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SPECIAL ISSUE: MEANINGS OF MEANING

Using Metaphor to Find Meaning in Life

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Pursuing meaning in life confronts the individual with abstract ideas about the connections between experiences and identities over time (*continuity*), the ends that life serves (*purpose*), and its worth (*value*). Conceptual metaphor theory is helpful to explain the cognitive strategies people use to understand these ideas. This theory posits that metaphor is a cognitive tool for understanding abstractions in terms of superficially dissimilar, relatively more concrete concepts. Early empirical tests of this claim focused on how activated metaphors influence judgments of other people, events, and social issues. Going further, an emerging area of research examines metaphor's roles in perceptions of life's continuity, purpose, and value. This article provides the first overview of this development. Specific aims are to organize previous findings, identify questions for future research, and discuss theoretical implications for the meaning of meaning.

Keywords: meaning in life, metaphor, continuity, purpose, value

A long tradition in psychology views the pursuit of meaning in life as a fundamental part of human nature (Frankl, 1985; May, 1953). These claims are supported by empirical data. Perceived meaning in life positively predicts indices of well-being and social functioning (e.g., relationship satisfaction; Baumeister, 1991; Steger et al., 2006; Zika & Chamberlain, 1992). Conversely, a persistent sense that life is meaningless is associated with poorer functioning and even pathologic states (Schnell, 2009).

These observations point to the theoretical and applied importance of uncovering the cognitive strategies by which people find meaning in life. Several such strategies have recently come to light. For example, people can retrieve a nostalgic memory (Routledge et al., 2013), think counterfactually about the conditions of their birth (Heintzelman, Christopher, et al., 2013; Waytz et al., 2015), or notice patterns in nature (Heintzelman, Trent, et al., 2013).

Another potential strategy is suggested by the observation that, across cultural and historical contexts, people routinely talk about life using metaphor (Kövecses, 2010; Moser, 2007). For example, the English expressions “come a long way” and “on the right path” compare life with a physical journey. Other common expressions compare life with a story (“I’m *writing* a new *chapter*”), a war (“Every day is a *battle*”), a sporting event (“I can see the *finish line*”), and a building (“Her life was in *ruins*”), to mention just a few. In addition to written and spoken language, metaphors of life

are communicated in nonlinguistic forms like images (e.g., greeting cards), ceremonies (e.g., rites of passage), and gestures (Forceville & Urios-Aparisi, 2009).

Seen through the lens of conceptual metaphor theory (Kövecses, 2010; Lakoff & Johnson, 1980), such communications are not merely ornamental tropes and figures of speech. Rather, they reflect the use of metaphor at a cognitive level to understand and experience life in terms of another concept—one that is superficially unrelated but relatively more concrete and easy to grasp. Indirect support for this possibility comes from evidence that metaphor use plays an integral role in social cognition (Landau, 2017). Nevertheless, metaphor's potential significance in the quest for meaning in life has yet to be formally acknowledged.

To fill this gap, this article brings together studies of metaphoric influences on perceptions of life. Because these studies use diverse methods, they need to be organized within a theoretical framework. The framework described below approaches meaning in life as a motive to understand life's continuity, purpose, and value. From there, studies pertaining to each dimension are reviewed in turn. Discussion looks across findings to identify new empirical directions and consider implications for understanding the meaning of meaning.

Theoretical Framework

Researchers commonly treat meaning in life as a global subjective evaluation and operationalize it accordingly as a unidimensional self-report construct. The widely used Meaning in Life Questionnaire (Steger et al., 2006), for example, assesses the presence of meaning with such items as “I have a good sense of what makes my life meaningful.” Similar measures include the Purpose in Life Test (Crumbaugh & Maholick, 1964), the Life Regard Index (Debats, 1998), and the Sense of Coherence Scale (Antonovsky, 1987). This approach is empirically generative (Hicks & Routledge, 2013). Narrowly applied, however, it may cause researchers to overlook the

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relevance of studies that do not explicitly measure meaning in life as a unitary construct.

Dimensions of Meaning in Life

A complementary approach taken here treats meaning in life as an *epistemic motive*—a desire to achieve and maintain particular types of knowledge. Specifically, it represents a desire for a clear, confident understanding of three related but distinct dimensions: *continuity* (vs. fragmentation) is the degree to which separate parts of life—personal history, current actions, and envisioned future—are perceived to fit into a coherent, temporally continuous whole; *purpose* (vs. pointlessness) is the degree to which day-to-day experiences are perceived as having some worthwhile end that one is making progress toward; and *value* (vs. worthlessness) is the degree to which life is felt as having admirable or esteemed qualities.

This approach has the advantage of widening the scope of relevant evidence to include studies examining perceptions of each dimension, even if they do not include direct measures like those just mentioned.

Abstractness Challenges Meaning in Life

A long-standing assumption in psychology and philosophy is that, for most individuals, a confident sense of meaning in life does not present itself in any direct, self-evident way. Rather, it is something that one must actively find or create, and is under continual assault from intimations of life's meaninglessness (Flanagan, 2009; Schlegel, Vess, & Arndt, 2012; Shaver & Mikulincer, 2012). Approaching meaning in life as an epistemic motive fleshes out this assumption. It portrays people as motivated to reach conclusions about life's continuity, purpose, and value that feel certain, or certain *enough*, as opposed to being uncertain or lost in equivocation. In the well-known terms of lay epistemology theory, they seek *closure* on these dimensions (Kruglanski, 2004).

The current framework is premised on the idea that achieving this closure is difficult in part because these dimensions are abstract. Such abstractness results when thinking about entities, forces, and relations that cannot be directly observed and seem removed from the practical realities of daily life (Trope & Liberman, 2010). Take continuity, for example. Claire stands to achieve a confident sense of continuity by appreciating how events from her afternoon (e.g., grocery shopping) were shaped by the person she used to be, and how they set the stage for becoming a future self. But this entails perceiving causal links between temporally remote events and identities—links that are not clearly determined and may seem arbitrary. It could also entail viewing individual experiences as all related to a self-defining trait or a recurring theme, but because the mental images thus formed are not present to the senses, Claire may be unsure whether they are based in reality or mere fantasies. In either case, abstract connections may feel inadequate to fully describe the whole of her life.

This premise—that abstractness is an impediment to finding meaning in life—is consistent with evidence that people often struggle to comprehend abstractions. They have lower confidence in abstract causal relations compared to relatively more concrete relations in which causes have directly observable and

immediate consequences (Buehner & May, 2003; Cheng, 1993; Michotte, 1946/1963). They also strain to understand and remember messages expressed in abstract language that prevents them from forming vivid mental images (Kosslyn et al., 2006). What's more, a reminder of personal mortality—a demonstrable spur to meaning-seeking—decreases liking for abstract stimuli, and exposure to stimuli that seem abstract or out of place makes people more eager to restore a global sense of meaning (e.g., by shoring up their ideological convictions; Greenberg et al., 2013; Heine, Proulx, & Vohs, 2006).

The question becomes: How do people gain a firm(er) grasp on these abstract dimensions of meaning in life? One answer is provided by conceptual metaphor theory, summarized next.

Conceptual Metaphor Theory and Research

Conceptual metaphor theory posits that a metaphor, traditionally dismissed as a quirk of language, is a cognitive tool for understanding one concept in terms of another (Kövecses, 2010; Lakoff & Johnson, 1980). The concept one seeks to understand—called the *target*—is typically abstract and difficult to represent in its own terms, whereas the concept used for this purpose—the *source*—is concrete and easier to grasp. Many sources derive from sensorimotor states and well-learned interactions with the physical environment (e.g., walking, grasping). Others refer to commonplace, stereotyped knowledge of cultural products (e.g., computer operation, building construction) and activities (e.g., baseball rules, courtroom proceedings).

At a process level, metaphor operates as a conceptual mapping, defined as a systematic set of associations between the target's elements (features, properties, relational information) and analogous source elements. A mapping is partial and selective, drawing attention to target elements that share a source analog and downplaying or inhibiting those that do not.

By means of a mapping, metaphor use enables people to apply source knowledge as a template for interpreting and evaluating the target, even though the two concepts are superficially unrelated. To illustrate, a person using metaphor to understand substance addiction (the target) in terms of a war (the source) transfers schematic knowledge of military combat to structure how she thinks and feels about select elements of addiction: She conceives herself as a *warrior*, therapy as a *weapon*, cravings as *enemy combatants*, and so forth.

Conceptual metaphor theory is supported by over 40 years of research across the cognitive sciences and humanities demonstrating metaphor's far-reaching significance in thought and behavior (Gibbs, 2008). These discoveries have recently inspired social psychologists to test metaphor's influences on social cognition using experimental methods (Landau, 2017). One method is to expose some people to a *metaphoric framing*—a message that uses metaphoric language or imagery to liken a target to a source—and compare their responses with those exposed to a parallel message using a different metaphor or no metaphor. Activating metaphors in this manner has been repeatedly shown to change target interpretations in ways that correspond to source knowledge. In one illustrative study (Thibodeau & Boroditsky, 2011), participants who read an article comparing a city's crime problem to an aggressive beast generated more punitive crime-reduction strategies, whereas those who read an article framing the same facts in

disease-metaphoric terms recommended addressing the root causes of crime. In both metaphor activation conditions, participants transferred knowledge of the respective source to determine how best to solve the target problem. Similar studies reveal metaphoric influences on person perception, memory, consumer decision making, and political attitudes, to name just a few processes studied.

Still, it is unlikely that metaphor use is inevitable or manifests in the same fashion across individuals and situations. Insight into moderating factors comes from conceptual metaphor theory's claim that metaphor use functions to support comprehension. This claim goes back at least to Aristotle (1924; ca. 330 BCE; trans. 1924), who said that "it is from metaphor that we can best get hold of something fresh" (1.1410). William James (1890/1983) similarly observed that people apprehend unfamiliar ideas by furnishing parallel cases—essentially, by first coming up with metaphors. Contemporary cognitive research confirms that individuals seeking to grasp an abstract concept are highly receptive to concretizing metaphors (Low, 2008; Midgley et al., 2013), and that even intellectual elites rely on metaphors to get a handle on elusive concepts (Dunbar, 1997; Thagard & Beam, 2004).

This functional analysis yields testable hypotheses about moderators of metaphor use. People's subjective comprehension is reduced when they perceive a target to be unfamiliar, abstract, complex, unstable, or obscure. The resulting desire to restore a sense of understanding will increase the appeal of metaphors likening that target to sources perceived as familiar, concrete, simple, consistent, or discernable. If, in contrast, people feel they have a satisfactory grasp of the target in its own terms, they will be less likely to adopt available metaphors.

Several studies support these hypotheses: Undergraduates applied *up/down* perceptual cues to evaluate their university when feeling uncertain about college's value (Keefer et al., 2011); exposure to a vehicle-metaphoric framing of a corporate bankruptcy informed observer's blame attributions when they felt uncertain about bankruptcy (Landau, Keefer, & Rothschild, 2014); when the stock market appeared highly abstract, or when an inanimate object behaved unpredictably, participants applied a provided metaphor comparing those targets to anthropomorphized agents (Jia & Smith, 2013; Waytz et al., 2010). In all these studies, participants who had a satisfactory subjective grasp of the target *did not* apply a provided metaphor to interpret the target.

Metaphor and Meaning in Life

Drawing on conceptual metaphor theory and the evidence reviewed thus far, it is possible that metaphor use helps individuals to satisfy the epistemic motive to find meaning in life. Within the current framework, that entails using metaphor to gain a confident understanding of life's continuity, purpose, or value.

To illustrate, consider how one might use the metaphor *life is a journey*. Life is not a journey in any literal sense (e.g., one can make major decisions without taking a single step). Nevertheless, this metaphor recruits knowledge about goal-directed motion along a path—knowledge acquired over years of routine bodily activity—and maps it onto elements of life (see Figure 1). This mapping enables the individual to understand herself as a *traveler*, her life goals as *destinations*, means of achieving a life goal as *paths*, difficulties as *obstacles*, and so on. It is notable that some bits of journey knowledge (e.g., travel insurance, carpoools) do not

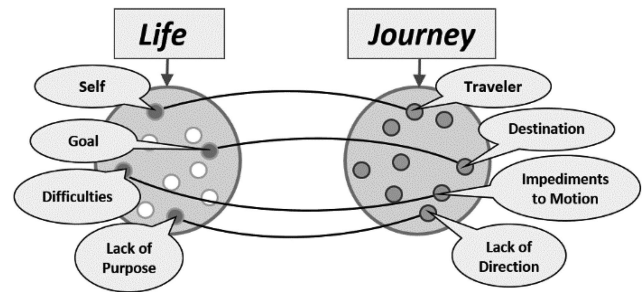


Figure 1. Depiction of a life metaphor's mapping.

conventionally participate in this mapping (although creative spins on life metaphors can expand mappings; Lakoff & Turner, 1989). This fits the theoretical claim that metaphor operates as a partial mapping, highlighting and downplaying select target elements.

On this account, metaphor use is an intermediary step to finding meaning in life. People reach for life metaphors because they have difficulty comprehending life as a whole or some significant aspect of it. And yet, for the concept *life* to participate in a metaphor's mapping, it needs some degree of structural delineation. To illustrate, for Claire to access the *journey* metaphor depicted in Figure 1, she first needs to identify life's parts (e.g., goals, decisions); otherwise there would be nothing to map onto analogous elements of a journey. Nevertheless, Claire still feels that something about life is vague or elusive. Perhaps she struggles to see how life's parts fit together, or she may be unsure how to prioritize goals. If life did not remain an epistemic problem—if, that is, one confidently grasped life's coherence, purpose, and value—there would be little need to reach for concretizing metaphors.

Is this true? Some support comes from research on the career of an instructional metaphor used in the classroom (Low, 2008; Vosniadou & Ortony, 1989). It is meant to provide students with a provisional ladder for bootstrapping an understanding of an abstract or complex concept (e.g., the heart is a pump; the atom is the solar system; the brain is a computer). It benefits students particularly when they have precursory knowledge of the target but do not yet understand it in full. Related experimental evidence shows that people are more likely to rely on bodily based metaphors to make judgments (e.g., judging a heavy vs. light book as more important) when they know something versus nothing about the target (Chandler et al., 2012).

With these theoretical points in mind, the next three sections review evidence of metaphoric influences on perceptions of life's continuity, purpose, and value.

Continuity

Some philosophers contend that if individuals were to scrutinize their experience and see the transient states of consciousness for what they are, they would not find anything that persists over time and defines their life (Hume, 1739/1988). Although radical discontinuity may be our default experiential setting, most people find it threatening, and they strive to piece together aspects of their personal history, everyday activities, and envisioned future into a unified whole (Bruner, 1990; Erikson, 1968). During adolescence we are characteristically preoccupied with forming an image of the

person we might become (Marcia, 2002), and in old age we try to retrofit pieces of personal history with overarching themes (Butler, 1963). These efforts are not in vain: Dispositionally high and experimentally increased perceptions of self-continuity predict stronger meaning in life (Borden, 1992; Hendrix & Haight, 2002; Sani, 2008; Shin et al., 2016).

Emerging research points to metaphor as one cognitive strategy people use to find continuity. As we will see, studies to date focus on the aforementioned *journey* metaphor, among several investigable metaphors. This focus is justified because influential presentations of conceptual metaphor have detailed how experiences with goal-directed motion along a path provide a rich source template for conceptualizing the time course of activities and events (Lakoff & Johnson, 1980; Kövecses, 2010).

In one study (Keefer et al., 2011), some participants were asked to visualize separate events from their past as physical locations along a path, while others organized past events in a literal, chronological fashion. Next, they reported how much their past has, in general, shaped the person they are today. The researchers hypothesized that when the *journey* metaphor was salient, participants would view their past as more influential in forming their current identity. They also expected this effect to hold particularly when participants were first led to feel uncertain about their current identity (vs. those focused on an aversive comparison topic). This is precisely what was found (see Figure 2), suggesting that using the *journey* metaphor helped participants to interpret their past in such a way that it culminated in their current self.

In addition to connecting past and present, the *journey* metaphor can reinforce continuity between a current identity and a possible future identity. Landau, Oyserman, Keefer, and Smith (2014) had college freshmen imagine themselves in the future as accomplished graduates. Compared with students led to represent that future self without a metaphor, those who visualized it as a destination on a path (see Figure 3) saw it as more strongly connected to their current identity. Furthermore, this effect was mediated by strengthened appreciation that academic activities in the present determine whether or not they attain long-term academic goals. Presumably, this metaphor transferred knowledge that reaching a far-off destination depends on steps taken now.

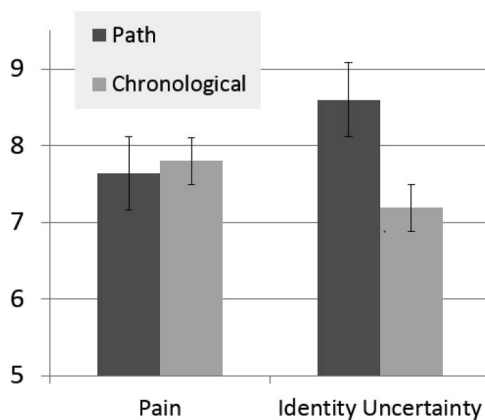


Figure 2. Framing past events as steps in a journey bolstered continuity between personal history and current identity, but only when participants felt uncertain about themselves (Keefer et al., 2011).

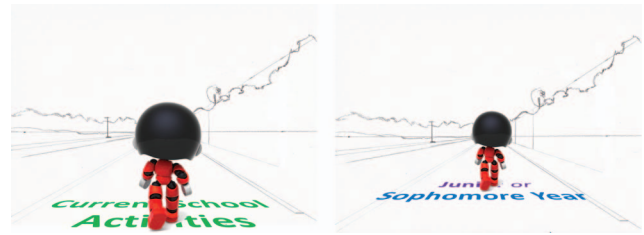


Figure 3. A future identity framed with a *journey* metaphor felt more connected to a current identity by means of portraying current actions as determining future goal attainment (Landau et al., 2014). See the online article for the color version of this figure.

In sum, continuity contributes to meaning in life but its abstractness renders it elusive. Metaphor use strengthens perceived continuity by transferring the structure of well-known events and activities (e.g., moving along a path) to represent how life's parts fit together. Studies support this claim and show that one mechanism is helping people visualize the otherwise abstract causal relations between remote outcomes. Also, when people feel uncertain who they are, they are especially receptive to metaphorical conceptions of their life's continuity. More work is clearly needed to test whether these effects generalize to other metaphors of life.

Purpose

"In the end, each life is no more than the sum of contingent facts, a chronicle of chance intersections, of flukes, of random events that divulge nothing but their own lack of purpose" (Auster, 1990, p. 256). Novelist Paul Auster proposes that a person's life, when viewed from one objective angle, amounts to a heap of ephemeral moments devoid of purpose. But that's not how most people want to see it. When they contemplate life and question where the meaning of it lies, they often find it in a sense of purpose (Frankl, 1985). How? One demonstrated strategy is to identify one's life with a larger social entity, like a nation or a utopian ideal, to live on symbolically after one's body has perished (Sullivan, 2016).

Metaphor use may be another strategy. Although people may not fully comprehend what their life is for, they are intimately familiar with the uses of myriad objects, events, and activities. They know, for example, that using a compass is for reaching a desired destination; violent confrontations are for defeating enemies; and athletic events are organized so that one of several competing parties can be determined a winner. Hence, representing life metaphorically in terms of such concepts may project onto life a clear and convincing purpose.

Baldwin, Landau, and Swanson (2017) assessed this possibility in a series of studies testing whether cued metaphors bolster perceived purpose. They also examined downstream consequences for feelings of life satisfaction. Participants were first led to consider aspects of their life such as a close relationship and a recent decision. Half were then randomly assigned to compare those life aspects with analogous aspects of a journey (e.g., "Decisions in your life are like choosing among branching paths. Write a couple sentences about a branching path you have encountered in your life"). The others were asked to elaborate on those life aspects in plain, literal terms (e.g., "Write a couple sentences about a deci-

sion you have made in your life”). Participants then completed measures of purpose in life (Crumbaugh & Maholick, 1964) and life satisfaction (Diener et al., 1985). As predicted, describing life using a provided metaphor (versus in literal terms) made life seem more purposeful, which in turn predicted higher life satisfaction.

One limitation of this study is that participants exposed to a metaphoric framing were spoon-fed analogs between life and a concrete source (e.g., “decisions in life are like branching paths”), which may have exaggerated the metaphor’s effects. Hence, in a second study all participants first generated a life metaphor of their choosing—one that “best describes your life”—but only one group was then asked to apply that metaphor to describe life aspects. In this way, those in the metaphor activation condition were prompted to generate the analogs themselves. This procedure minimizes the possibility that simply priming a figurative snapshot of life strengthens purpose to the same degree as systematically mapping life onto a source.

Despite the variety of generated metaphors, ranging from conventional (e.g., “My life is a *movie*”) to idiosyncratic (e.g., “My life is a *casserole*”), applying a metaphor to describe life increased perceived purpose and life satisfaction. Also, the effect of metaphor activation on perceived purpose mediated its effect on life satisfaction. This finding conforms to conceptual metaphor theory’s claim that metaphor operates as a systematic mapping: If participants generated a life metaphor but did not subsequently apply it to fit life’s aspects into the source’s “slots,” they did not gain a boost in purpose (or life satisfaction).

Baldwin et al. (2017) addressed a further question: *For whom* will metaphor lend purpose? Recall that a cued metaphor bolstered continuity particularly for individuals who felt uncertain about their identity (Keefer et al., 2011). This suggests people will employ an accessible metaphor to find life’s purpose if they are disposed to see life as lacking coherence, but not if they see clear, predictable order in life. To test this possibility, the researchers had German undergraduates complete a translated version of Antonovsky’s (1987) Sense of Coherence Scale (sample item: “In the past 10 years your life has been: 1 = *full of changes without your knowing what will happen next*; 7 = *completely consistent and clear*”). They were randomly assigned to describe decisions and other life aspects with or without a *journey* metaphor before evaluating life’s purpose. As predicted, the *journey* framing strengthened purpose among participants lacking strong perceptions of life’s coherence (see Figure 4).

In sum, the present analysis posits that metaphor use supports perceived purpose in life by projecting onto life the well-known purpose of another, superficially unrelated thing. Initial empirical tests of this claim show that: Cued life metaphors bolster purpose; this effect is stronger when life metaphors are processed as a systematic mapping (vs. superficially); metaphor use supports purpose for individuals lacking coherence in life, much like it supports continuity among those made uncertain about their identity.

Value

Psychologists working across existential and humanistic traditions converge on the notion that a confident sense of personal value (worth, esteem) is essential for viewing life as meaningful (Becker, 1971; May, 1953; Rogers, 1961). The claim is *not* that

people are unable to extract meaning from information or events that make them feel bad about themselves. On the contrary, research shows that even traumatic events can serve as a catalyst for achieving higher levels of self-determination and life satisfaction (Janoff-Bulman & Yopyk, 2004). Rather, the claim is that persistent feelings of low self-worth signal life’s meaninglessness.

It is worth a brief detour to consider how value contributes to meaning in life. From the perspective of terror management theory (Greenberg et al., 2013), life’s meaning is under continual threat from the awareness (normally implicit) that death may signal the absolute end of existence. People may struggle to view life as meaningful when they sense that at any moment it could be snuffed out and shortly forgotten. To avoid this threat, they strive to perceive themselves as living up to their culture’s standards of value and, consequently, qualifying for the routes to death transcendence promised by that culture’s worldview (e.g., admission to an afterlife, the promise of an enduring legacy of achievements). Put differently, self-esteem is earned by following cultural prescriptions for being a “good” person, and because cultures promise that good people will continue on in some form after death, self-esteem fends off the nagging anxiety that life is a mere flash in the cosmic pan.

It follows that when thoughts of death are salient, strong feelings of personal value will protect against the perception that life is meaningless. Supporting studies show that chronically high accessibility of death-related ideation predicts lower meaning in life among individuals low, but not high, in trait self-esteem. Also, situational reminders of death decreased meaning in life particularly among low self-esteem individuals (Routledge et al., 2010).

The present analysis adds another piece to the total picture by explaining why people may have difficulty establishing confident knowledge of their personal value. Because *value* is an abstract idea, people may struggle to form a clear mental image of what it is, how to attain it, and whether they have “enough” to view life as meaningful (Nagel, 1979). Metaphor use is one strategy for overcoming this epistemic hurdle. It represents value in terms of another idea that is superficially unrelated but easier to conceptualize. In this way, metaphor use has the potential to bolster con-

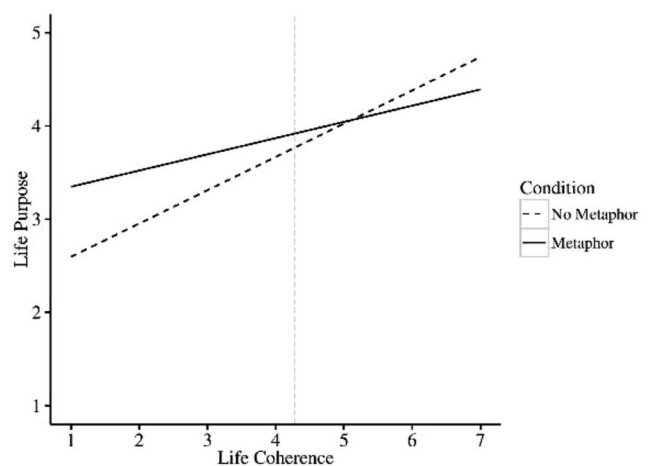


Figure 4. Cued life metaphors bolster perceived purpose for individuals with weak, but not strong, life coherence (Baldwin et al., 2017).

fidence in life's value and, as a result, meaning. Although studies have not yet tested this mediational hypothesis in full, they have begun to demonstrate theory-driven effects of metaphor activation on perceptions of value.

Some studies examine the *theatrical* metaphor that casts life as a stage play, one in which *actors* adopt shifting *roles* when sharing different *stages* with rotating sets of other *characters*, and they emerge from *backstage* in *costume* to enact their *performances* in the hope of gaining *applause* (approval). This metaphor is reflected in common expressions like “I wear a mask at work” and “She puts on a good show in her marriage,” and it was formalized in Erving Goffman's (1959) dramaturgical perspective on social life.

In what situations are people motivated to (at least temporarily) embrace this metaphor? What is the appeal of viewing life as an elaborate stage play? According to Sullivan, Landau, Young, and Stewart (2014), when people feel that they are somehow failing in their performance, the *theater* metaphor may be desirable because it allows them to discount *all* social roles and activities as theatrical constructions. Put another way, people may experience feelings of inadequacy in a variety of different areas—in the workplace, in their knowledge of art and culture, in their physical appearance, and so on. To defend their sense of personal adequacy in *any* of these domains, they may adopt the *theater* metaphor, reassuring themselves that society is just one big theatrical production and one's performance in a given role does not indicate the ultimate value of the self. One is simply crafting an identity by trying on roles and masks.

Supporting studies show that college students told they were performing poorly in school endorsed an essay expressing the *theater* metaphor, but not an essay trivializing the value of the student role, suggesting that understanding life as a big play is distinct from simply trivializing a threatened role. Another study showed that exposure to this metaphor (vs. a nonmetaphoric description of life) buffered participants from a threat to their self-esteem. By interpreting life through a theatrical metaphor, viewing all social roles as essentially artificial dramatic performances, people can brush off threats to their performance in any given role or domain.

Other studies examine a quantification metaphor comparing value with a score along a metric. Linguistic analyses show that people commonly describe abstractions as though they were numbers. For example, government officials attempt to legitimize military aggression by comparing enemy casualties with points in a game (Lakoff, 1992). More pertinent, people commonly think and talk about personal value as though it were a number. They might cite a 140 IQ to advertise their intelligence, equate sexual prowess with number of partners, or assess what their life amounts to by tracking salary, number of publications, or years spent volunteering.

Inspired by these observations, Rothschild, Landau, and Sullivan (2011) examined the motives behind value quantification. Prior research shows that simply assigning numbers to an idea connotes precise definition (von Winterfeldt & Edwards, 1986). Hence, they hypothesized that people will gravitate toward value quantification when they feel as though they lack a clear conception of their value and seek to compensate for that deficit. They had some participants perform a task with unclear value contingencies, meaning that the performance feedback they received

made it uncertain how much success outcomes reflected personal ability versus external factors. Later they chose between equally flattering indices of their intelligence—one expressed in words, the other as a number. Compared with participants exposed to clear value contingencies or explicit negative feedback, those exposed to unclear contingencies showed decreased self-esteem certainty (but not level) and, in turn, increased preference for a quantitative representation of their value. Furthermore, this effect was specific to participants high (vs. low) in Personal Need for Structure (PNS; Thompson et al., 2001)—those known to respond to uncertainty-arousing situations with compensatory efforts to restore certainty (see Figure 5).

Future Directions

Taken as a whole, the studies just reviewed show metaphor's significance in efforts to find meaning in life. Using diverse methods, these studies intersect with several concepts and perspectives in the literature on meaning in life. The downside of this diversity is that it is difficult to draw firm conclusions about when and how metaphor use directs meaning-related processes and outcomes. To advance this research area, the next sections discuss some avenues for empirical extensions and theoretical refinement.

Dimensions of Meaning in Life

The current theoretical framework separately reviewed metaphorical influences on perceptions of life's continuity, purpose, and value. Because these dimensions figure centrally in influential

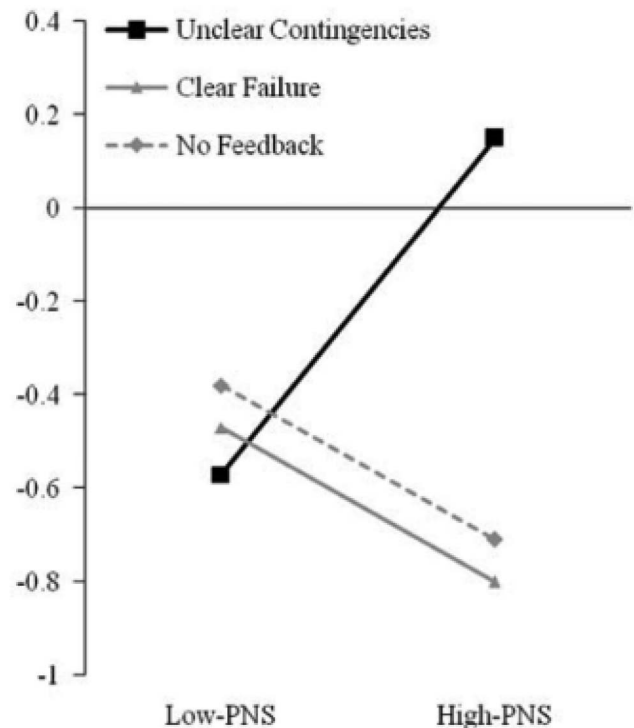


Figure 5. Structure-seeking individuals (i.e., High-PNS) prefer a quantitative (over qualitative) value index when contingencies of value are unclear (Rothschild et al., 2011).

theoretical perspectives (e.g., continuity: Bruner, 1990; purpose: Frankl, 1985; value: Becker, 1971), this organization highlights the relevance of metaphor studies.

Still, this is not an exhaustive list. Finding, possessing, and lacking meaning depend on several other constructs including community, freedom, suffering, and boredom (Baumeister, 1991; Flanagan, 2009; Hicks & Routledge, 2013; Shaver & Mikulincer, 2012). Are these conceptualized with metaphors? Although the relevant experimental tests are lacking, analyses of language suggest they are. For instance, a strong predictor of meaning in life is the perception that one is in control of life (Seligman, 1975; Skinner, 1995). When people talk about personal control, Lakoff and Johnson (1999) showed, they often liken it to concrete experiences with object integrity and fragmentation: “I need to *get myself together*; I’m *falling apart*, *all over the place*.” Future studies should directly test whether this metaphor influences perceived meaning and associated outcomes like life satisfaction. One possibility is that haptic experiences with objects produce source-consistent effects on perceived control and meaning in life even in contexts where metaphoric language is not salient.

As an organizational heuristic, the current framework draws a one-to-one connection between metaphor and dimension. The fuller picture is likely to be more complex, with a given metaphor informing multiple dimensions. Consider the metaphor *life is a story*, which portrays the self as the central character in an unfolding drama, complete with characters, chapters, and plot twists (Bruner, 1990; McAdams, 2001). It likely reinforces continuity by structuring life around a template borrowed from the domain of storytelling—one that prescribes slots for life’s aspects to build on each other in a predictable order. At the same time, stories have socially sanctioned purposes—to educate and entertain, for example—which may transfer to portray life as progressing toward a future goal. The *story* metaphor may also reinforce life’s value by casting the self as the hero in a triumphant tale of overcoming adversity (McAdams, 2001).

Future studies should also test metaphor’s impact on direct measures of meaning in life. An initial study (Baldwin, Landau, & Swanson, 2017) showed that inducing a life metaphor increased scores on the Meaning in Life Questionnaire (Steger et al., 2006) compared with other life construals (e.g., self-defining traits), especially among participants insecure of their grasp on life’s structure.

When do People Use Metaphor to Find Life’s Meaning?

The reviewed evidence suggests that thinking metaphorically does not inevitably influence perceptions of life. In some studies, metaphoric influences emerged only when participants were high in the motive for closure—a desire for clear, certain knowledge (Kruglanski, 2004). Closure motivation was variously operationalized as heightened uncertainty about identity (Keefer et al., 2011); low trait perceptions of life’s coherence (Baldwin et al., 2017); exposure to ambiguous standards of worth; and high trait preference for well-structured knowledge (Rothschild, Landau, & Sullivan, 2011).

These findings converge with studies, mentioned earlier, showing that metaphoric influences on perceptions and judgments were moderated by target abstractness and uncertainty. Taken together,

these interactive effects support the current claim that metaphor use is a unique strategy to find meaning in life: It’s particularly under the conditions people are theorized to rely on metaphor to think that we see cued metaphors shaping meaning-relevant perceptions.

Still, not all reviewed studies tested for potential moderation by closure motivation. More work is needed to assess whether this effect generalizes across other operationalizations. Studies could build on evidence that the urge toward closure is triggered by situations where thinking involves a lot of effort or is otherwise unpleasant (Kruglanski, 2004). When people feel that they are under time pressure to make a decision, if they have a lot of things on their mind, or if they are fatigued, they are more inclined to terminate the thinking process and reach closure on a simple, clear-cut interpretation. It follows that such conditions will increase reliance on concrete metaphors to understand and relate to one’s life.

Also relevant is evidence that confronting people with existential threats such as mortality and reduced personal control instigate compensatory efforts to seek simple, well-structured interpretations of social stimuli (Koole et al., 2006; Landau et al., 2015). A next step for researchers is to test whether (and when) people respond to such threats by clinging to concretizing metaphors of life. In fact, people may be so intent on assuaging existential concerns that they embrace life metaphors that are appealing for the sake of comprehension but which are ultimately harmful, perhaps because they justify commitment to unsatisfying relationships or neglect of opportunities to seek out optimal challenges.

Which Life Metaphors do People Prefer?

As mentioned at the outset, people talk about life using a wide range of metaphors. In one study (Moser, 2007), American and Swiss students asked to describe their life spontaneously used thousands of metaphoric expressions that clustered around 20 source concepts. Some sources were based in bodily experiences, such as manipulating containers (e.g., “I’m *opening up*”) and sensations of balance and weight (“Life is *crushing me*”; see also Lakoff & Johnson, 1999); other common sources did not seem to arise primarily out of bodily experience, but derived their content and structure from schematic knowledge of sociocultural ideas such as military combat, economics, sports, law, science and technology, and art.

Given the panoply of life metaphors, one empirical strategy is to zoom in on an individual metaphor to tease out its roles in self-perception, behavior, and well-being (e.g., Landau et al., 2011 studied how *container* metaphors inform representations of private vs. public dimensions of life). Another strategy examines factors—both individual difference and situational—that determine metaphor preference. Researchers can draw on conceptual metaphor theory’s claim that metaphor functions not only to support comprehension but also to put a particular spin on a target. Mapping a target onto one source directs attention to certain elements while pushing others to the periphery of awareness; alternative mappings may highlight and downplay different subsets of target elements. Hence, individuals motivated to maintain a particular interpretation of life may strategically map it onto select sources.

How, concretely, can researchers test such motivated metaphor use? They can gain inspiration from qualitative studies of group-

level differences in metaphoric communication. In one, Americans and Hungarians described life using many of the same sources—a *game*, *journey*, *compromise*, *war*, and so on (Köves, 2002). But the ordering of metaphors (see Table 1) reveals that Americans most frequently described life as a *precious possession*—a wonderful commodity that needs to be cherished and taken care of, like a prized vase. Hungarians tended instead to frame life as a constant *struggle* or an exhausting *battle*. The closest counterpart in Hungarian to the *precious possession* metaphor—life as a *gift*—figured only fourth in order.

This pattern makes sense in light of evidence that Americans are highly motivated to exaggerate their standing on valued dimensions and avoid anything that threatens to undermine their positive self-views (Heine & Buchtel, 2009). A next empirical step is testing whether situational variation in self-enhancement motivation (e.g., by means of negative personality feedback) influences preference for self-aggrandizing metaphoric conceptions of life.

Implications for the Meaning of Meaning

Theoretical implications of the present account for this special issue's inquiry into the *meaning of meaning* have been mostly implicit; here they are unpacked. To simplify this enigmatic phrase, we focus on the meaning of a human life, setting aside, for example, sentence meaning. Next, we get clues from conventional usage of the term *meaning* in ordinary discourse. Imagine your podiatrist diagnoses you with Morton's Neuroma. "What does that mean?" you ask. If she replied "It's named after Thomas George Morton who first described this condition in 1876" you would be unsatisfied. You were requesting information about this condition's influence on you (e.g., it will cause sharp pain after walking) and your response options (e.g., wear arch supports; get surgery). That's what you *mean* by the *meaning* of Morton's Neuroma.

This scenario illustrates a pragmatic definition of meaning that complements (but does not replace) more esoteric scholarly treatments. The theoretical backdrop is the notion that people have stored in long-term memory schemas representing knowledge about categories of stimuli (e.g., people, objects, events), such as beliefs about attributes of category members and memories of exemplars. The *meaning* of a stimulus refers to a subset of its schema that addresses the question: "*How do I relate to this thing?*" Pieces of schematic knowledge with less pragmatic relevance may be valued for other ends (e.g., aesthetic enjoyment), but

they are not normally represented as part of that thing's meaning. Hence, to grasp something's meaning is to confidently know how the self does, can, and should relate to it. Although people occasionally contemplate something's meaning from external or objective perspectives, typically they focus on its relevance for their own functioning and goal pursuit.

The broad question "How do I relate to this thing?" can be decomposed into three questions: *How does it work* (i.e., what are its parts and how do they interrelate)? *What is it for?* and *Is it good or bad for me?* To illustrate, once an observer classifies another person as a *librarian*, he accesses a repository of knowledge about that category organized in the form of a schema. A subset of that schema represents the librarian's meaning and includes, for example, beliefs about which traits are generally shared by members of her group ("reserved") and how those traits relate to other aspects of the world ("She probably doesn't enjoy extreme sports"); plans for how to interact with her, if at all ("I can ask her where magazines are"); and evaluations of her as good or bad for the self. From this perspective, finding meaning is not an exotic process; it's simply a label for a person's working answers to these pragmatic questions.

A corollary point, revisited momentarily, is that meanings vary in their degree of persuasiveness. Some meanings feel complete and accurate; others feel elusive or dubious. Determinants of persuasiveness need not concern us here, but likely candidates are ease of retrieval (Alter & Oppenheimer, 2009) and consensual support (Berger & Luckmann, 1967). More pertinent is the observation that unpersuasive meanings elicit an unpleasant state of uncertainty about how to relate to something, which instigates efforts to establish more compelling meanings for that thing (Heine et al., 2006).

This pragmatic definition demystifies the *meaning of life's meaning*. The first implication is that people use the same epistemic method to pursue life's meaning as they do the meaning of librarians, car registration, and Post-It notes. They refer to a subset of their total *life* schema that addresses how parts of life interrelate, what life is for, and what makes it valuable. Persuasive answers to these questions afford, respectively, the meaning dimensions we picked out: *coherence*, *purpose*, and *value*.

Why, then, do people pour vast resources into a decades-long, sometimes urgent quest to expand or deepen the meaning of their life but are not equally preoccupied with the meaning of bumper stickers and graduation parties? One answer is that many social stimuli—from role performances to cultural symbols—are designed by humans to have well-known inner workings, functions, and value. Put more simply, their meanings are *built in*—easily perceived, generally agreed-upon, and rehearsed in behavior. The meaning of life, by contrast, remains stubbornly elusive because the concept *life* lacks built-in meaning. From a biological perspective, a life form—human or otherwise—*just is*. Furthermore, as existential philosophers point out, the specific contours of an individual's life—mine, yours, Cindy's, Trevor's—are merely contingent facts that could have turned out very differently depending on millions of dumb, random occurrences (Heidegger, 1927/1962). People are at least implicitly aware of these complexly uncomfortable facts and thus work extra hard to give life meaning that feels *real* and permanent.

The second implication is that metaphor is a particularly interesting strategy for finding meaning in life. It's certainly not the

Table 1
What is life? Americans and Hungarians Differ in the Sources They Bring to Mind

Americans: Life is . . .	Hungarians: Life is . . .
1. a precious possession.	a struggle/war.
2. a game.	a compromise.
3. a journey.	a journey.
4. a container.	a gift.
5. a gamble.	a possibility.
6. a compromise.	a puzzle.
7. an experiment.	a labyrinth.
8. a test.	a game.
9. war.	freedom.
10. play.	a challenge.

only one. Several others were mentioned at the outset of this article, and still others are featured elsewhere in this special issue. However, metaphor is special because it leverages a characteristically human ability to look past the superficial differences between things to appreciate their shared structure. On the surface, life doesn't resemble a journey, a war, a casserole, or a sporting event. It is remarkable that people can filter out those superficial differences, distill the structure of such concrete concepts, and transfer that structure over to project onto life form, direction, and worth.

A third implication is that the meanings assigned to life are not arbitrary. Many influential perspectives in cultural psychology and philosophy take for granted a radical relativism according to which life's meaning is created out of whole cloth in each culture and even each individual (Berger & Luckmann, 1967). In this view, meaning is a symbolic fiction floating above concrete reality. Conceptual metaphor theory gives us a better handle on why some life meanings are likely to be culturally widespread or universal and why some are culturally specific. Metaphor use helps people to conceptualize abstractions by repurposing more concrete concepts. Hence, we can predict, a priori, that certain life metaphors will have greater universal appeal because they are rooted in common human experiences, such as correlations in embodied experience typically shared by all people (Lakoff & Johnson, 1999). For example, across cultures we see the joint metaphors *good is up* and *bad is down* reflected in the way people think and communicate about life (e.g., "She's *rising* in stature;" "Things have been *downhill* since Mabel left"). This suggests that people everywhere use the vertical dimension of space to orient themselves to positive and negative aspects of life, such as happiness, health, depression, power, success, divinity, and morality. This universality is not coincidental. Humans cannot be upright without some degree of health, and when they are sad, they tend to hold a stooped posture. These and other species-specific bodily dynamics help account for the similarities in the spatial representation of life's value across different geographical locations and historical periods. This example illustrates the broader point: Metaphor development and use are constrained by our routine interactions with the physical and social environments.

To sum up some implications for understanding the meaning of meaning:

1. Pursuing meaning in life is not a mysterious process. It's a summary label for efforts to find compelling answers to three pragmatic questions about life: How do its parts connect? What is it for? What is it worth? Complicating matters, however, life's lack of intrinsic coherence, purpose, and value weakens confidence in life's meaning, motivating persistent efforts to find compelling meanings.
2. Among the many strategies for finding meaning in life, metaphor use is remarkable because it involves an ability, unique to humans, to comprehend how two concepts share a similar structure despite their superficial differences.
3. The meanings people give to life are not arbitrary fictions unmoored from concrete functioning. Those based in

metaphors structure life around schematic knowledge of interactions with the physical environment (e.g., habitual motor routines) and the social environment (e.g., applying folk psychology to personify nonhuman entities). By attending to the metaphors that people in different cultural contexts use to collectively represent and communicate life's meaning (e.g., in language, art, and other cultural practices), researchers can make specific predictions about which meanings are likely to be culturally universal and which are culturally specific.

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