness may be understood as *meta-cognitive* in nature, as it seeks not to change the content of one's thoughts but rather to change one's *relationship* to those thoughts – be they positive or negative – that come and go with varying degrees of salience (Segal et al. 2002; Wells 2002). In this sense, the practice of mindfulness is more aligned with narrative process than with narrative content in that it is present-centered. In theory, once an individual begins to understand that the goal of a mindfulness breath meditation is not relaxation, *per se*, but simply to “catch-and-release” any thoughts (including those focused on hedonic states or physical sensations) as part of a continuous process of redirecting one's attention back to one's breathing, then the impermanence of all states reveals itself, allowing for the generation of healthier, more adaptive responses.

Mindfulness-based relapse prevention (MBRP), as presented by Marlatt and Witkiewitz (2005), follows the basic mindfulness-based stress reduction (MBSR) manualized treatment developed by Jon Kabat-Zinn and his colleagues at the University of Massachusetts Medical Center in 1979 (Kabat-Zinn 1990; Santorelli 2000). It includes 8 weekly 2.5 h group sessions featuring experiential instruction in mindfulness principles and formal meditations facilitated by a trained instructor. Participants are expected to practice for up to 45 min a day and are provided with prerecorded guided meditations to utilize at home.

In Bryn's case, she received a guided meditation audio CD and followed the meditation routines at home on a daily basis. One guided meditation created by one of the authors focused on transforming fear through acceptance (Singer 2009). In this meditation, entitled Mountain Well, she was asked to develop an image of a fearful creature and then embrace it. In doing so, the creature was transformed into a benign spirit that empowered her to find nurturance through the expression of her wishes and hopes.

Simultaneously, the therapist worked with her on cultivating a different more mindful attitude toward her interpersonal interactions that put her at risk for further alcohol abuse. Drawing on her prior identification of "sparkling events" in which she had resisted drinking too much, the author introduced the mindfulness concept of "black ducks."

Derived from clinical work with chronic pain patients, the concept of finding one's black ducks is grounded in Hempel's Raven Paradox (Hempel 1965), which seeks to demonstrate the limitations of inductive reasoning. Clients are told a story of how, long ago in Medieval Europe, it was believed, based on observation, that all ducks were white. Discovery of a single black duck, however, created a paradigm shift in this false system of belief. For chronic pain patients, a black duck may be a moment of spontaneous laughter in which all thoughts of pain are forgotten. This unique outcome offers up the recognition that by engaging fully in a present-centered activity, such as laughter, they gain the ability to abandon a rigid script in which they are in constant pain. Clients are, therefore, encouraged to "find your black ducks," which may be defined in terms of MBSR as discovering those meaningful moments in their lives in which they coped successfully with cravings and urges or experienced the positive benefits of sobriety.

Black ducks may be gathered into flocks, so to speak, to serve, ultimately, as internalized reminders that nothing is permanent and that black and white thinking can be replaced by the mindful ability to hold ambivalent or contradictory feelings simultaneously without having to react in a predetermined fashion based on an anxious adherence to an established script. Thus, the use of black ducks as part of mindfulness psychoeducation serves as kind of hermeneutic to illustrate concepts such as nonjudgmental self-acceptance, presence, awareness, un-attachment from suffering, and greater self-efficacy through generating creative and flexible responses to new stressors.

In the case of Bryn, alcohol dependency was less of a salient issue than her addictive relationship to her own negative thoughts. Her repetitive tendency toward alcohol abuse was conceptualized as resulting from a desire to avoid negative hedonic states that have been shown to increase urges or cravings to use (Witkiewitz and Bowen 2010). Ironically, the more she avoided and resisted these states, the more vulnerable she became to entering into her old repetitive script of binge drinking, blacking out, and feeling remorse. In helping Bryn to see how she focused on past events and relationships, on the one hand, and the fearful anticipation of future problems, on the other, she was offered mindfulness as a means to get "out of the box" of a thin and rigid script. This script was collapsing under the tremendous

narrative strain required to balance her internal needs with the external stressors placed on her by unhealthy interpersonal relationships (refer to B. F. Singer 2007, pp. 55–58 for a discussion of narrative strain).

With her meditation training and increased capacity to slow her thoughts and exercise the option to catch and release them, as well her accumulation of “black duck moments,” Bryn felt much more equipped to resist the pull of her interpersonal script toward despair and destructive drinking. As her safe behavior extended into a period of months, she reported a growing sense of freedom to choose alternatives when experiencing interpersonal threats and disappointments. No longer in the throes of her maladaptive script, she used her mindfulness techniques to guide her to healthier and more satisfying choices.

Conclusion

Bryn’s alcohol abuse script and the clinician’s efforts to free her from it, based in narrative therapy and mindfulness techniques, exemplify a critical problem of meaning in psychotherapy. Dating all the way back to the Freudian concept of the *repetition compulsion* (Freud 1920/1973), therapists have helped their clients identify rigid patterns of thought, feeling, and action that are applied to similar situations over and over again, despite their fruitless, and in many cases, destructive results. In fact, it is a familiar therapeutic maxim that the definition of *neurosis* is “repeating the same behavior and expecting a different result.” The meaning-oriented techniques described in this chapter are recent efforts to help clients break this logjam in their thought and action in order to create more flexible and novel responses to episodes of alcohol abuse in their lives.

The fundamental premise that both narrative therapy and mindfulness share is that these destructive action patterns stem from a kind of narrative rigidity as we seek to draw meaning from new experiences. In other words, we tell ourselves “the same old stories” about ongoing events in our lives, and through the lens of these overdetermined narratives, we preclude the possibility of other meanings, understandings, and subsequent novel responses. In Bryn’s case, she reaches for the bottle (after starting with the glass) because she is deeply ensconced in a narrative of rejection in the face of self-assertion. Believing others have little interest in her genuine welfare, she follows the conclusion of this story – “Why should I care for myself? I might as well drink (even though I know it will end badly).”

Social psychologists, Routledge and Arndt (2009), have recently demonstrated that an intervention that encourages individuals to engage in creative exploration of different social, cultural, and intellectual alternatives reduced their tendency to respond rigidly when confronted with mortality salience. Active engagement in novel ideas along with social support to explore these new viewpoints seemed to unlock these individuals from their familiar routines. We would like to suggest that this critical mechanism of new meaning generation may account for some of the effectiveness of our narrative therapy and mindfulness interventions. When clients are encouraged to focus on “sparkling moments” and “black ducks,” when they are

encouraged to see their story as belonging to a larger sociocultural problem rather than a long-standing personal failing, when they are offered new ways of thinking about their thinking, and of breathing and being in their bodies, an invigorating sense of possibility emerges in the face of what has seemed an inevitable despair. *Despair* literally means the absence of hope, and it is hopelessness that often leads from alcohol abuse to chronic addiction (Chen 2010; Singer 1997). What these innovative therapeutic strategies offer in their creative challenges to narrative rigidity is the promise of new endings to painful and repetitive stories. To find new meanings (and consequently new choices and new behaviors) is to replace despair with hope. Recent studies of individuals who have had sustained recovery from alcohol addiction have found that a higher quality of life in personal, interpersonal, and social functioning post-recovery is associated with a more positive sense of meaning and purpose in one's life (Hart and Singh 2009). For Bryn and others like her, prone to negative scripts of alcohol abuse, the path to that better quality of life may lie through the exploration and discovery of different narratives and new meanings.

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Chapter 29

Life, Drugs, and the Making of Meaning

Joseph De Leo and Mitch Earleywine

Life, at least for staunch existentialists, is inextricably bound in an endless solitary struggle for meaning. *Meaning*, in this sense, is not viewed as an inherent quality or attribute of the world. Rather, meaning is a reflection of what we ascribe to our experience within the world. It is experienced as a relational mode of being. According to Viktor Frankl, Austrian psychiatrist and Holocaust survivor, human beings express a “will to meaning”—a primary force that drives human motivation. From this perspective, humans act as “meaning makers” who are collectively motivated to create and maintain a sense of order, certainty, and value in an otherwise chaotic, uncertain, and meaningless existence. The human condition can *meaningfully* be assessed by our effort to integrate our subjective experiences in a manner that is sensible and familiar to us. Our ability to achieve stable, predictable, and meaningful relationships is tantamount to our continued survival and successful adaptation in a rapidly changing and complex environment.

Throughout our developmental history, human beings have relied on continuous fluid neurotransmissions that are implicated in the maintenance of a functional and adaptive motivational state. Historically, people have used drugs—chemical substances that act primarily on the central nervous system to alter bodily functioning—for their unique physical and psychological effects. Many who have used psychoactive drugs comment on how intoxication alters the way that they make meaning of the world. An apt example appears in a description of the subjective effects of LSD, “No one part of it is more real than another. Everything at all moments is shimmering with all the *meaning*” (italics added, Leary et al. 1964). Hallucinogens are notorious for effects like these and often accompany subjective changes in perception, thought, emotion, and consciousness.

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Despite much research effort devoted to assessing the risks associated with drug use, it is conceivable that circumstances exist where the use of psychoactive substances may effectively promote functioning or enhance one's sense of meaning. The aim of this chapter is to consider the function of drug use motives, more broadly, as part of a larger search for meaning. A review of recent psychological literature examining social motivations offers interesting insight regarding the link between arousal states and behavioral responses. Research also supports the notion that our responses to the environment are in part influenced by acquired expectancies of outcomes that are perceived to be desirable or promote functioning in some way. Recent psychological theorizing has examined how an individual's meaning frameworks, comprised of these expectancies of likely future outcomes, underlie a diverse array of human motivation. One such model, dubbed the Meaning Maintenance Model, may prove fruitful in further elucidating the unique relations among drug use expectancies, motivations, and behaviors.

The Meaning Maintenance Model

According to the Meaning Maintenance Model (MMM), meaning is relation—that is, meaning is what links people, places, objects, and ideas in expected and predictable ways. This model presumes that human beings develop complex relational frames of reference. These relational frames are evident in social and psychological research covering everything from our assumptions related to terror associated with our own mortality to held worldviews more broadly (Proulx and Heine 2006; Chap. 4 by Proulx, this volume). These socio-cognitive theories attempt to explicate relevant aspects of person-environment interactions that shape our perceptions of the world. In turn, they provide insight as to factors that influence our behavioral responses within the particular contexts that we find ourselves seemingly entrenched.

The MMM asserts that when people perceive threats to their meaning framework, they experience increased arousal, which prompts them to compensate by affirming another meaning framework so as to rectify the disruption. Existentialists describe this threat-induced change in arousal as a “feeling of the absurd,” similar to Freud’s characterization of “the uncanny.” According to the model, individuals modulate these arousal states through perceptual and cognitive processes designed to maintain equilibrium and promote the reduction of cognitive dissonance (Festinger 1957). According to the MMM, when someone’s meaning framework is threatened due to any violation of expected relationships, a process of fluid compensation occurs. During this process people compensate by reaffirming other relational structures or frameworks. Simply put, when people feel that their sense of meaning is threatened, they compensate by employing alternate perspectives that may lessen the accompanying distress while also serving to reestablish a sense of order and coherence in *their* world.

It is important to note that this model extends beyond the physical constraints represented by other motivational factors, such as experiences of pleasure and pain.

It highlights that human beings are also profoundly influenced by the development of self-identities that are based within a socially constructed world. Human beings are constantly making predictions of likely future outcomes and therefore, by extension, creating expectations about future events. The MMM asserts that an individual's decisions are motivated at levels that transcend physical consequences. Great consideration is given to how their relational meaning frameworks "fit" with likely past, present, and future environmental conditions. Furthermore, this model asserts that humans possess a unique ability to reflect on their physical state and subjective representations, making them capable of detecting structural breakdowns and inconsistencies between physical and subjective conditions, as we will describe below. Awareness of these processes provides human beings with the unique ability to project and assert expectations of how certain sets of relations *should* function within a given context. This dynamic process acts like a feedback loop that drives individual motivation and maintains perceptually and cognitively consistent frames of reference. Thus, a threat to meaning will fundamentally motivate us to reassert meaningful relations, including relations in domains that may be quite disparate from the threat itself.

A Model of Absurdity and Drug Use

Laboratory work supports the MMM in interesting ways. A host of different threats to meaning have appeared in the social psychology literature. One strange research manipulation primed participants about the existence of dust mites, an unexpected challenge to their perception of themselves and the safety of their environments. Other researchers remind participants of their impending death, threaten their self-esteem with bogus feedback, or require that they read absurd stories with morals counter to accepted ideals. All of these manipulations lead participants to behave in ways that suggest that they are trying to reintroduce order into a world perceived to be without it. For example, after various threats to meaning, participants grow angrier when others are treated unfairly. They are more punitive toward criminals. They show more disdain toward anyone who critiques their country (see Proulx and Heine 2006, for an engaging review).

Findings from the MMM literature may offer some intriguing implications for the study of drug use motivation and meaning. One experiment (Proulx et al. 2010) asked participants to read an adventure tale for young boys and then surprised them with an absurdist Monty Python story (*Biggles: Pioneer Air Fighter*) that is known to violate most people's expectations of such tales. This "unexpected unexpected" condition gave participants a taste of an unexpectedly absurd story with no warning or expectation that such absurdity lies ahead. (The tale included taking drugs, homosexual innuendo, and sexual assault by the Red Baron.) As the MMM would predict, these participants affirmed an alternative meaning framework. In this case, researchers measured the affirmation by asking participants to set a dollar amount for a bond for someone who had been arrested for prostitution. (The researchers reasoned that participants who saw sex work as justifiably illegal would extract more

money for this offense as they reaffirmed their meaning framework.) Participants who had read the absurdist story set the bond at a statistically significant amount higher than control participants who had read a non-absurd, control joke. (They set the bond more than \$125 higher.) This result is exactly consistent with other work on the MMM. The added wrinkle for this experiment came from another experimental condition—one where participants were told explicitly that they were about to read an absurdist story, rather than an adventure tale for young boys, before diving into Monty Python's *Biggles*. Participants in this “expected unexpected” condition knew that absurdity lay ahead; they showed no need to affirm an alternative meaning framework after the story. They set their bonds statistically lower than participants in the “unexpected unexpected” condition by almost \$130.

The *Biggles* results have interesting implications for drug use and meaning given the resistance to absurdity shown in the “expected unexpected” condition. Many drugs create a sense of absurdity on their own. These can dwarf the simple experience of reading an absurdist story. Cannabis (Earleywine 2005a) and the hallucinogens (Strassman 2001, 2005) are renowned for such effects. Strassman's (2001) DMT experiments led users to state “It (*reality*) is like a cosmic joke” (p. 205) and “All of my ideas and beliefs seemed absurdly ridiculous” (p. 240). The notion that these experiences would inspire a serious reconsideration of the nature of meaning has almost become cliché. But the intensity of these experiences suggests that those who have used these drugs might behave much like those in the “expected unexpected” condition in the *Biggles* experiment. It is possible that well-informed drug users who have developed expectancies based on a predictable drug experience (“expected unexpected”) may be less aroused by experiences of the absurd. An empirical investigation of the impact of threats to meaning (like the unexpected *Biggles* story) in those who have used psychoactive drugs many times and those who have never used them would make for a suggestive first step. Perhaps those who have used hallucinogens or cannabis (for example) would find the *Biggles* story less of a threat to meaning, even in the unexpected condition, making its impact markedly smaller relative to the effect it has on those who are inexperienced with drugs. Or, perhaps acute use of drugs attenuates these effects because the mind is remarkably adept at constructing meaning in even this “meaningless” situation or other altered states.

Enter the Absurd: Meaningful Motivations and Drug Use

This model may offer interesting insight into processes that are implicated in drug use motivations, specifically as they relate to the development of drug expectancies. Let us consider what might happen when people first use psychoactive drugs. Marijuana might serve as a prime example. Despite data to the contrary, many of us learned as children that using marijuana leads to mental illness, serves as a gateway to drugs associated with negative consequences, and saps the desire to become a productive citizen. This training can create certain drug expectancies, as we'll

emphasize below. It is likely that as we age we might meet someone who has used the plant without incident. Odds are high that the user is not mentally ill, addicted to hard drugs, or markedly less productive than nonusers we know. (These odds simply stem from the low base rate of severe mental illness, drug dependence, and flagrantly low productivity.) These observations may appear a bit *absurd*—or at least counter to our worldview at the time given our limited exposure to and experience of the effects of this particular psychoactive drug.

Under these conditions, it is conceivable that we might engage in a compensatory response so as to further clarify our relative belief or attitude on the matter. For instance, we might be dismissive of the individual user, perhaps as a way to cope with feelings of offense. Alternatively, we might interpret this person as an outlier of some sort, which might provoke further interest and curiosity and encourage one to seek more data on the topic. These efforts are tied to our ability to make sense of the new information being presented. This might be expressed by further probing the experience of this user, who might report some of the common subjective effects of the plant. These subjective effects are often tied to the specific effects of the psychoactive drug. In the case of marijuana, these might include relaxation, enhanced appreciation of stimuli, and euphoria. Alternatively, these rarely include insanity, drug craving, and unemployment (Earleywine 2005a, b).

This new information might alter our own expectancies in a manner that could motivate a “first use” in line with a desire for direct experience of the expected drug effects. For those apt to challenge their expectancies through experience, research suggests that initial use of marijuana often leads to little effect, perhaps because few know how to inhale smoke well enough to absorb its psychoactive components (Earleywine 2005a, b). To a novice user, the world of psychoactive drug use may present itself as particularly confusing due to a lack of consistency or confirmation of any previously held hypothesis of what could reasonably be expected by their use of the drug. One might think: Here is a drug that is supposed to create a world of negative effects or perhaps some simple delights: however, it has done nothing of the sort but instead further muddied my beliefs of what it means to use this drug. This confusion might, in turn, motivate some individuals to avoid the plant or inspire others to try it again in different circumstances so as to assess potentially different effects and functions. These experiences might lead to attributions of paranoia and aversive self-consciousness or the same euphoria and relaxation other users have reported based on the drug effects and context of use. In either scenario, the effect generates new expectancies and contributes in the making of new meaning regarding marijuana and its function. At least one study of the MMM suggests that exposure to threats or absurdity might actually enhance the rate of learning (Heine et al. 2006), potentially making the drive to seek out and acquire new expectancies even more probable. In a sense, the stigma associated with drug use skews people’s perceptions, which primes them to respond curiously when confronted with disruptions to their expectancies, potentially encouraging further inquiry and potential use.

An initial exposure to a psychoactive drug can create new meaning, depending upon the particular drug user and the salience of the drug effect on the user’s subjective experience. Over time, the intoxication experience may challenge previous

ideas regarding the conventional meaning of drug use, leading to new beliefs and attitudes about the expected drug effects as they apply to specific contexts. These drug expectancies influence an individual's drug use behaviors and motivation—here we mean not only the motivation to use the drug again but also toward maintaining a coherent framework of meaning that promotes functioning.

Additional factors contribute to drug expectancies and their affect on user preferences. This process depends on the user's motivational state at the time of use. For example, one might be more willing to use drugs under oppressive conditions that restrict the ability to make meaningful connections to the environment. In these circumstances, an individual's behavior might correspond with their perceived sense of risk in a given environment, provoking responses that perpetuate these sentiments. For instance, consider a person who seeks relief from severe physical or chronic pain through the use of pain medications. Opioids, such as OxyContin and morphine, are commonly prescribed because of their effective analgesic, or pain-relieving, properties. Both patient and doctor must consider the potential risks of physiological dependence that can develop over the course of treatment. In particular, consideration should be given to secondary pain that can develop over prolonged periods of use and exacerbate symptoms of pain in absence of these drugs due to tolerance and withdrawal effects. It is challenging to achieve a balance of care given the negative reinforcement cycle that can develop, which strengthens the behavioral response to use drugs, given associated expectations that relief can be experienced through the use of drugs designed to serve that purpose. This drug expectancy may also increase the likelihood that an individual would use another substance not otherwise prescribed for the same reason, perhaps even to counteract the negative effects of existing physiological dependency. It is important to consider how our meaning frameworks uniquely contribute to our understanding of expectancies inform our behavioral responses and perhaps relate to factors that support continued drug use and heighten risk of relapse.

Also, another factor of importance is the availability of other desirable or functionally equivalent experiences that could offset the overt appeal of any one reinforcing experience when presented in isolation. A broadening of one's experiential repertoire might buffer the potential negative effects of some drug use known to increase the risk of narrowing one's behavioral repertoire. Those who have meaningful work, leisure skills, and a lively social life might turn to drugs only occasionally. Those with little else to do might find drugs their lone source of meaning (Klinger 1977; Cox et al. 1990). Psychoactive drug use could be seen as complimentary and related to a diverse array of experiences rather than as the intended experience itself. Depending on these factors, continued use of drugs can either go awry and become problematic or alternatively be adopted into the user's repertoire as a purposeful behavior that acts to compliment or enhance the user's quest for meaning.

Expectancies, Meaning Making, and Drug Use

Support for this notion can be found in research examining the role of expectancy constructs (i.e., cognitive motivations), which may act as functionally autonomous influences on the use and abuse of drugs (Stacy et al. 1993). Drug effect expectancies vary with the use of alcohol, marijuana, and cocaine (Schafer and Brown 1991). Leventhal and Schmitz (2006) proposed a model that identified drug use outcome expectancies as a common etiological mechanism involved in the development of substance use patterns. Those who use drugs tend to expect more positive effects from them. These expectancies likely mediate the relation between individuals' biological sensitivity to specific drug effects as well as associated personality traits, such as impulsivity, and drug use behaviors (Vangsness et al. 2005). Thus, children of alcoholics might drink more than children of nonalcoholics in part because they expect alcohol to have a more dramatic, fun effect upon them. In this sense, expectancies prime the individual for the enhancing effects of the drug in a predictable manner that interacts with the individual's perceptual, cognitive, and emotional context. During the early stages of drug exposure, drug use behaviors are likely maintained by expectancies that are associated with the positively reinforcing effects of the drug, such as a temporary improvement in mood, enhanced sense of well-being and inter- intrapersonal coherence.

The observed compensatory response to perceived threats may account for variation in individual's substance use motives. For instance, drug use might support optimal function by providing alternative meanings in particular contexts, especially when other aspects of meaning have been threatened. For example, alcohol is frequently used as a "social lubricant," capable of lessening inhibitions in low to moderate doses. Drinking might help people to "loosen up" and take part in context-appropriate behaviors, such as engaging in social interactions at a party. Drinking might serve an important social function in these circumstances, as alcohol may be perceived to facilitate social connection, which under "normal" circumstance may accompany heightened anxiety and require additional effort to maintain a functional state. An additional peer pressure may assert itself in these contexts, further highlighting substance use as a path of least resistance. Alcohol use is often culturally celebrated and used as a way of identifying one's self within a group.

Given the previous example, it is clear that individuals use substances in ways that exploit the unique psychoactive drug effects that they consider meaningful or support optimal functioning in a particular context. Particular psychoactive drug effects may further reduce experiences of perceptual or cognitive dissonance by shifting the conventional or normative constraints of reality altogether. Escape, in this sense, can encourage opportunity for exploration of newfound relationships, which may serve as an important coping mechanism especially in the face of constrained choice, physical barriers, or other contextual limitations.

Individuals acquire drug expectancies that reflect their experiences of drug use. These expectancies become associated with a variety of contextual cues (i.e., affective, cognitive, perceptual, etc.). These contextual cues heighten cognitive processing and allow an individual to synthesize information from their environment into their meaning framework. Expectancies not only arise from personal drug use but also from modeled behaviors in friends, family, media, and education. To the extent that individuals differ from each other in their expectancies, we would expect variability in behavior as well. This likely accounts for differences in individual drug use behaviors, given those who are able to engage in recreational use and those who are at risk of problematic use. The presence of alternative reinforcers, and expectancies about their utility, might contribute to decisions to use the drug more often or in greater amounts (e.g., Levy and Earleywine 2004; Correia 2005).

Individuals maintain a variety of expectancies in memory. These can be primed in relevant environmental contexts; therefore, the behavior may be very different depending on the specific expectancy that is activated. We often presume that the expectancy that is activated is one that is congruent with the behavior of interest, but this presumption is not necessarily well founded. According to the MMM, disruption to one's expected set of relationships (i.e., expectancies about what will happen after using a drug) may lead to compensatory responses nonspecific to the threat. Rather, the response is superseded by its function designed and directed to sustain the individual's motivational state within a given context. For example, young adolescents who lack meaningful interpersonal connections with others might have parents who are generally passive and unresponsive. They may be more likely to use substances like alcohol as a way to gain access to a peer group who shares in these activities as a way of compensating for the lack of social connection experienced more generally. This effect may be especially pronounced if these adolescents then receive attention from the parents because of their substance use.

In addition to the variability in behavior that might arise from different expectancies both within and across participants, the extent that these expectancies are desired or feared may impact the observed behavior. For example, while there is a strong expectation that alcohol increases sexual arousal, many individuals may not desire such an outcome in an unfamiliar lab setting with strangers of the opposite gender. Under such circumstances, the belief that one has consumed alcohol may activate an expectation of sexual arousal, but this expectation might enhance anxiety and vigilance and lead to restrained behavior. In contrast, the expectation might have a completely different effect with an intimate partner in a more private setting. In short, success in activating a specific expectancy will not necessarily result in behavior congruent with that expectancy, but it may activate behaviors with the motivation of avoiding or compensating for the expected outcome. This compensatory effect appears to occur through increased evaluative control and action-monitoring processes, the very effects that are impaired by alcohol.

Expectancies prime the individual for the "enhancing effects" of exposure to a particular reinforcer, such as a substance or drug. As such, reinforcers that serve a similar or desired function may in turn be motivated by other operant behaviors. As such, the MMM posits that satiation and substitutability play important regulatory

roles in the maintenance of meaning frameworks. For drug use, however, satiation is not just the result of direct physiological consequences of ingesting a certain amount of the substance within a certain period. Issues arise when considering the role of physiological and psychological craving, which temporarily increases motivation for the product or behavior. For this reason, the use of substances requires additional consideration of the unique drug effects so as to effectively gauge its appropriateness as a response in certain contexts.

Most explanations for the links among drug expectancies and drug use rely on general learning principles rather than the MMM. Parsimonious theorizing suggests that expectancies are essentially conditioned or modeled rather than arising from some threat to meaning. Nevertheless, several results are particularly consistent with the MMM, and the model has the potential to make some novel predictions that standard conditioning paradigms might not. A classic study illustrated this by using an expectancy challenge to reduce drinking in college students (Darkes and Goldman 1993). Participants attended a couple of sessions where groups of people drank together. Some received alcohol and others had placebos, but no one knew who received which drink. After playing games and interacting, participants then tried to identify who had actually received alcohol and who had not. Every participant made mistakes on this task; people were correct about their own beverages only half the time. These sessions ended with discussions of the role of expectancies in determining the effects of alcohol. Six weeks later, these participants were drinking significantly fewer drinks per week. Heavier drinkers were particularly affected, drinking about seven fewer drinks per week after the intervention. These reductions covaried with changes in their expectancies about alcohol's effects, too. Control groups who had received alcohol education or mere assessments instead of the expectancy challenge did not change their drinking at all.

This expectancy challenge experience seems consistent with the MMM, among other models. Imagine walking into a lab made to look like a bar, hanging out with peers, having a couple of drinks, and enjoying the social lubrication and tension reduction that often accompanies alcohol, only to learn that you've been quaffing a placebo. This threat to previous ideas about the necessity of alcohol for various experiences seems genuine. Its impact on expectancies and drinking makes sense. Changes this dramatic might not quite fit what we would expect from a couple of simple conditioning trials. Participants would likely experience that odd arousal associated with this absurd experience and alter their thoughts about alcohol and subsequent consumption, as a number of psychological theories would predict. It would be intriguing to learn how those who are fooled by a placebo might respond on tasks that have appeared in experiments supporting the MMM. Would they despise critics of their country, grow angrier when others are treated unfairly, or be more punitive toward criminals? Would these opportunities to get a worldview back in line minimize or enhance the impact of the expectancy challenge on subsequent drinking? Standard conditioning models would likely not make the same predictions that arise from the MMM.

A curious parallel with this expectancy challenge and its potential to alter worldviews and behavior exists in the experience of many drug policy reformers. A couple

of anecdotes might prove illustrative even if they do not qualify as definitive data. Jack Herer, legendary hemp activist, claims he grew up as a Goldwater Republican, extremely conservative in his views. His initial experience with cannabis was extremely pleasant, leading him not only to subsequent use of the plant but a lifetime devoted to ending its prohibition (Jones 1999). Irvin Rosenfeld, who was active in his high school's anti-drug student group, later learned that cannabis helped alleviate symptoms of his rare bone disorder. He is now one of the few recipients of medical cannabis provided by the US government and an outspoken critic of cannabis prohibition (Rosenfeld 2010). Comparable stories abound among drug policy reformers. These life trajectories echo those experiments where threats to meaning lead to angrier reactions to unfairness. Experiences with cannabis not only alter expectancies about drug effects but also appear to motivate these people to act against what they perceive are unjust laws. Although other social psychological models suggest that those with extreme views might change their views more dramatically after some interventions, few would suggest that they would be more likely to take up a political cause like this one. An MMM perspective brings these examples into a new light.

Meaningful Drug Expectancy Resolutions

People claim to use drugs in an effort to enhance their functioning. Some appear to succeed at this task, others appear to draw no benefit from their drug use, and still others suffer negative consequences from drugs. The Meaning Maintenance Model (MMM) suggests that challenges to a worldview lead people to reassert meaning in other domains. The model has interesting implications for the development of drug use and makes novel predictions about the consequences of experiences with drugs. Those who acquire inaccurate information about the effect of drugs can have their worldviews threatened when they are faced with data counter to their expectancies. This threat could potentially lead to changes in their expectancies about drugs, which could cascade into different patterns of use and effects, as many theories suggest. In contrast, the MMM suggests that this threat to meaning might also lead to attempts to reassert meaning in other domains. Laboratory work examining how threats to beliefs about drugs might alter behaviors unrelated to drugs is scarce. Nevertheless, the MMM would suggest that expectancy challenges, where people are fooled by a placebo and subsequently change their drug use, might also lead to behaviors as disparate as growing angrier when others are treated unfairly, becoming more punitive in the treatment of criminals, or showing more disdain toward those who criticize their country. In addition, these threats to meaning might inspire attempts to reform drug laws.

It is unclear whether reaffirming other systems of meaning might minimize the effect of an expectancy challenge, but the hypothesis is certainly testable. In addition, drug experiences that differ dramatically from expectancies might challenge meaning in a way that leads to more drug use rather than less. Positive experiences

might increase use of a drug, particularly if these experiences are at odds with expectancies acquired from sources other than personal use. These experiences might also alter attitudes about the source of the initial expectancies (including authorities and media) in ways that might lead to reforming worldviews. They even have the potential to inspire activism. The implications for drug prevention programs are often counterintuitive. These programs are far from perfect, but they might benefit from providing more information about the range of potential drug experiences. This approach could make the initial experiences of those who dabble in drugs become less of a threat to meaning, which might, oddly enough, lead to fewer drug problems in the long run.

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Chapter 30

Meaning in Life as the Aim of Psychotherapy: A Hypothesis

Thaddeus Metz

Introduction

The point of psychotherapy has occasionally been associated with talk of “life’s meaning.” However, the literature on meaning in life written by contemporary philosophers has yet to be systematically applied to literature on the point of psychotherapy. My broad aim in this chapter is to indicate some plausible ways to merge these two tracks of material that have run in parallel up to now.

There is of course a distinct field of existential psychotherapy, which expressly addresses the topic of life’s meaning and appeals to ideas from classic philosophers such as Søren Kierkegaard and Martin Heidegger (e.g., Yalom 1980). However, my hunch is that psychodynamic and humanistic therapy, clinical psychology, and counseling psychology¹ *as such*, not a particular branch of them, are best understood as enterprises in search of meaning in life, in the way many present-day philosophers understand this phrase. In this chapter, I spell out what I mean by this bold hypothesis and provide some good reason to take it seriously (I do not try to establish it conclusively).

As a philosopher, I am interested in theorizing about the final aims of psychotherapy for its own sake. My hope is that psychologists will find it revealing to view a major aspect of their field in light of distinctions and concerns from another, philosophical one. However, for readers who are more practically inclined, I point out that one can reasonably expect clarity about the proper goal of therapy to have important implications about the form it should take (Bader 1994; Hansell 2008).

I begin by providing an overview of philosophical reflection on meaning in life (Sect. “Contemporary philosophers on meaning in life”), which should be

¹Insofar as it transcends mere career assessment.

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informative to someone unfamiliar with the English-language academic literature in the postwar era. I focus on perspectives that are the most recently and widely held by philosophers. In the following section, I explain what I mean by the “ultimate point” of psychotherapy and then provide a taxonomy with which to organize reflection from a wide array of perspectives on it (Sect. “[A taxonomy of the ends of psychotherapy](#)”). Intending to be inclusive with regard to sources, e.g., by referring to drive and ego psychologies, object-relational and self-actualizing theories, views focusing on mental illness and those emphasizing mental wellness, and so on, I reduce the myriad accounts of the proper aims of psychotherapy to three, logically exhaustive types of views: intrapersonal, interpersonal, and mixed. Supposing, probably with most contemporary therapists who have reflected on the point of their practice, that what I call the “mixed” perspective is more promising than the other two, I provide reason to think that recent philosophical reflection on what makes a life meaningful captures it with specificity and plausibility (Sect. “[A specification of the mixed view](#)”). I conclude the chapter by noting some of its limitations and indicating some of what needs to be done in future work to test more fully the hypothesis I propose here (Sect. “[Conclusion](#)”).

Contemporary Philosophers on Meaning in Life

It is common among professional philosophers to draw a distinction between meaning *in* life and the meaning *of* life. The former concerns a desirable, higher property that a person’s life can exhibit to a certain degree, whereas the latter is a feature of the human species as such or of the universe in toto, e.g., a source of these wholes (having sprung from God) or a pattern they could exhibit (developing toward a *telos*). In proposing that recent philosophical literature has an important bearing on understanding the proper ends of therapeutic practice, I am interested solely in meaning in life, viz., in something other than base pleasure that makes an individual’s life more worth living or in those facets of a person’s existence that merit substantial pride or admiration.²

Most philosophers in the past 50 years who have addressed meaning in life have articulated and evaluated *theories* of it, where a philosophical theory has a structure similar to that of a scientific principle. “E=MC²” and “water is H₂O” are representative of successful scientific enquiry, and philosophers can be viewed as seeking a similar formula for what makes a life meaningful. They have been trying to fill out the sentence “Meaning in a person’s life is identical to....”, i.e., to reduce the varied, uncontroversial respects in which meaning is possible to a single, comprehensive, and basic property. For instance, it is comparatively uncontested that one’s life would be more meaningful, the more one reared children to become healthy adults, engaged in loving relationships, undertook aesthetic pursuits such

²For a thorough analysis of what the phrase “meaning in life” and cognate terms signify, see Metz (2001).

as gardening or painting, worked for charities that helped other human beings, and discovered knowledge that would satisfy characteristic human curiosity. What is the one thing (if anything) that these and all the other sources of meaning have in common? A philosophical theory purports to provide the most justified answer to such a question.

One such general perspective is *supernaturalism*, the view that one's life is meaningful just insofar as one relates to a spiritual realm in a certain way, say, by fulfilling the purpose of the creator or by having oriented one's soul so that one will receive grace or reward upon bodily death (e.g., Tolstoy 1884; Cottingham 2003). The idea that one's existence is significant at bottom in virtue of immaterial properties such as a perfect being (God) or a perfect state of being (Heaven) is motivated, in part, by the idea that any value beyond mere physical pleasure or desire satisfaction would have to come from beyond nature.

Although popular among laypeople and theologians, supernaturalism is clearly a minority view among professional philosophers. The main problem with supernaturalism is not atheism, the view that nothing spiritual exists. It is rather that it seems possible, even to many theists, that life could be meaningful in the absence of anything supernatural. Suppose that neither God nor a soul existed; Albert Einstein, Pablo Picasso, and Mother Teresa (at least in our stereotypical understanding of them) would have had meaning in their lives nonetheless.

Such a judgment, among other considerations, has led most theorists about meaning to accept *naturalism*, the general view that a significant existence is possible in a purely physical world. For much of the postwar era, the debate was between *subjective* naturalists and *objective* naturalists. Subjectivists, such as Jean-Paul Sartre on the Continent (1946) and Richard Taylor in the United States (1970), maintained that whether a life is meaningful depends on the subject, viz., on a particular individual's attitudes toward the world. One's life is meaningful, on this view, just insofar as one, say, gets whatever one most wants or fulfills the most highly ranked goals one happens to have. This kind of theory aptly entails that many different kinds of meaningful lives are possible, and it accounts well for the judgment that a meaningful life is one that includes zest and a sense of satisfaction.

However, the major problem with subjectivism, for a majority who have theorized about what makes a life meaningful, is that it has counterintuitive implications about what can confer meaning. Suppose that someone, deep down, liked being a serial killer, or degrading women, or stealing small items, or having sex with lifelike dolls, or being addicted to heroin as long as he could. If someone truly and strongly desired to do such things and then did them, subjectivism entails that he would have a very meaningful life for having done so, an implication that few of today's philosophers countenance.

Most philosophers currently writing on meaning in life, therefore, believe that there are certain ways of living in the physical world that one *ought to* want and to seek out, regardless of whether one currently is. Objectivism is the view that there are particular ways of being on earth that are at least partly meaningful "in themselves," not *merely* because a certain individual wants to engage in them or likes them. More specifically, most objectivists hold a view that has been neatly summed up as the

principle of “subjective attraction to objective attractiveness” (Wolf 1997). According to this dominant account, a person’s life is meaningful insofar as she not only engages in projects that are worth doing for their own sake, i.e., are activities that in themselves *merit* pursuit, but also exhibits positive attitudes toward them, such as believing they are worthwhile, wanting to do them, and enjoying them. Such a theory implies that no meaning would accrue to one’s life either if one were attracted to something that did not deserve it or if one engaged in an attractive project but were not attracted to it, hence capturing the subjectivist’s idea that a meaningful life is not plagued by frustration and boredom, let alone angst and depression.³

Now, talk of “objective attractiveness,” “worthwhileness,” and “meriting pursuit” is vague, and it is only upon specifying these terms that I can begin to characterize psychotherapeutic practice as one properly directed toward meaning in the lives of patients. For many philosophers, objectively attractive projects are centrally those that involve the exercise of reason done for the sake of “the good, the true, and the beautiful.”⁴ To exercise reason, or to “transcend one’s animal self” as philosophers sometimes put it, is to live with intelligence, which includes, among other things, reflecting on one’s aims, planning so that many aims are realized in the long term, acting in light of one’s deliberation, and exhibiting strength of will. Note that “intelligence” and “rationality” in this context *also* include human capacities that some readers might suspect are being excluded, such as emotions and, in particular, love and artistic expression. I, with many colleagues, deem these capacities to go “beyond one’s animal self” and to be part of one’s “rational nature” insofar as they *include an element of judgment* (e.g., that something is disgusting, that a beloved is good, that a brushstroke is apt) and can be *modified by reflection* (at least indirectly, over time). Emotions are, in these ways, forms of intelligence that animals lack and that differ from autonomic functions, reflexes, and moods.

Most in the field believe that notable meaning would come from directing one’s intelligence, so understood, toward certain ends, most saliently the following: “goodness,” viz., helping others in the form of, say, loving a family, working for a charity, or being employed in a caring profession; “truth,” which means informedly reflecting about society or nature, perhaps by obtaining a formal education; and “beauty,” shorthand for being creative by, for instance, making art objects, decorating a room, or expressing humor.

There is a bit more consensus than this to note. Most contemporary value theorists with regard to meaning in life would, upon reflection, accept the claim that meaning can arise from beneficent, reflective, and creative intelligence (and being subjectively attracted thereto) in two different respects. On the one hand, such a way of living can make one’s existence meaningful, considered apart from anything else

³One might describe periods of life in which one experiences negative emotions as “significant” but presumably only *in the sense of being instrumentally useful*. Depression is a signal that something is wrong and can prompt one to move onto a better path. Now, a philosophical theory is about “meaningfulness” as a property that is worth seeking out *for its own sake*, i.e., is about *the nature of the better path*, such that depression, anxiety, and the like do not count.

⁴For example, Nozick (1981), Smith (1997), Gewirth (1998), Levy (2005), and Metz (2011).

about one's life. Helping a child with homework, sympathizing with one's spouse, writing some poetry, or accomplishing something at one's career can each make a life meaningful, just looking at the time at which it is done.

On the other hand, exercising one's reason in various ways toward the good, the true, and the beautiful can confer meaning by virtue of the "life story" of which they are a part. Looking back from one's deathbed, one could reasonably feel esteem not merely for the discrete projects one engaged in but also the overall narrative or autobiography they help to compose (Taylor 1989: 41–52; Velleman 1991). For example, one can sensibly take pride in one's life having *progressed*, from having started out badly in one's adolescence and then having ended on a high note in one's old age. For another example, many feel a sense of accomplishment for having *redeemed* unfortunate parts of a life by making good come of them in later parts. One might seek to redeem an unhappy childhood by ensuring that one's offspring have a happy one or a period of drug addiction by becoming a rehab counselor.

This completes my brief sketch of several decades of philosophical reflection on meaning in life. In sum, philosophers by and large seek to answer the question of what makes a life meaningful theoretically and do so by contending that *meaning arises from being subjectively attracted to objective attractiveness, where the latter is a matter of intelligence principally directed toward the classic triad of the good, the true, and the beautiful and in a pattern that makes for a compelling life story*. In the rest of this chapter, I propose, and to some degree defend, the idea that the practice of psychotherapy is best understood as directed toward realizing meaning, so construed, in the lives of clients through the overcoming of mental blockages.

A Taxonomy of the Ends of Psychotherapy

I have surveyed a number of writings on the proper final aim of psychotherapy, ranging from works by Sigmund Freud to those of contemporary thinkers, and I maintain that the views expressed are usefully classified under one of three major headings: intrapersonal, interpersonal, and mixed, where these terms are philosophical ones that I use and are not meant to track preexisting distinctions in the psychotherapeutic literature. In this section, I first explain what I mean by "final aim" and then articulate the three different theoretical approaches to it that I encounter.

A final aim or ultimate point is a goal that is not merely instrumental, i.e., is a condition that should be sought out at least partly *for its own sake* and not solely because of what it can bring about in the long term. Such a goal is often called an "outcome goal" in the psychological literature (e.g., Bader 1994; Orlinsky et al. 1994) and is distinguished from mere "process goals" or what philosophers call "intermediate ends." Making a patient feel heard, fostering a holding environment, inviting free association, and interpreting a dream are examples of process goals. These are ends that are properly pursued, but *only as a means* to some expected further state of affairs, viz., the final aim, ultimate point, or outcome goal, which I am alone concerned to specify in this chapter.

In addition to a final aim being desirable for its own sake, I take it to be something that constitutes an *ideal* for which to strive, where an ideal is a maximally valuable state of affairs that can be realized in principle but might not be practically realizable in a given situation. Hence, a final aim will often *not* be something that an analyst thinks is in fact achievable with a particular patient. Putting things in crude, numerical terms, if fully achieving the final aim gave a patient a score of 100, then it could well be that a certain patient is currently sitting at 25 and that, given the degree of damage done or limited amount of resources (time, gumption, insurance) available to him, he can move up to only 50. Even though the final aim cannot be completely realized in this context, it would rightly orient the analyst's treatment of this patient, in the sense that her work should be a matter of trying to get him (and any other patient) as close to it as she can.

Now, it will not do to say that the obvious final aim of psychotherapy is the reduction of mental illness and the production of mental wellness, for another way to put the present topic is: what *is* mental illness and its positive opposite? Similarly, it will not suffice to point out that the ultimate point of psychotherapy is to enable the patient to function, for the question is: function *in what sense*? And, again, it will not be enough to suggest that the outcome goal of a therapist should be to "modify his patient's psyche" (Aslan 1989: 14), for the pertinent issue is: *how*?

What I call an "intrapersonal" view of the ultimate point of psychotherapy is, roughly, one that focuses on states internal to the individual patient. More carefully, a view of what a psychotherapist ought to be aiming for in the final analysis (so to speak) counts as intrapersonal if and only if it makes *no essential reference* to a person other than the patient in relation to him. In contrast, a view is "interpersonal," or "relational," in the way I use these terms, insofar as it does make essential reference to some other person in relation to the patient. Such a view is that mental wellness is fundamentally a matter of being capable of starting and maintaining certain relationships with others and that mental illness basically consists of an inability to do so.

In the following, I canvass a wide array of texts to illustrate these distinctions, and, when I do, the reader should keep in mind that I am aiming to clarify theories, and not theorists. I am not out to accurately represent the views of particular psychologists, but rather draw on statements they have made in order to spell out different principled characterizations of the ultimate point of psychotherapy, regardless of whether it is the full story of what they themselves believed. This approach raises the question of whether anyone actually has held the theories I adumbrate below. I believe they have. However, even if I were wrong about that and were articulating mere "ideal types," this would be illuminating. The distinction between intrapersonal and interpersonal theories helps to clarify the options logically available, and supposing that I am correct when I suggest in the next section that a mixed theory is best, this would counsel future theoretical work to avoid falling into language or concepts restricted to either of the more simple ones.

Consider a variety of intrapersonal accounts of the final aim of therapy that are suggested in the literature. Begin with Freud's classic claim that the point of analysis is to make the unconscious conscious (1920: 12; 1938: 224). Although such an aim

could well involve becoming aware of previously unacknowledged feelings about another person, Freud's account is intrapersonal, in my sense, because it makes no *essential* reference to establishing a relationship between the patient and another; after all, being aware of one's reactions to others is not the same as engaging in a relationship with them, on which an interpersonal theory focuses. Even if engaging in substantial "ego expansion," replacing *Id* with *Ich*, brought in its wake an improved ability to relate to others (as one would expect), the bare idea that the ultimate point of psychotherapy is *ego expansion* counts as intrapersonal, for it does not say that the ultimate point of psychotherapy is *relating to others* in a certain way.⁵ Similar remarks go for Freud's additional suggestion that the therapist's goal should be to relieve patients of suffering and to help them feel pleasure without contortion, disturbance, or other symptoms (1930: 32–33, 48; for similar recent views, see Bader 1994: 261 and Fink 2010).

Carl Jung, too, makes remarks that suggest an intrapersonal view, when he emphasizes the need for a patient to prize his "inner voice" (1953: 156) or to place "*his* law above all conventions" (1953: 154). "The greatness and the liberating effect of all genuine personality consists in this, that it subjects itself of free choice to its vocation..." (1953: 155). Again, one's calling could involve relationships with others, but insofar as it need not, Jung's comments occasion awareness of an intrapersonal theory.

Similar remarks go for a wide array of views mentioned by a variety of influential theorists about psychological sickness and health from at least the postwar era. Many conditions advanced as the suitable aims of psychotherapy are intrapersonal, making essential reference only to the patient, and not explicitly mentioning anything about relationships with others, such as being open to experience and accurately apprehending reality (Reich 1925: 244; Maslow 1950; Rogers 1957; Becker 1971: 148–153; Miller 1979); being more spontaneous, independent, free, or autonomous (Jung 1933; Maslow 1950; Rogers 1957; Becker 1971: 153–154; Szasz 1983: 19–54); being unique or creative (Jung 1953: 154; Storr 1960: esp. 156–160; Maslow 1963; Kohut 1984: 44); feeling alive or experiencing vigor (Winnicott 1955, 1960; Kohut and Wolf 1978; Miller 1979); having a true or strong self (Winnicott 1955, 1960; Kohut and Wolf 1978; Miller 1979; Masterson 1990; Hansell 2008: 1181); regaining lost parts of the self or overcoming its fragmentation (Guntrip 1971b: 170; Steiner 1996: 1074–1078); and coping with anxiety or stressors in one's environment and being able to rely on oneself (Rogers 1957; Bowlby 1973; Masterson 1990; Hansell 2008: 1181).⁶

⁵Some might consider it odd to characterize self-knowledge as a final aim, since psychoanalysts deem insight rather to be the most they can achieve in a clinical setting, without considering it to constitute mental wellness as such. However, there are certainly texts that suggest otherwise, and there is a large body of literature arguing that insight per se should not be considered a final aim of psychotherapy (e.g., Fink 2010).

⁶See, too, most of the aims discussed in a historical overview of how psychoanalysts have conceived of the point of therapy in Sandler and Dreher (1996).

I am aware that some of the thinkers I have cited do accept the relevance of interpersonal factors, e.g., Abraham Maslow does speak of self-actualizing people as being capable of “profound interpersonal relationships” and evincing a “democratic character” (1950: 180–183). However, such considerations are far from being the dominant elements in his texts; of Maslow’s 14 key traits of self-actualizers, only two are interpersonal (1950: 165–187). So, while some cited above might ultimately be best classified as “mixed theorists” (as I spell out below), their texts occasion awareness of an intrapersonal *theory* in the first instance.

Interpersonal theories come to mind upon reading Martin Buber, who claims of psychotherapy that “the sicknesses of the soul are sicknesses of relationship” (1967: 150), and Harry Guntrip, who states at one point that the “*true aim of psychotherapy is to liberate us to become persons*,” where a person is one who “*realizes his essential nature as personal in mutual relationship with other persons*” (1971a: 146, 147).⁷ Also relevant here are views expressed by thinkers such as Erich Fromm (1956: esp. 16–17) and Rollo May (1969: 275–286), who cash out mental health in terms of the capacity for loving relationships, explicitly contending that non-relational conditions are insufficient.

Worth mentioning, too, are Anthony Storr (1988: e.g., xiv, 5–7, 151) and Lavinia Gomez (1997: 212–222), who interpret the lot of object-relations theorists as being “interpersonal” in my terms. My suspicion is that these and commentators are misreading object-relations theorists, in that they are failing to differentiate the claim that certain relationships are a necessary *means* to mental health, which an intrapersonal theorist can readily accept, from the claim that mental health *just is* to be capable of certain relationships, which an intrapersonal theorist must reject by definition. For example, the classic object-relations theorist W. R. D. Fairbairn’s characterization of the point of psychoanalytic treatment clearly counts as “intrapersonal” in my terms, when he says that its primary aim is “to promote a maximum ‘synthesis’ of the structures into which the original ego has been split” (1958: 380). Once one firmly grasps the difference between the question of what the ultimate point of therapy should be and the question of how to achieve it, one sees that one can hold what I call an “intrapersonal” theory of the former, as, say, psychic integration, while holding that certain supportive relationships, say, with one’s parents or a therapist, are a necessary means by which to realize it.⁸ Conversely, it is clear that an “interpersonal” theorist can in principle accept the notion that self-analysis is a suitable means by which to realize the final end of mental health qua loving relationships.

Having illustrated and clarified the distinction I draw between intrapersonal and interpersonal accounts of the proper final aim of psychotherapy, I now note that there is a third view to be found in the literature, namely, a mixed or composite one

⁷ But see Guntrip (1971b: 145–173), where he appears to express not an interpersonal view but a mixed one.

⁸ Note that in Heinz Kohut’s last book, he deems certain relationships to be so absolutely essential for maintaining a strong self that he characterizes the essence of a psychoanalytic cure as the self being able to be sustained by *acquiring enough selfobjects* (1984: 77). Even so, it is useful, contra Kohut, to distinguish rigorously between a final end and the means—even necessary ones—to it.

according to which it is *both* self- and other-regarding. One clear adherent to such a mixed perspective is Karen Horney, who characterizes the point of therapy as enabling the patient to work, to relate to others, and to be responsible, where these are all on an equal footing (1950: 333–368). Noting a change in the definition of neurosis relative to previous (intrapersonal) theoretical work by other analysts, Horney says, “*Neurosis now became a disturbance in one’s relation to self and to others*” (1950: 368; emphasis in original). Another example is Storr’s own view of the point of therapy, when he speaks of a state where “we can be whatever we are and allow (others) to be the same” (1960: 52). More recent expressions of a mixed theoretical perspective include the claims that “the overall goals of therapy can be summarised as the search for intimacy and autonomy” (Holmes 1998: 236; cf. Neri 2008: 326) and that “a descriptive summary of analytic goals might be that ‘the goal of analysis is to be able to love, work, and self-regulate with happiness’” (Cogan 2007: 205).

My survey of the literature, given its enormity, has unavoidably been partial, but I contend that anything else that one will encounter can neatly be classified under one of these three major headings I have adumbrated. The views I have canvassed are representative of three logically exhaustive approaches to psychotherapy. In the next section, I focus on the mixed approach, working to develop it in light of philosophical work on life’s meaning.

A Specification of the Mixed View

A slight acquaintance with *DSM-IV* is enough to make some kind of mixed perspective look particularly attractive, and from what I gather of the contemporary field, most psychotherapists now implicitly hold such a view or would accept it upon reflection. Although it is well worth spending time to defend a mixed perspective relative to the intrapersonal and interpersonal ones, I lack the space to do so, and hence in the rest of this chapter will take it for granted. Instead, what I do from here on out is to answer the question of which particular mixed view is best, doing so more theoretically than has been done up to now in the psychological literature, as I am familiar with it.

One strategy for answering the question of which mixed view is most attractive, and the dominant one employed in the ways mixed accounts have been expressed, would be simply to list all the relevant intrapersonal and interpersonal factors side by side. That is what those cited as expressing mixed views in the previous section do (e.g., Horney 1950: 334, 364) and what, e.g., Maslow (1950) does as well, with his grab bag containing 14 properties of psychological health.

However, a different approach would be to consider whether the intrapersonal and interpersonal factors share common features, to seek for unity amidst the diversity. This is the tack I pursue, by appealing to the theory of meaning in life that currently is the most defended, and probably most defensible, in the philosophical literature. Recall that it is the principle that one’s life is more meaningful, the more

one exhibits positive attitudes toward one's undertaking objectively worthwhile projects, which are largely a matter of exercising one's rationality in beneficent, reflective, and creative ways that, as a pattern, make for an interesting life story. I now contend that this philosophical conception of what makes a life meaningful promises to neatly capture all the key considerations of mental illness and wellness from the psychological literature that I have discussed.

First off, consider what is involved in *exercising one's rationality* or realizing one's intelligence. To do so is a matter of developing the following abilities, which I believe progress in the order below:

- to reflect on one's aims, rather than be so dissociated as to be unable to deliberate;
- to adopt aims that one has judged to be worthwhile, rather than hating oneself so much that one deems nothing to be worth doing, or adopting ends because one believes others would like one to;
- to plan so that many aims can be realized in the long term, instead of being impulsive and unable to delay gratification;
- to be aware of what is likely to realize one's plans, rather than engaging in wishful thinking;
- to adjust one's plans as things arise, instead of rigidly adhering to a goal that has become irrational to pursue out of a need to feel a sense of control;
- to act in light of one's plans, rather than being carried away by compulsion or addiction;
- to act in a way that is in fact likely to realize one's plans, rather than being thwarted by desires and feelings that remain unconscious;
- to have confidence in one's ability to achieve one's plans and to overcome obstacles, rather than caving in to fear of failure or of others' negative judgment;
- to be able to withstand anxiety and pain in pursuit of one's plans, rather than ignoring criticism or collapsing upon encountering setbacks; and, finally,
- to have the determination and resolution to carry out one's plans, rather than exhibiting weakness of will or suffering from outright depression.

This account of what it is to act rationally underwrites many of the intrapersonal considerations from the psychotherapeutic literature. Even if therapists would not be inclined to describe themselves as trying to enhance their patients' powers of reason, when these are carefully defined, it becomes plausible to think that this is what therapists are up to or should be.

However, there are two other major facets of the philosophical theory of meaning, and they are necessary to account for additional, salient intrapersonal factors, as well as the interpersonal properties that are plausibly relevant. Many of the remaining aspects of overcoming mental sickness and of obtaining mental health are entailed and explained by the idea of directing one's intelligence, as above, *toward ends other than self-protection, viz., toward promotion of the good, the true, and the beautiful*. When philosophers speak of the "good," recall, they have in mind beneficent relationships, ones of aid, support, care, friendship, and love, which are

also what interpersonal theorists have in mind. However, invoking the “true,” intellectual reflection or even self-knowledge, and the “beautiful,” creativity, is essential to account fully for the recurrent judgments among therapists that being able to be self-aware and to be productive is inherent to someone’s being fully mentally healthy.

Finally, recall the third major part of the philosophical theory, the idea that meaning is partially constituted by one’s life *progressing* in certain ways, say, potentially grounding a biography that others should want to read. The urge for one to create a life story in which one can sensibly take pride might not drive troubled souls into therapy, but, once there, it does often move them to want to make something good come of the bad in their lives, and analysts typically want to help them do so. One reason that many in the psychoanalytical field are wary of antidepressants and the like is (even if they do not use my terms) the sense that patients’ life stories would not be as meaningful if they did not work through their problems. It is not so much that, for many psychoanalysts, “to lose pain without quest or struggle is to lose self” (as per Kramer 1993: 277), but, rather, I think, that they see more narrative value in a life if, given disease, grappling with *it* eventually results in health than if, given disease, health comes from a source unrelated to it. Analogous appears to be the case, oft discussed among philosophers, of a politician who has worked hard to win an election: more meaning would accrue to his life if he afterward won the election than if he won the lottery instead (e.g., Velleman 1991).

Conclusion

My aims in this chapter have been to acquaint psychologists with recent work done by philosophers on the topic of what makes a life meaningful and to put forth, as worthy of further reflection, the hypothesis that the proper final aim of psychotherapy is well understood as pursuing meaning as they have construed it. I must save for another occasion objections to my proposal that the proper end of psychotherapy is captured by the dominant philosophical theory of what makes life meaningful. In another context I submit that it would be worth taking time to answer the following kinds of questions: What are the strongest arguments for favoring an intrapersonal or interpersonal theory? What reason is there to think that they are ultimately inadequate? Supposing that some sort of mixed theory is best, are there intuitive elements of it that are not entailed or plausibly explained by the philosophy of life’s meaning articulated here?⁹

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