

## SYNTHESIS

# Finding the Meaning of Meaning: Emerging Insights on Four Grand Questions

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This is a stand-alone reflection on meaning written by two scholars who recently edited a special issue on that topic. The first of four organizing questions concerns the nature of meaning. The meaning of signs (e.g., words) consists of nonphysical connection (e.g., symbolism) and potential organization. Meanwhile, existential meaning (meaning of life) involves purpose, value, mattering, continuity, and coherence. The second question concerns how meaning affects behavior. Answers are diverse and multifaceted, ranging from efforts to grapple with uncertainty and unknowns to engaging in significance-seeking violence and self-regulating in light of abstract values and standards. To the question of whether meaning is made or found, the authors propose that finding meaning is prevalent, while the creation of new meanings is only supported in a limited sense. Although often portrayed as a constructive process, accessing meaning normally involves relating target stimuli to what is already known. A fourth question asks whether meaning is individual/personal or collective/social. The collective dimension plays an integral yet often neglected role in scaffolding personal meanings.

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What is meaning, and how does it operate in the lives of individuals and societies? These questions reverberate through multiple disciplines. Although influential answers traditionally come from philosophers, psychologists are increasingly investigating what meaning is, how people find and lose it, and the role that meaning plays in diverse aspects of human behavior and experience. These developments are featured in a recent special issue of the *Review of General Psychology*.

Editing such an issue is often a tedious and thankless task, but it does give the editor a rare, broad perspective on the topic under study. The goal of this brief article is to articulate lessons learned. It is intended as a stand-alone contribution, accessible to readers who have not read the rest of the special issue.

Meaning seems to fit the quip that everyone wants it, but nobody knows quite what it is. Despite the slippery conceptualization, meaning is clearly important. People in many societies seek and negotiate meaning, clash and argue with others who embrace incompatible meanings, and struggle to cope with loss of or threat to meaning. It is, therefore, not surprising that the topic has spurred a variety of conceptual and empirical questions. We identify four such questions and propose answers arising from the nine papers in the special issue.

### What Is Meaning?

For the sake of logical theory development, we begin with the most basic question, which unfortunately is also the most esoteric. Readers without a passionate interest in these issues may prefer to skip ahead to the next question section.

### Two Meanings of Meaning

Not all usages of meaning fit the same definition. There are at least two broad types. One is basic, denotative meaning, as in the meaning of a sentence or sign. The other is existential meaning, namely, the meaning of life. Although English uses the same word to refer to both, other languages denote them with different words. For example, German has both *Bedeutung* (akin to denotation) and *Sinn* (related to the English word “sense,” as in purpose or point). To appreciate the distinction, consider that attaining meaning in life is rarely achieved by merely looking up “Life” in the dictionary. Instead, it requires elaborating ideas about purpose and value and instantiating those abstractions in one’s activities, or at least in one’s perception of those activities. Questions about the meaning of life demand existential, not denotative, answers.

Thus, the question *What is meaning?* takes two different forms. The more general one asks about the nature of meaning per se. It concerns how a word, artifact, or event can mean anything, as well as whether meanings reside in individual brains or in the external world (and whether that means the social world of shared understandings or the physical world of molecules), and why some meanings are favored over others. The more specific question concerns the meaning of life. Why do people consider some

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events, stimuli, and even some lives to be more meaningful or meaningless than others?

### Symbols, Agents, Contexts

Insights into both types of meaning come from the study of symbol use. Symbols belong to the broader category of signs—entities that stand for (signify) something else (objects). Sign and object can have different kinds of relationships, as explained by the founders of 20th century semiotics (de Saussure, 1983; Peirce, 1982). They may be physically related, in the way that smoke stands for fire (a “warning sign”) because of a reliable causal connection. Symbols are different in that they do not rely on a concrete physical connection. Rather, they stand for objects based on some convention, habit, or social rule. For example, people know that a red traffic light means that one should stop, but there is no direct physical connection between the red light and vehicle operation. Rather, customs and laws establish the connection between red light and stopping. As Abbott (2018) emphasizes, the red light does not directly cause cars to stop. Rather, an agent must understand the symbol’s meaning (stop) and initiate action based upon that meaning (step on brake).

Crucially, meaning is not accessed in separate bits but rather in networks of related concepts (Peirce, 1982). Put differently, things do not have meaning by themselves but rather within a web of contexts linking and distinguishing other things. As one obvious example, the number 60 cannot exist in any sense by itself and is only meaningful in the context of plenty of other numbers arranged in order. It can take on additional meanings, such as being the single-season home run record set by Babe Ruth, but again that fact has meaning only in the context of baseball history, the game’s rules, and all the other people who have played it professionally.

Probably the most basic meanings are association (linking stimuli together) and distinction (registering difference between stimuli). These are accessed by many nonhuman animals, but humans evolved to harness the full power of symbolism, which allows them to represent and communicate elaborate meanings that are far removed from immediately present stimuli (Deacon, 1998; Langer, 1988). This facility with meanings is also made possible by human sociality, because meanings can emerge from interactions between individuals (a point to which we return).

Hence, understanding how minds use symbols shows meaning to be based on sometimes arbitrary and nonphysical connections among things. Typically, an individual meaning is situated in a network of conceptual relationships (a context), and sometimes the same symbol will have different meanings depending on the context (e.g., red lights as traffic signals or Christmas decorations). Any functioning of symbols in the physical world requires agents capable of situating those symbols within broader conceptual networks—and thereby understanding the symbols and acting on their meaning.

### Meaning Is Not Physical but Real

Finland is full of molecules, and a Finnish flag is also made of molecules, but the manner in which the flag stands for the entire country has nothing to do with how its molecules interact with the country’s molecules. The connection is symbolic, which is not physical (indeed the symbolic relationship is the same regardless

of whether the flag is in Finland proper or far overseas). The connection depends on the minds of agents who share the understanding of its meaning.

Thus, again, symbolic meaning is not a physical thing. What makes a flag stand for a country, or 10 dimes equal to a dollar, is not discernible from any analysis of the volume, weight, chemical makeup, or other physical properties of the flag or the currency units. Instead, symbols point to other symbols in networks, indeed ones that require a community of brains that can create shared understandings. The connections that constitute those networks are social conventions, laws, and the like. Hence, a symbol’s meaning inheres in its position within a network rather than its resemblance to physical things. Returning to the number 60 as an example: Its meaning within a network of symbols is independent of any specific physical fact.

All physically real entities have definite physical properties: mass, precise location in space, velocity, acceleration, electrical charge, and (except for tiny particles) molecular structure and chemical composition. These are not optional: Every physical item has all of them. Meaning has none of these. If one analyzes meaningful entities—language, morality, the wrongness of “ $2 + 2 = 5$ ”, democracy, indeed ideas in general—none of them can be characterized in those physical terms. At highly abstract metalevels, the connection to the physical world is remote or even entirely absent, such as in advanced mathematics or moral debate involving hypothetical dilemmas.

Acknowledging the nonphysical nature of meaning raises an ontological question: Is meaning real? Many psychological scientists adopt a naïve physicalist view, assuming that everything that is real is made of physical matter (atoms, molecules, chemicals, etc.). Defining reality in purely physical terms requires concluding either that meaning is not real or that meanings are ultimately physical things. Neither view stands up well to critical scrutiny.

To the former view, although symbolic meanings are not reducible to physical terms, they are no less real in the sense of organizing reality and the agent’s experience thereof. In social psychology, for example, the extensive literatures on cognitive dissonance and balance theory demonstrate that ideas and their relations (in this case, consistency) have a measurable impact on overt behavior and physiological states like arousal (Cooper, 2007).

Indeed, it seems absurd to deny the reality of meaning, given its causal importance in the physical world. Buildings are physical entities, but almost every building existed as an idea (designed, detailed, revised, approved) before it existed as a physical fact. Mathematics helps impose organization on the physical environment in countless ways ranging from economic calculations to surveying land. Obviously, meaning also helps to organize social life. As one example, the difference between animal mating and human marriage is partly the organizing effects of the symbolic contract of marriage. As another example, democracy is a highly successful form of social action and collective decision-making, essentially unknown in nature but widespread in (modern) human social life. Although democracy is an idea that cannot be seen or touched or chemically analyzed, it furnishes a new kind of organization for group life.

Further evidence of the reality of meaning can be found in how physical events are changed by the social uses of meaning. Ideas can move molecules, at least when physical agents use them to

inform their actions. A declaration of war causes many molecules to be rearranged. [Abbott's \(2018\)](#) examples of how changing prices affect sales volume nicely illustrate how a symbolic meaning can have physical consequences. Likewise, self-regulation often incorporates meanings to regulate molecules, as when a dieter changes what she eats based on numbers such as scale weight and calorie counts.

What about the claim that meanings (or any mental states, for that matter) are real only as physical events in the brain (a version of the perspective called eliminative materialism, e.g., [Stich, 1983](#))? One limitation of this view is that it cannot explain how different brains can have the same idea, or why the meaning of “ $2 + 2 = 4$ ” remains unchanged when a brain that knew it dies. If a meaning's existence were reducible solely to brain activity, then it could not survive the death of the brain. Brains instantiate meanings rather than constituting them. Also, meanings may depend on agents with brains to have any physical impact, but they are not entirely at the mercy of them. A brain is wrong if it believes “ $2 + 2 = 5$ ”—and not merely because it happens to be outvoted by other brains.

Summing up our analysis, we arrive at two keys to understanding the nature of meaning: nonphysical connection and potential organization. Together they explain how meaning is detached from the material world yet nevertheless exerts a real impact on physical phenomena.

Understanding meaning as nonphysical connection and potential organization invokes many themes from the special issue. Conceptual metaphor theory ([Landau, 2018](#)) explains people's efforts to understand abstract or complex concepts by using analogies to well-understood, typically more concrete things. A metaphor can compare things that share no salient physical properties (e.g., conceiving social status as a “ladder” that people climb up and down). In this way, it helps the agent to look past superficial differences, access a network of ideas about a concrete thing (e.g., its parts and how they relate), and apply that structure to conceptualize analogous parts of an abstraction. In this sense, metaphor use resembles other tools for understanding (e.g., heuristics) in that it relates challenging or unfamiliar ideas to what one knows (a point to which we return). That is why, as [Wu and Dunning \(2018\)](#) point out, people may fail to understand events or actions because they lack sufficient knowledge to provide a mental context in which to connect those stimuli.

### What Are Meanings of Life?

The foregoing characterization of meaning applies generally to the meaning of pretty much anything, from a street sign to a political ideology. But some scholars, and people in general, are especially preoccupied with the meaning of life.

Meanings of life are conceptualized in somewhat different ways by different researchers, and probably in even more diverse ways by the people who participate in their studies. Nevertheless, several key themes are worth mentioning. Most thinkers include purpose: Life in general, and particular events or activities, draw meaning by being connected to higher and/or future goals. [Frankl \(1985\)](#) equated meaning with purpose. [Baumeister \(1991\)](#) added value, efficacy, and self-worth. Self-worth has not been mentioned much in recent writings, though perhaps it is implicit.

Multiple articles in the special issue referred to the importance of *matter*, which seems to be a combination of efficacy and self-worth. People find life meaningful insofar as they feel they matter. Value is also included in most ideas of life's meaning, sometimes explicitly and sometimes implicitly ([Kruglanski et al., 2018](#)). Not all purposes are equal, after all—and people want their lives to have value, not just purpose.

Continuity and coherence also emerged in the special issue repeatedly as contributors to existential meaning. *Continuity* means connection across time. In a purely physical sense, all lives are equally meaningful in that an organism has physical continuity across the moments between birth and death (despite gradual changes in molecular content and configuration). Yet, for most people, this physical sameness does not itself provide a satisfying sense of continuity in life; they also want to perceive that their personal history, current identity and activities, and future identities and goals are integrated into a sequence that unfolds reliably over time.

Continuity, then, is a variety of autobiographical coherence in which temporally remote parts of life are viewed as connected. People derive meaning in life partly by crafting a story in which the present is explained both as the product of past events and as a springboard for future states toward which they are striving ([Habermas & Bluck, 2000](#)). Other varieties of coherence include thematic coherence derived from connecting personal episodes separated in time to overarching themes that help define one's life (e.g., “standing up for my rights”).

Both continuity and coherence invoke the two key aspects of meaning discussed in the previous section. First, they are a matter of nonphysical connection. A life has many different moments, actions, and experiences, and there is no inherent need for them to be coherent. Coherence and continuity consist of connections across time, without physical causation being the glue that binds those connections. They also impose organization by directing how even temporally remote events unfold. Keeping a promise, for example, organizes behavior across time (and changes how molecules are moved).

Indeed, the idea that meaning is nonphysical connection that provides organization is a central assumption underlying meanings of life (e.g., [Hooker, Masters, & Park, 2018](#); [Van Tongeren et al., 2018](#)). Purpose links future events to present and past ones. Continuity is a degree to which different moments or events in one's life are consistent with each other. Nostalgia enriches the present by linking to various valued events in the past ([Sedikides & Wildschut, 2018](#)). [Park and George \(2018\)](#) linked the two kinds of meaning (i.e., life's meaning and denotative meaning): The structure of threats to meaning involves violation of expectancy, thus a failure to connect the threatening event to what one already knows. Such threats to existential meaning motivate strenuous efforts to restore connection, so again molecules are moved by a human being's quest for meaning.

### Section Conclusion

Meaning exists by defining how physical events and stimuli can be organized, even though meaning itself lacks the properties of physical reality. It also governs social events and stimuli. Meaning has its own structures and system. The fundamental, denotative sort of meaning is the basis of information and comes not in

isolated pieces but rather in networks of associations and distinctions. Existential meaning involves purpose, value, mattering, continuity, and coherence. These too exploit nonphysical connections to relate entities and events across time, and in this way shape social and physical reality.

### How Does Meaning Influence Behavior?

The question of how meaning influences behavior may seem deceptively simple, but it has extensive ramifications, and for traditional, behavior-minded psychologists it is the foremost question. We have already insisted that meaning is not itself a physical, material thing. Behavior is physical, however (though often overlaid with and even caused by symbolic meanings). To the extent that meaning shapes or guides behavior, then, nonphysical realities become part of physical causation. Stated more simply, ideas help cause behavior. Of course, ideas do not have causal power all by themselves; instead, physical things (brains) can use ideas as organizing principles to alter the steering of behavior. For example, a moral principle does not itself cause action, but brains socialized to understand moral principles can alter behavior on their basis. Physical reality thus uses meaning to organize its processes, and in this way, meaning enters into the stream of physical causation.

The assertion that ideas enter into the stream of physical causation may offend those committed to a highly reductionistic style of thinking, such as the people who believe that the laws of physics can eventually explain everything—or, closer to home, that understanding how the brain works will supplant most other psychological theory. (For influential contrary view, see *Anderson, 1972*.) Yet we think most social scientists acknowledge the causal power of ideas. In our own field of social psychology, the causal power of various mental states (norms, prejudice, attitudes, moral principles, consistency, threats to self-esteem) is an indispensable assumption.

Meanings can enter into the causation of physical action in a rich and diverse assortment of ways. One of the broadest and most frequent is in self-regulation (*Van Tongeren et al., 2018*). People adjust their actions to bring them in line with standards, often ones valued by society. (Note that standards, as ideas of how things should be, are detached from physical reality as it currently is). As a result, selfish and other antisocial actions are curbed.

Self-regulation is generally positive in nature, but the quest for meaning can cause destructive actions too. *Kruglanski et al. (2018)* emphasize that terrorists and other violent extremists often are motivated by the desire to matter, that is, to be someone whose life is meaningful and significant. As a result, they embrace a set of meanings, called “the Narrative,” and carry out acts of violence—sometimes causing the seemingly pointless deaths of innocent strangers—that accomplish little of substance but make symbolic statements upholding their group’s values. The symbolism is of course an indication of the importance of meaning. Terrorist acts are often pragmatically futile. The symbolic message is all that they accomplish.

Goal pursuit is often aided by meanings (see *Van Tongeren et al., 2018*). *Landau (2018)* reports studies (*Landau, Oyserman, et al., 2014*) showing that people led to represent a desired future identity metaphorically as a destination on a personal journey (vs. without a metaphor) saw that identity as more strongly connected to who they are now. This metaphor-bolstered continuity in turn motivated people

to take active steps to achieve their goals (e.g., trying harder on a test), rather than slack off. The metaphor-based meaning portrayed current activities as determining long-term outcomes, strengthening efforts to take goal-directed action in the present.

Another dimension of how meaning affects behavior was elucidated by *Baumeister, Maranges, and Vohs (2018)*, who proposed that much of human behavior is directly about meaning, indeed essentially trafficking in information. The view of the human self as an information agent posits that much of what people do involves communicating information, including arguing, teaching, and gossiping. Questioning and arguing involve the effort to improve the quality of shared information. From this perspective, an integral and essential part of modern human behavior is the exchange of information, either as outcome and purpose or as essential cause. As prominent examples, most modern jobs are partly based on exchange of information, and many are entirely based on it (e.g., corporate management, information systems, university faculty).

*Wu and Dunning’s (2018)* discussion of hypocognition highlights a different set of ways that meaning affects behavior. When people lack the context (i.e., the basic knowledge structures) to understand something, they cannot remember it as well or make use of it as effectively. Information does not function as isolated ideas or bits of data, but rather as an organized structure of knowledge. People may fail to benefit from new information if they do not know enough contextual information to know how to make use of it. *Wu and Dunning* review studies showing some of the behavioral costs of hypocognition, such as impaired performance at chess and problem-solving.

Meaning also has important consequences for mental and physical well-being. *Hooker et al. (2018)* reported fascinating findings indicating that having a strong sense that life is meaningful buffers people against the negative impact of stresses and hassles. They emphasized that the operative variable is not merely an abstract sense that life is probably meaningful, but rather an acute awareness of life’s meaningfulness, purpose, and value. People who lack that awareness show increases in depressive symptoms and other problems when life is stressful, but people with that awareness of meaning can carry on relatively unaffected. Among the mediating processes are more adaptive styles of coping and overall improvement in health behaviors. People with a high sense of meaning engage in more and better self-regulation (akin to the analysis by *Van Tongeren et al., 2018*).

In sum, both kinds of meaning figure prominently in diverse ways in the causation of behavior. The conceptual connection and organizational aspects of meaning are useful to humans for guiding their behavior. Even at the simpler level of animal cognition, the learning of associations occurs precisely because it generally helped organisms behave adaptively. Meaning itself lacks causal influence on physical things, but brains (and other intelligent agents, such as computers) can process meanings and alter behavioral responses on that basis, so that molecules move based on meaning.

### Is Meaning Found or Made (Or Both)—and If So, How?

Creative processes can be sorted roughly into discovery and invention (*Piscopo & Birattari, 2013*). Discovery means finding something that already exists, whereas invention means creating something that did not exist previously. Which is appropriate for describing meaning? Scientists generally present their work as discovery rather than invention (though inventions sometimes can

follow based on these discoveries, such as when the discovery of lasers led to the invention of surgical devices). Even mathematicians, who explore a realm of meaning rather than the physical environment, think of their work as discovery more than invention (though there are some mathematical products, such as methods, that can be fairly described as inventions; see Gowers, 2011). For example, Polkinghorne (2011) noted that mathematicians typically regard their work as “acts of discovery as they explore an independent realm of reality” (p. 1). As a vivid example, arithmetic facts such as “ $5 + 7 = 12$ ” are the same everywhere, despite being developed independently, and so it is hard to consider them as inventions. In these senses, meaning is found, not made.

Meanwhile, creative artists definitely consider what they do as invention (creation), rather than discovery. But even so, does the novel or painting create new meaning, or merely express something that already existed? The point is that, contra convention, a stronger case can be made that meaning is found rather than made. Next, we consider how articles in this special issue illuminated this controversy.

### The Case(s) for Making Meaning

The call for the special issue used the title “Finding Meaning”—thus adopting the more cautious treatment of meaning as discovery rather than invention. To invoke again the example of the number system, there are presumably numbers that have never actually been used or thought, but their place in the system of numbers is implicit in the system, so it makes little sense to discuss the “invention” of new numbers. Despite the “Finding Meaning” title, however, many submitted articles referred to “making meaning.” The three editors agreed to be open to this usage but to challenge authors to say exactly in what sense something new was being made. We suspected that many authors had used the “making meaning” phrase casually, without making ontological claims about the creation of something new. Consistent with that impression, most authors responded to our challenge by simply changing their terminology to eliminate claims about making meaning. They presumably found that they could explain their findings and ideas perfectly well without asserting that meaning is made.

The main outstanding exception was Park and colleagues (see Hooker et al., 2018; also especially Park & George, 2018). Their usage of making meaning does not make a strong assertion of the creation of something objectively new, but rather subjectively new. A person makes meaning by mentally connecting things. The connection is new to that person and, if the person is the first person to link those two things, new to society, even new to the physical universe in the sense of being the first time that physical molecules were moved in accordance with that bit of meaning. Still, one could argue that it was merely a discovery of the possible organization that already existed (i.e., existed as possibility, not reality)—just as the first person to use some particular very large number did not really invent a new number but simply found reason to use it, when no one else ever had.

Making meaning as used by Park and colleagues seems like the colloquial “making sense,” a term commonly used for achieving a subjective understanding. (Also recall the word *sense* is related to the German word *Sinn*, which is one of two meanings of meaning.) Clearly the authors are correct that people do make sense of things, that is, arrive after some mental exertion at an integrative under-

standing. Still, when people say, “It took me a while to make sense of it all,” they are not talking about creating something new. Rather, they simply mean they are achieving a subjective understanding of what was already existing outside of them.

Abbott (2018) also retained terminology implying that meaning is essentially made. With a background in computer science and philosophy, Abbott’s assumptions are somewhat different from those of psychology. In his view, meaning is made when an agent responds to a symbol by initiating or changing action. His point is that an agent responding to a symbol is not the same as an instance of physical causation, such as snow melting in the hot sun. The agent effectively decides whether to respond this way or that way, based on interpreting the symbol. To us, that still does not constitute the creation of new meaning, but it does point toward one process by which an abstract meaning (as possible organization) becomes physically real by directing physical phenomena. The abstract idea of stopping that is expressed by a red traffic light can become a physical reality in the abrupt deceleration of a car.

Thus, meaning making in both the ways the term is used by Park and colleagues (2018) and by Abbott (2018) involves the transition of meanings from abstractions into physical processes. In Abbott’s sense, the agent translates the symbol into observable action. In Park’s sense, the individual brain’s activity reconciles the new event with its existing knowledge, and in the process, changes (however slightly) the distribution of molecules in the agent’s brain. That seems to be the best case for “making” meaning.

### Using Meaning

Human life consists of physical events that are interpreted, that is, that become endowed with meaning. Indeed, they are often shaped by meaning, in the sense that ideas and values influence behavior, and plans guide actions. Whether the process is described as finding or making, the key aspect seems to be linking something new or perplexing to existing knowledge structures (variously termed schemas, stereotypes, lay theories, internal working models, ideologies, worldviews, scripts, and so on). The interpreting mind takes the target stimulus and thinks how it relates to what it already believes.

The conceptual metaphor argument (Landau, 2018) is a paradigmatic example of this process of coming to represent some of the possible connections between well-known and lesser known things. When the target stimulus is readily understood in the context of prior knowledge, no concretizing metaphors are needed. But when it appears vague, complicated, or unpredictable, one seeks to make sense of it by forging an analogy to something better understood. As abstract things are generally harder to understand than specific, concrete ones, the usual use of metaphor is to provide a concrete analogy to help understand some abstract concept (e.g., understanding love as a kind of shared journey along a path).

The hardest things to understand are those that lie beyond the horizons of one’s knowledge, not finding any (even metaphorical) place in the organized system of prior knowledge structures. Wu and Dunning (2018) analyze these problems and processes, highlighting the key role played by mismatch between a target stimulus and existing knowledge structures. To borrow one of their examples, people who live in cultures with fewer names for colors can see differences in color just as well as other people—but they do

not remember them or process them as well. The different shades of blue just settle in the mind into the “blue” category, unless one’s culture has names for different shades of blue, in which case the differences are remembered better. In another example, nonexperts do not have a basis for realizing what they do not know, whereas experts often have a fairly precise and clear idea of what it is they do not know. Consequently, nonexperts cannot judge their ability as well as the experts can (i.e., the Dunning-Kruger effect). They lack the knowledge structures needed to evaluate the quality of their own performance.

Thus, the crucial aspect of using meaning is perhaps neither finding nor making but rather integrating. By adulthood the person has a vast body of knowledge that forms the basis for encountering or reinterpreting something that is new, vague, or complicated. In the process, the target stimulus is modified to fit what is known, and the body of knowledge is also modified to accommodate the new meaning. This back-and-forth process has been dubbed the hermeneutical circle, as the discipline of hermeneutics (named for Hermes, the messenger of the gods, who thus symbolized the back-and-forth process) analyzes interpretive processes (e.g., [Gadamer, 1975](#)).

Their study of nostalgia sheds particularly informative light on how meaning is used. As [Sedikides and Wildschut \(2018\)](#) explain, nostalgia enriches meaningfulness of life in at least two ways. First, it increases continuity by explicitly connecting the past to the present (and future). Second, it increases the sense of belongingness. Nostalgia is not solely or fundamentally about incorporating something new into existing knowledge structures, like most of the current examples. Rather, it strengthens the nonphysical connection aspect of meaning, producing emotion in the present by linking to past experiences. Thus, again, both integration and modification are evident: The present moment is integrated with the past (and the self is connected with other people), and present experience is modified by the connection.

## Section Conclusion

This section had a two-part question. The first part dealt with whether meaning is more accurately characterized as made (creation) or found (discovery). Although many researchers refer casually to making meaning, we contend that meaning is in almost every case found. Proponents of the “make” portrayal argue that people “make sense” of something at a subjective level ([Park & George, 2018](#)), or that agents make meaning by transforming abstract possibility into physical reality, such as when people think about meanings or when agents use symbols to guide their actions ([Abbott, 2018](#)). Although these points are well taken, the case for creating something wholly new remains elusive. At best, some actions move meaning from abstract idea into changes in physical reality. Looking beyond the articles’ specifics, we urge researchers to rethink the conventional, prevailing notion that people generally “make” or “construct” meaning.” This assumption is reproduced in textbooks and popular overviews of the field, but it may obscure the nature of meaning and its roles in thought and behavior.

The second part of this section asked how meaning is “realized” (again a term that mixes discovery and invention). The brain incorporates new or otherwise problematic information into its existing body of knowledge, in the process modifying both the stimulus at hand and the prior knowledge base. This process may

sound fairly solitary, but the next section will consider whether meaning is really a private, personal affair.

## Is Meaning Individual or Collective?

Is meaning a private, personal phenomenon or something that is fundamentally social and shared? This is an important but complex question. In psychology, researchers typically measure meaning-related processes at the individual level (e.g., using self-report measures of meaning in life). But one could certainly argue for a collective dimension. Consider that language is arguably the world’s premier tool for using meaning, and it is fundamentally collective. Children learn their society’s language and use it as a basis for thinking about both the social and the physical environment. In this way, individual thinking rests on collective understanding.

The lone organism uses meaning in a limited way, registering nonphysical connections and using them to organize its understanding of the world. Simple acts of meaning involve discerning patterns and forming associations and distinctions. A well-trained laboratory rat presses the bar when the light is on, and thereby it receives food rewards, and when the light goes out (signaling no more food) the rat stops pressing. This learning of simple associations shows that meaning can be processed individually. But perhaps that is not what mainly happens among human beings.

## Collective Aspects of Meaning

If language is both the main tool for using meaning and inherently collective, then the strong and ubiquitous human motivation to acquire language suggests that people are designed not just to think but to think collectively and communicate. [Pinker’s \(2007\)](#) case for a language instinct noted the dramatic comparison between sign language acquisition between chimpanzees and humans. Chimpanzees can be taught to communicate by gesture, but they are often slow, reluctant learners, and they show very little interest in using it to communicate with each other. In contrast, when sign language was first introduced to (human) schools for the deaf, the children not only adopted it quickly and eagerly and used it among themselves, but they introduced innovations to improve it.

A similar motivation was evident in recent laboratory research by [Jolly, Tamir, Burum, and Mitchell \(2017\)](#), which shows that people particularly wished to share positive experiences with others, and that they would sacrifice small amounts of money in order that they could do so. Moreover, their desire to share was independent of any improvement of the experience. They wanted to share the experience to improve their connection to others.

Perhaps, then, the human mind is not content simply to acquire meaning. Instead, it is motivated to share thoughts and ideas with others. This is one theme of the paper by [Baumeister et al. \(2018\)](#) contending that people operate as information agents, collecting, refining, and sharing information, so as to reach and maintain a collectively shared understanding of the world.

This interpersonal perspective suggests an intriguing possibility: Meaning can only be used to full advantage by a group. Just as with language itself, information is far more useful and extensive if shared by multiple contributors rather than held in a single, solitary brain, no matter how smart. Indeed, the very term “infor-

mation” is linked to communication (i.e., *inform*). Thus, the term itself suggests that humans engage with knowledge as something to be shared.

In that sense, the human use of meaning is inherently collective. For most animals, meaning is mostly a private affair, of gathering information and extracting lessons to guide future responses. Human minds may do this occasionally, but the universality of language entails that the overwhelming majority of human cognition rests on *collectively* accumulated knowledge—including both the medium (the common language) and the shared knowledge base. In principle, anyone can privately use arithmetic, but knowledge of arithmetic (let alone algebra, trigonometry, and calculus) is much too much for a single person to discover, so it gets built up over many generations. Once something has entered into the collective store of knowledge, individuals learn to use it. In practice, each person learns most information from the group rather than discovering it independently.

The collective accumulation of knowledge and information is a key human innovation, especially in the context of the information agent theory (Baumeister et al., 2018). The social group builds up a common stock of knowledge and other shared information. The term *doxa* has been used (Bourdieu, 1977) to refer to that which is commonly understood without needing to be said within a society or social group. This appears to be mainly a human attribute, as other species have none or only a few shreds. The *commonly* word emphasizes the collective nature of the meaning. People mainly have conversations based on a wealth of shared assumptions that do not require explicit restatement. When events occur or facts arise that are novel or difficult to grasp, people tend to discuss them, which is a way of integrating them with the shared understandings (Sherif, 1966). This is thus a collective version of the hermeneutical circle.

Probably a great deal of human conversation functions basically to integrate new information into the *doxa*. People discuss target events and how these mesh with or refine the collective body of knowledge. As we write this, Americans are talking about recent events including sexual harassment accusations, football outcomes and injuries, political fortunes, and terrorists and spree killers, among others. Their discussions are aimed in part to transmit information to one another, but also to reconsider the *doxa* in light of the event under discussion. No person alone can definitively decide what something in the collective sphere means, so it helps to contextualize it by way of updating and maintaining the *doxa*. This is the hermeneutical circle at work: What people already know in common informs how they interpret and discuss new events, and the new ones can modify the *doxa*.

The notion of *doxa* is also highly relevant to the Kruglanski et al. (2018) paper on terrorism. As they suggest, “downtrodden individuals are drawn to extremism as a mechanism through which they can remedy their state of insignificance” (p. 109). In many cases that entails joining a group and embracing its significance-conferring worldview. They offer the example of Muslims who believe that their coreligionists are discriminated against, mistreated, and humiliated all over the world. Joining a network of people who share such beliefs, and who are furthermore convinced that their religion is the only true one, puts them into a position where such beliefs are not questioned and violence is justified as a means of responding to threats to the group’s existence or value.

## Personal Aspects of Meaning

Having elucidated the collective aspect, let us briefly reconsider the private aspect. The meaning-making processes discussed by Park and colleagues (2018) seem largely private: The person makes the connection between general and specific (though as we have noted, in everyday life people may do this collectively with reference to the *doxa*). Even in those cases, however, the meaning is not truly private. Heidegger (1927) asserted that nothing is truly private. At most, an individual has a secret collection of things borrowed from the public realm. The ways of understanding are often taught by the collective (and certainly the language in which thoughts are formed). Plus, the individual typically uses much of the *doxa* when seeking to make sense of some event.

Against Heidegger’s view, an evolutionary perspective would point out that the use of meaning by most nonhuman animals is almost entirely private, as already noted. For most animals, meaning is mostly a private matter of gathering information and extracting lessons to guide future responses. They lack a *doxa*. Still, humans may be fundamentally different in this regard. The much more advanced theory of mind that humans have (e.g., Tomasello, 2014) produces an ongoing sensitivity to what one knows differently than others know and what one knows in common with them.

Private meanings certainly exist in the sense that some stimuli may have more associations for one individual than for others. The concept of sentimental value rests on some item having higher value for one person than others based on emotional associations. Someone seeking to sell a house or car may ask a higher price than the buyer wishes to pay, based on sentimental value (which the buyer fails to appreciate). Likewise, nostalgic thoughts are often experienced alone, yet their contents often connect one with others (Sedikides & Wildschut, 2018). Again, the private meaning is a personalized version of the public realm (Heidegger, 1927).

So, altogether, meaning is more collective than individual, though there is an important individual component. Still, this remains a nuanced question that deserves further theoretical attention. One useful starting point is to think of meaning use metaphorically as participation in a game or a sport. In an American football game, for example, each player performs his own role, suffers his own injuries, adjusts his own play, and forms his own memories—but all within the collective context. Indeed, none of his actions or experience makes sense outside the collective context of the entire game and the many other players, often even with a broader context such as this game’s effect on the standings and eventual championship. Thus, the game is essentially and inherently a collective affair, even though people participate in it and understand it, to some extent, as separate individuals.

## Life Meanings

If language and shared reality (the *doxa*) show a powerfully collective aspect of meaning, meanings of life seem quintessentially individual. Yet once again the collective dimension lurks not far below the surface. A person’s meaning of life may comprise how that person interprets the purpose, continuity, and value of his or her life. Still, value, continuity, and purpose are largely gleaned from culture and society, along with the preferred ways of thinking about them and the language in which those concepts are enacted (Berger & Luckmann, 1967; Mead, 1934).

The most meaningful activities generally involve relating to other people. In fact, by far the most frequently cited source of meaning in life is close relationships (e.g., Lambert et al., 2013). When asked to articulate what makes their lives meaningful, people primarily mention family and friends and other relationships to various people and groups. Even mental events that may seem private, such as nostalgia, end up enhancing meaning by increasing a sense of social connection (Sedikides & Wildschut, 2018).

However commonly people cite relationships as the main source of existential meaning, there is something tenuous about such answers, objectively speaking. Connection to another does not seem sufficient to endow something with positive meaning. Does a piece of mud become more meaningful (and in a positive way, yet) because it sticks to your shoe and later gets ground into your rug? Another seeming fallacy is claiming one's life has meaning and value by virtue of raising children. But so what? The children in turn presumably will get purpose and value by raising their own children, and so on. This sort of thinking passes the existential buck indefinitely.

One way to make sense of these patterns is that human beings are basically animals, with animal wants, needs, and behaviors, so the human addition of meaning simply dresses up the basic animal responses with highfalutin ideas. Like other animals, people want to prolong life, accumulate resources, have good sex, and maintain membership in important social groups. Much of the meaning of life involves doing these things with a gloss of higher meaning. People may talk about the central importance of love and a good relationship, for example, to give their lives meaning, and when a love relationship ends, they may experience an existential crisis—but usually this is resolved by finding someone else to love (Baumeister & Wotman, 1992). If meaning comes from connecting with others, per se, then it does not matter much who the others are, and certainly the others are eminently replaceable.

Interpersonal relationships do however seem well suited to provide meaning, as opposed to more life-sustaining activities such as breathing and urination. Relationships extend across time. They are powerful ways of enabling people to feel that they matter, because clearly they matter to the relationship partners. (This may be why unrequited love is a threat to meaning.) Relationships connect present and past events with future purposes and provide fulfillment. They offer opportunities for efficacy (e.g., caring for children) and self-worth (e.g., being chosen among romantic rivals).

Apart from the notion that connecting with others is a main source of meaning, there is also the question of who is the ultimate judge of the meaning of a person's life—that individual him or herself, or the collective? This raises the broader question of where the meaning of a life resides. One can imagine a man passionately devoting his life to an objectively spurious religious belief, or a doomed political movement, or to developing and promoting a scientific theory that is invalid. Suppose that the man dies before the wrongness or futility of his endeavors becomes evident, so that he happily experiences his life as highly meaningful, seemingly contributing to valued progress. In his own mind, his life was full of meaningful success, yet posterity will judge him as having wasted his life. Whose verdict counts? Although we will not take sides on that question, we note that psychology's methodological reliance on self-appraisal entails that that person's life

will stand out in a dataset as highly meaningful (because that's how the man himself judged it) because it overlooks the contrasting judgment by society and posterity. One can argue that that is appropriate, but it does support cultivating an idiosyncratic worldview and eschewing reality testing. Individual meanings at odds with collective assessments can easily degenerate into self-flattering illusions.

## Section Conclusion

Both kinds of meaning have individual aspects but rest on top of shared understandings. Moreover, both denotative and existential meanings are used to help the individual connect with the group. Individuals may form associations and in that sense use meaning individually, but most private aspects of meaning are heavily grounded in collective understanding and social reality.

## Discussion and Conclusions

This article has asked four questions about the meaning of meaning and used the nine articles in the special issue, along with some other material, to address them. Exploration of meaning has come only lately to the social sciences, especially psychology. Perhaps this owes to the emulation of the natural sciences, which have little truck with meaning. In contrast, issues of meaning have historically been central to the humanities. The humanities do not use the scientific method, and so psychologists are understandably skittish about consulting them. But perhaps borrowing some of their concepts would help advance scientific theory. In particular, the psychology of meaning can be extended, complemented, and corrected by insights from philosophical analyses of symbolic cognition, the hermeneutical circle (back-and-forth integration of new information into existing knowledge structures) and the doxa (shared body of knowledge, including worldview, values, information, collective goals, and basic assumptions).

To summarize briefly, we concluded that meaning is nonphysical connection and potential organization. That is, meaning connects physical things and events in nonphysical ways such as patterns and plans, and people use meaning to impose order on their physical and social environments as well as society as a whole. Meaning exists as a set of possible relationships and ideas, which living things with brains can use to guide overt behavior. Meaning functions in multiple ways to shape and guide behavior, for better and for worse. Meaning is mainly found rather than created, though some theorists use the notion of meaning making to refer to the transfer from the realm of abstract possible ideas into physical reality, including the individual thinking of thoughts. Meaning is also heavily social and collective, though each individual may form a unique personal collection of these thoughts taken from the collective sphere. The notion of a doxa (that is, what a social group understands together, so that it does not require being stated) deserves further study as a foundation of human social life in shared meaning.

The relevance of existential meaning to behavior remains an important question for future research. Much work has studied how much people rate their lives as meaningful, but relatively little has examined behavioral consequences. The possibility remains that existential meaning is just a gloss put on more basic, natural

functions, akin to the ever-popular entertainment of dressing up animals in fancy human clothes. That is, evolution designed animals to want certain things that facilitate survival and reproduction. Humans want those same things and do so throughout life, merely disguising them with fancy glosses of meaning. Abundant evidence indicates that people find meaning by connecting with other people, helping others, prolonging life and creating progeny, doing what the group values, competing and aggressing against enemies, and seeking approval. What the quest for meaning adds above and beyond those basic drives may be less than meets the eye, but it is of particular theoretical importance and deserves careful attention from researchers.

Although meaning is widely adored and people clearly desire meaningful rather than meaningless lives, the downsides of meaning must be acknowledged. Most obviously, some meanings help motivate people to perform highly destructive actions, such as terrorist aggression (Kruglanski et al., 2018). Although most effects of self-regulation are good, self-regulation can be in the service of striving for goals with negative personal or collective repercussions (Van Tongeren et al., 2018). Likewise, most effects of nostalgia seem to be positive (see Sedikides & Wildschut, 2018), but it can have negative effects if people downgrade the present in comparison to a nostalgized past. Indeed, nostalgia may idealize the past, which political or charismatic charlatans could exploit to attract support and block progress in the name of recapturing some ostensible bygone utopia.

Even metaphors can be costly, despite being mostly helpful and beneficial (Landau, 2018). Hauser and Schwarz (2015) found that many people adopt military metaphors for their “battle” against cancer—yet unfortunately, these metaphors steer them away from dieting and other measures that would help reduce cancer risk, insofar as these do not fit well with the military metaphor.

Last, meanings of life also fit the pattern of being mostly good but having a downside. Park and George (2018) discuss the many sources of uncertainty and dysphoria that attend uncertainty about life’s meaning. Plus, again, the quest for meaningful mattering is one factor that leads some individuals into violent extremism (Kruglanski et al., 2018). Furthermore, insofar as self-esteem is a key contributor to meaning in life, research shows that preoccupation with enhancing and defending self-esteem can have negative consequences for self-regulation and psychological well-being (Crocker & Park, 2004).

Meaning remains, however, an important key both to understanding the operation of the single human mind and the social and cultural life that is quintessentially human. Meaning connects across time and space, thereby freeing thought from the tyranny of physical stimuli. People also use meaning to connect socially with other people, and the sense of meaning is enhanced by social connection. Thus, both social and conceptual connections involve meaning.

## References

- Abbott, R. (2018). Meaning, autonomy, symbolic causality, and free will. *Review of General Psychology, 22*, 85–94. <http://dx.doi.org/10.1037/gpr0000125>
- Anderson, P. W. (1972). More is different. *Science, 177*, 393–396. <http://dx.doi.org/10.1126/science.177.4047.393>
- Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford Press.
- Baumeister, R. F., Maranges, H. M., & Vohs, K. D. (2018). Human self as information agent: Functioning in a social environment based on shared meanings. *Review of General Psychology, 22*, 36–47. <http://dx.doi.org/10.1037/gpr0000114>
- Baumeister, R. F., & Votman, S. R. (1992). *Breaking hearts: The two sides of unrequited love*. New York, NY: Guilford Press.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge*. New York, NY: Doubleday Anchor.
- Bourdieu, P. (1977). *Outline of a theory of practice* (R. Nice, Trans.). Cambridge, UK: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511812507>
- Cooper, J. (2007). *Cognitive dissonance: 50 years of a classic theory*. London, UK: Sage.
- Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin, 130*, 392–414. <http://dx.doi.org/10.1037/0033-2909.130.3.392>
- Deacon, T. (1998). *The symbolic species*. New York, NY: Norton.
- de Saussure, F. (1983). *Course in general linguistics*. Chicago, IL: Open Court.
- Frankl, V. E. (1985). *Man’s search for meaning*. New York, NY: Simon & Schuster.
- Gadamer, H.-G. (1975). *Truth and method* (J. Weinsheimer & G. Marshall, Trans.). New York, NY: Continuum.
- Gowers, T. (2011). Is mathematics discovered or invented? In J. Polkinghorne (Ed.), *Meaning in mathematics* (pp. 3–12). New York, NY: Oxford.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin, 126*, 748–769. <http://dx.doi.org/10.1037/0033-2909.126.5.748>
- Hauser, D. J., & Schwarz, N. (2015). The war on prevention: Bellicose cancer metaphors hurt (some) prevention intentions. *Personality and Social Psychology Bulletin, 41*, 66–77. <http://dx.doi.org/10.1177/0146167214557006>
- Heidegger, M. (1927). *Sein und Zeit* [Being and time]. Tübingen, Germany: Niemeyer.
- Hooker, S. A., Masters, K. S., & Park, C. L. (2018). A meaningful life is a healthy life: A conceptual model linking meaning and meaning salience to health. *Review of General Psychology, 22*, 11–24. <http://dx.doi.org/10.1037/gpr0000115>
- Jolly, E. P., Tamir, D. I., Burum, B., & Mitchell, J. P. (2017). *Wanting without enjoying: The social value of shared experiences*. Manuscript submitted for publication.
- Kruglanski, A., Jasko, K., Webber, D., Chernikova, M., & Molinaro, E. (2018). The making of violent extremists. *Review of General Psychology, 22*, 107–120. <http://dx.doi.org/10.1037/gpr0000144>
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. *Personality and Social Psychology Bulletin, 39*, 1418–1427. <http://dx.doi.org/10.1177/0146167213499186>
- Landau, M. J. (2018). Using metaphor to find meaning in life. *Review of General Psychology, 22*, 67–72. <http://dx.doi.org/10.1037/gpr0000105>
- Landau, M. J., Oyserman, D., Keefer, L. A., & Smith, G. C. (2014). The college journey and academic engagement: How metaphor use enhances identity-based motivation. *Journal of Personality and Social Psychology, 106*, 679–698. <http://dx.doi.org/10.1037/a0036414>
- Langer, S. (1988). *Mind: An essay on human feeling* (abridged ed.). Baltimore, MD: Johns Hopkins University Press.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago, IL: University of Chicago Press.
- Park, C. L., & George, L. S. (2018). Lab- and field-based approaches to meaning threats and restoration: Convergences and divergences. *Review of General Psychology, 22*, 73–84. <http://dx.doi.org/10.1037/gpr0000118>

- Peirce, C. S. (1982). *Writings of Charles S. Peirce: A chronological ed.* (Vols. 1–6). Bloomington, IN: Indiana University Press.
- Pinker, S. (2007). *The language instinct*. New York, NY: Harper Perennial Modern Classics.
- Piscopo, C., & Birattari, M. (2013). Invention versus discovery. In E. Carayannis (Ed.), *Encyclopedia of creativity, invention, innovation, and entrepreneurship* (pp. 1139–1146). Heidelberg, Germany: Springer Science+Business Media. [http://dx.doi.org/10.1007/978-1-4614-3858-8\\_402](http://dx.doi.org/10.1007/978-1-4614-3858-8_402)
- Polkinghorne, J. (2011). *Meaning in mathematics*. New York, NY: Oxford University Press.
- Sedikides, C., & Wildschut, T. (2018). Finding meaning in nostalgia. *Review of General Psychology*, 22, 48–61. <http://dx.doi.org/10.1037/gpr0000109>
- Sherif, M. (1966). *In common predicament: Social psychology of inter-group conflict and cooperation*. Boston, MA: Houghton Mifflin.
- Stich, S. (1983). *From folk psychology to cognitive science*. Cambridge, MA: MIT Press.
- Tomasello, M. (2014). *A natural history of human thinking*. Cambridge, MA: Harvard. <http://dx.doi.org/10.4159/9780674726369>
- Van Tongeren, D. R., DeWall, C. N., Green, J. D., Cairo, A. H., Davis, D. E., & Hook, J. N. (2018). Self-regulation facilitates meaning in life. *Review of General Psychology*, 22, 95–106. <http://dx.doi.org/10.1037/gpr0000121>
- Wu, K., & Dunning, D. (2018). Hypocognition: Making sense of the landscape beyond one's conceptual reach. *Review of General Psychology*, 22, 25–35. <http://dx.doi.org/10.1037/gpr0000126>

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