

## CHAPTER 2

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# THE PSYCHOLOGICAL CONSTRUCTION OF POSITIVE EMOTION AS A WINDOW INTO WELL-BEING

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**A**cross academic disciplines, thinkers agree that emotions contribute to well-being through the functions they serve. Specific emotions are functional (i.e., beneficial or purposeful) because they increase the probability of behaviors that solve problems of adaptive import (Frank, 1988; Frijda, 1986; Johnson-Laird & Oatley, 1992; Keltner & Gross, 1999; Keltner & Haidt, 1999; Lazarus, 1991; LeDoux, 2000; Levenson, 1999; Mesquita & Albert, 2007; Oatley, 1992; Öhman & Wiens, 2003; Tooby & Cosmides, 2008). Fear, although negative, is a classic example—it potentiates escape-related behavior in response to threat, such as fleeing, freezing, or fighting, and thereby prolongs survival. In recent years, the functional approach became a tool for examining the importance of discrete *positive* emotions. In this view, positive emotions build enduring resources through the functions they serve, particularly in interpersonal domains, and enhance well-being (Algoe, Fredrickson, & Chow, 2011; Fredrickson, 1998, 2001).

Nevertheless, theories of emotion (e.g., basic emotion theory) that originally gave impetus to functional accounts have been challenged due to a lack of empirical support. These theories suggest that specific emotions such as fear, anger, and joy are functional because they are instantiated by specific neural circuits endowed by natural selection (Ekman, 1992; Izard, 1977; Levenson, 2003). Yet, several literature reviews concluded that specific emotions fail to correspond with consistent and specific signatures in the brain, peripheral nervous system, voice, or facial expressions (e.g., Duffy, 1934; Hunt, 1941; Mandler, 1975; Ortony & Turner, 1990; Turner & Ortony, 1992; Cacioppo et al., 2000; Russell, 2003; Russell, Bachorowski, & Fernandez-Dols, 2003; Barrett, 2006a; Barrett, Lindquist et al., 2007; Kagan, 2007; Mauss & Robinson, 2009;

Barrett, 2011b; Lindquist et al., 2012). Although discrete emotion categories fail to map onto objective measures, researchers continue to find support for the argument that discrete positive emotions serve specific functions (see Algoe et al., 2011; DeSteno, 2009). We propose that greater knowledge of the relationship between positive emotions and well-being will manifest from alternative conceptualizations of the functions of positive emotion. In particular, we question whether emotions serve functions through some route other than dedicated neural systems.

## PSYCHOLOGICAL CONSTRUCTIONIST APPROACH TO POSITIVE EMOTION

Psychological constructionist approaches to emotion—which have their roots in works by Wilhelm Wundt and William James (for a historical review, see Gendron & Barrett, 2009)—present an alternative way to think about the function of discrete positive emotions. In our psychological construction approach, the Conceptual Act Theory<sup>1</sup>, we hypothesize that emotions emerge from the interplay of neural circuitry for psychologically primitive processes (e.g., interoception, evaluation, attention, language, executive control, categorization). As a general strategy, psychological construction seeks to identify the psychological processes that make physical states of the body (interoceptive information) in context (exteroceptive information) meaningful as emotions. In the Conceptual Act Theory, physical changes in the body and brain take on new functions when they are conceptualized as a specific discrete emotion, which the physical states alone do not have. The act of conceptualizing an accelerated heart rate as *joy*, for example, provides that physical change with new functions. The concept provides information about the situation (e.g., “something good is happening”), prescribes action (e.g., “it is desirable to stay in this situation”), allows communication about one’s state (e.g., “I am happy”), and aids social influence (e.g., “I am a safe agent to socialize with”). In this view, emotions are functional via processes that create subjective meaning out of sensations from the body and world.

In this chapter, we elaborate on the psychological construction account of how positive emotions become functional and thereby contribute to well-being. We first discuss how physical sensations become constructed mental states—experienced as emotions—and take on new functions that they did not have by virtue of their biological nature. Next, we discuss how emotions prepare one for action appropriate to the situation at hand. While the theoretical views contained in this chapter apply to negative and positive emotions alike, a discussion of the positive emotion domain from this perspective remains lacking. Thus, in the second half of this chapter, we discuss how our perspective illuminates the light and dark sides of positive emotion and identify new research questions about the relationship between positive emotions and well-being.

## PHYSICAL CHANGES BECOME FUNCTIONAL WHEN CONCEPTUALIZED AS AN EMOTION

In modern psychological construction accounts, physical changes in the body and/or their representation in the brain are referred to as “core affect,” which is a state of pleasure or displeasure with some degree of bodily arousal. Core affect represents the fundamental physical ingredient

that contributes to an emotion (i.e., a measurable change in the body and brain, such as activation in the orbitofrontal cortex, which results in a shift in valence). It is constantly produced by the brain as a basic evaluative process that integrates information from the body with information from the world, although other physical changes (such as those occurring with sleep, food intake, etc.) also influence core affect (Barrett, 2006b,c; Russell, 2003; Russell & Barrett, 1999). As a basic ingredient of the mind, core affect is contained in all psychological phenomena, including those typically considered beyond the domain of emotion such as *cognitions* and *perceptions*. Objects in the world are considered “positive” or “negative” as a result of their ability to alter core affect. Because internal sensations from the core of the body are difficult to experience with any degree of specificity (Cacioppo, Klein, Berntson, & Hatfield, 1993) the experience of core affect serves as a person’s constant neurophysiological barometer of how his or her ever-changing internal state is linked to the external world. A person’s subjective rating of his or her state is the readout of that barometer (Barrett & Bliss-Moreau, 2009). Core affect by itself does not constitute an emotion, however, because emotions result from the interplay of multiple psychological ingredients, including conceptual knowledge.

According to psychological construction, emotions emerge when a physical response, such as a change in blood pressure, is conceptualized as an emotion, and in so doing takes on additional psychological functions that the physical change could not perform on the basis of its physical structure alone (Barrett, 2012). Whereas the physical change serves a biological purpose (e.g., a blood pressure change keeps a person from fainting as they stand from a sitting position), the physical change takes on a new purpose when conceptualized as a specific emotion (e.g., a blood pressure change becomes an indication of a challenge, which then cues a person to mobilize resources, or seek social support from another person). The processes by which physical changes become functional as emotions can be illustrated by reference to many common human-made categories. Consider the variety of objects that have been used as mediums of exchange (i.e., “money”) to purchase goods and services throughout history: salt, shells, barley, cheese, tea, cattle, grain, coins, and paper. Nothing about the physical nature of these objects renders them “real” as “money.” They were endowed with value because a group of perceivers had collective agreement that they could be traded for material goods or services. No one would argue against the view that a seashell (as an object, or molecules, or subatomic elements of matter) exists in the natural world—that is, the seashell is *ontologically objective*. It continues to exist even in the absence of a human mind to perceive it (i.e., it is *perceiver independent*). There is another kind of real, however, associated with the seashell when it is called “money”—it is an object capable of exchange for goods and services. There is nothing in the physical world (no molecular make-up or set of biological properties) that indicates whether the seashell is serving as money or not.<sup>2</sup> An object’s status as money is determined by some human act—a verbal declaration involving a word or label (e.g., “this is money”) or a meaningful situation (e.g., a seashell is money if used as a medium of exchange). Money is *ontologically subjective* because it depends on human perceivers for its existence (i.e., it is *perceiver dependent*). When perceivers conceptualize shells as money, the shells gain the function of having value. One perceiver is not enough, however. Although the act of conceptualization occurs within the head of a single perceiver, the conceptualization must be drawing on shared knowledge that is collectively held for the additional functions to emerge with conceptualization.

According to the philosopher John Searle (1995, 2010), humans create ontologically subjective things as part of social reality by imposing functions on objects (and people) that are not based solely on the nature of their physical properties. Searle states this as a general rule: An

object or instance (X) counts as having a certain status (Y) in a particular context (C). This status allows X to perform a particular function (or functions) not inherent to its physical structure. For example, when a seashell serves as money, this *creates meaning* about the value of the seashell: referring to a seashell as money communicates that it is to be valued, protected, (and perhaps invested), while experiencing it as an artifact from the ocean brands it as something to be discarded or used as a souvenir on one's shelf. Money *prescribes actions* that a mere seashell cannot: money is to be exchanged for some good or service that is determined to be of some value. Money allows people to *communicate* with one another in a relational way: receiving a seashell from a business client represents an entirely different meaning than when receiving it from your three-year-old son.<sup>3</sup> Money is also a form of *social influence*, in that it bids to control the mental state and actions of another person in a way that a mere seashell cannot achieve.

**Emotions as social reality.** We have extended Searle's rule to state "A state of physical sensation (X) counts as an emotion (Y) when it is conceptualized by a human perceiver (C)." Physical actions and body states, like seashells, exist in nature. But the status of these physical changes as instances of positive emotions such as pride, joy, or love is created in the same way that a seashell becomes money or a trinket on a bookshelf: with a human mind making meaning of physical events. Through this meaning, physical changes acquire the ability to perform functions that they do not have on their own (creating social meaning, prescribing actions, allowing communication, aiding social influence).

Humans create ontologically subjective categories to serve functions that help constitute social life. According to Searle, such functions are the glue that holds a human society together. If emotion categories are ontologically subjective categories, then they can be thought of as collective cognitive tools that allow members of the same culture (and even across cultures, depending on the categories, of course) to represent and shape social reality. Category knowledge about emotions does not cause emotions *per se*—it constitutes emotions by adding epistemologically novel functions to actions and body states. Said another way, an emotion is enacted when embodied conceptual knowledge is brought online to shape the perception of a physical state, binding that physical state to an event in the world (as opposed to being merely a physical sensation). This view is consistent with a variety of views that define emotions as functional states (Frijda, 1986; Mesquita & Albert, 2007; Oatley, 1992; Tooby & Cosmides, 2008), although the constructionist view presented here is unique in emphasizing that functions are imparted by emotion concepts (rather than, for example, by modules selected for by evolution). A body state or an action has a certain physical function (e.g., changes in respiration might regulate autonomic reactivity or widened eyes increase the size of the visual field) but these events do not intrinsically have certain functions *as an emotion*; events are assigned those functions in the act of categorizing them as emotion during the construction of a situated conceptualization. A partial list of functions and positive emotion examples are presented in Table 2.1. Given the central role of concepts in providing affective sensations with discrete functions, we now turn to the notion of situated conceptualization and its role in preparing an individual for action.

## SITUATED CONCEPTUALIZATION AS PREPARATION FOR SITUATED ACTION

*Situated conceptualization* is a central construct in recent theories of grounded cognition (Barsalou, 1999, 2003b, 2009) that suggest conceptual knowledge is represented as neural

Table 2.1: Functions of Transforming Physical States and Actions (X) Into Emotions (Y). Adapted from Barrett (2012)

Function	Elaboration
1. Linking the body to the world to create meaning.	As a body state or action becomes an emotion, a perceiver is <i>making sense</i> of how events associated within the body relate to the immediate circumstances outside the body. Coordinating changes in the body to the world, and making meaning of this linkage, is one of the brain's primary jobs. In principle, this idea is consistent with the models that describe emotions as containing relational themes (e.g., Frijda, 1986; Lazarus, 1991); in the view being developed here, however, there is no one-to-one link between an emotion and a theme. Even the physical states of non-human animals take on a relational meaning when they are perceived as emotions. For example, fear is something more than just the act of freezing with its concomitant physiological changes in the body. When a human perceives physical changes as fear (say, in a rat), this perception communicates something about the psychological meaning of those changes in relation to a specific situational context, such as danger. Likewise, joy is something more than play vocalizations in a rat (cf. Panksepp, 2008), and perceiving vocalizations as such communicates something about the specific situational context, such as social engagement. The idea that emotions, as ontologically subjective categories, serve the function of creating meaning is consistent with the idea that emotions can be described by appraisal dimensions (cf. Barrett, Mesquita, et al., 2007), as long as appraisals reflect the descriptive properties of experience (for examples of these appraisal approaches, see Clore & Ortony, 2008; Smith & Ellsworth, 1985) and are not considered computational mechanisms that cause emotion (for a discussion of different appraisal models, see Gross & Barrett, 2011; Moors, 2009). Emotions have also been called embodied appraisals of the world (Prinz, 2004). The current view is also consistent with the ideas that emotion categories are theories (Clore & Ortony, 1991) or scripts (Russell, 1991) about what emotions are and how they work, or complex narrative schemes that give meaning to changes in the body (Shweder, 1994).
2. Regulating action.	Emotions, as ontologically subjective categories, prescribe subsequent action, and so can be thought of as a form of <i>self-regulation</i> —an emotion is a prediction for the most functional action to be taken in the next moment, given the specific situation at hand (cf. Barrett & Gross, 2001). A change in heart rate (X) can function as a feeling of contentment (Y1) or a feeling of compassion (Y2), depending on the situated conceptualization that is constructed, and each will dictate a different action tendency; this is an example of the more general hypothesis that situated conceptualizations prepare a person to act (Barsalou 2003b, 2009). It is also consistent with the idea that emotions are states of action readiness (e.g., Bull, 1945; Dewey, 1895; Frijda, 1986), although in the present view, there is no one-to-one link between an emotion and a specific state of action readiness.

(continued)

Table 2.1: (Continued)

Function	Elaboration
3. Communication.	Emotions also function to <i>communicate</i> the meaning of physical actions and body states to others and to broadcast future intent. To declare "I am grateful" or "I am proud" creates intention in the listener (either toward the speaker or toward the broader situation). In this way, such declarations, whether or not they are stated explicitly or made intentionally, are a theory of mind task. They are also a way of assigning responsibility for physical actions.
4. Social Influence.	As a body state and/or action become an emotion, it not only prepares a person to act, but it can also serve as a source of <i>social influence</i> . It is a bid to regulate or control the actions of others, because an emotion obligates or constrains the set of possible actions from another person during an interaction. In this way, an emotion (in accordance with the rules of a culture) affords the opportunity to control the meaning of an interaction (Solomon, 1976).

re-enactment of states across multiple modalities (e.g., visual, sensory-motor, proprioceptive, and introspective). More specifically, the Conceptual Act Theory of emotion proposes that situated conceptualizations shape how physical changes in the body become functional as emotions, including preparation for action appropriate to the situation at hand (among other functions listed in Table 2.1). In this section, we discuss how conceptual knowledge about emotions develop and subsequently promote action appropriate to the situation at hand.

Over the course of a lifetime, a person develops concepts for any aspect of experience that attention repeatedly selects across situations (Barsalou, 2003a). Consider the concept for *chair*. As a person encounters instances of the category chair, either through direct interaction or indirect experience (e.g., movies, literature, conversation), he or she develops concepts in memory that will help construe (or interpret) future encounters with instances of the category. This includes concepts for the setting (e.g., *living room, office, airplane*), internal features of the body and mind (e.g., *sitting, feeling comfortable, tired, relaxed*), events (e.g., *working, resting, eating*), and exemplars (e.g., *recliner, desk chair*). In this view, concepts are simulations across multiple modalities, as opposed to a singular system of linguistic or other amodal representations. After developing a concept, information contained within the concept is available in memory, which is used during various forms of cognition—categorizing novel perceptual instances (e.g., which objects in a furniture store are *chairs*), imagining a chair that is not present (e.g., a *chair* that a friend is describing), thinking and reasoning about chairs (e.g., deciding how to arrange a group of *chairs*), and so on. Concept simulations involve re-enactments of some subset of the category's content across multiple modalities, including objects, settings, events, actions, introspections, properties, relations, and so forth that have been associated with the category in past experience (Barsalou, 1999, 2003b, 2009).

A situated conceptualization is one particular representation of an instance of a category (e.g., an instance of *chair*; an instance of *joy*). Over time, a number of situated conceptualizations associated with a category become entrenched in memory such that a given situated conceptualization automatically activates upon encountering a similar future situation. During that

situation, a situated conceptualization in memory fuses with impinging sensory and other information, which occurs via pattern completion mechanisms (e.g., filling-in, implicit memory), to create a single, unified gestalt (Barsalou, 1999). As some element of a situation is perceived, the conceptual system begins to simulate elements from prior experience and categorize the agents, objects, setting, behaviors, events, properties, relations, and bodily states that are present. A situated conceptualization does more than simply identify elements of experience, however, because the information it contains allows one to go beyond the present and *infer* or make predictions about what will happen next. The brain does this effortlessly and automatically. Whereas part of a familiar situation is perceived initially, the remaining components activated in memory as part of the situated conceptualization, but not yet experienced, constitute a prediction about events likely to occur and appropriate actions to engage in (Barsalou, 1999, 2003b, 2009). Predictions allow one to infer how the object, event, or entity is likely to behave, how one can interact with it, the likely value to be obtained from interacting with it, and so forth. Thus, situated conceptualizations are responsible for producing the action, internal states, and perceptual construal that underlie goal-related activity in a current situation (Barsalou, 1999, 2003b, 2009).

**Emotions as situated conceptualizations.** In our view, emotions work in much the same way as other concepts. In particular, the Conceptual Act Theory hypothesizes that emotions are situated conceptualizations that function to create meaning of affective changes in the body in a way that is responsive to and integrates information from the immediate situation, and in so doing, guide behavior, allow communication with others, and influence the mental states and actions of others (Barrett, 2012). People develop concepts for positive emotions (e.g., *gratitude, pride, compassion*) as they do many other aspects of experience that are concrete (e.g., *chair, apple, trumpet*) or abstract (e.g., *gossip, truth, meeting*) in nature. For example, the first time a child receives help with a difficult task and feels pleasant, his parents might explain that the pleasant feeling he is experiencing is one of gratitude (e.g., a parent might say "You're feeling *grateful* because Robert helped you with your homework") and it is appropriate to express thanks. Hearing others talk about gratitude conveys information about the situational context in which the experience occurs. As physically distinctive events are repeatedly encountered and associated with the word "grateful" over time, the individual develops situated conceptualizations for the concept *grateful*. When an element of a gratitude exemplar is later encountered, pattern completion mechanisms produce perceptual inference, filling in other elements to create a situated conceptualization of gratitude, which includes knowledge about appropriate action in a given situation (e.g., expressing thanks). Constructing a situated conceptualization for *gratitude* shapes the unfolding situation such that it is experienced as other-focused gratitude instead of self-focused joy or contentment and guides behavior appropriately. In general, people automatically and effortlessly categorize their affective states using concepts that develop for categories of positive emotion experience (e.g., gratitude, pride, inspiration) (Barrett, 2006b).

Our view, then, is that an emotion occurs when a situated conceptualization for an emotion category becomes active to make meaning of physical sensations in the body and the world. In heightened states of core affect, people automatically and effortlessly categorize their state using conceptual knowledge about emotion (Barrett, 2006b). Thus, core affect represents one element that initiates a situated conceptualization (although once the conceptualization is underway, it can alter core affect). Alternatively, the conceptualization of an emotion state can be initiated by other means, such as when it is primed by the situation, or when a person is searching for meaning in a given instance. The activation of conceptual knowledge of *gratitude*, for example, determines when core affect will be experienced as gratitude rather than joy or hope: one can



feel pleasant and actively search for its meaning, and some element in the situation primes gratitude. On the other hand, one can simulate an experience of *gratitude* in one's mind, absent of physical events in the environment and subsequently feel pleasant. In all these examples, an active conceptualization has the potential to cause subsequent shifts in core affect.

Consider the typical *pride* experience of receiving a high mark on an exam. As the relevant situated conceptualization becomes active, one might feel increasingly pleasant, engage in celebratory behavior, and share one's accomplishment with others in the social setting. Sustained positive feelings might encourage one to seek out further opportunities to demonstrate one's ability in the task domain, such as further academic pursuits. During this evolving process, information received from one's teacher may be construed as welcoming and encouraging. Alternatively, the same event might elicit a situated conceptualization relevant to a different emotion category, such as *gratitude*. Upon receiving the high mark, the student might attend to the variety of factors that led to his or her success such as the help of others (e.g., tutors, teachers, fellow classmates). A conceptualization for *gratitude* becomes active and guides behavior and perceptual construal. Rather than displaying his dominance through celebratory behavior, the student might approach his benefactors with an expression of thanks. Furthermore, he may construe others in his social surroundings as fundamental to his success and seek to reinforce those bonds. Concepts thus play a fundamental role in the experience of emotion and behavior.

Situated conceptualization also explains the heterogeneity of responses associated with a single emotion category. A single concept encompasses a variety of situated conceptualizations, reflecting the variety of situations in which the concept is experienced (Barsalou, 2003b, 2009). Different situated conceptualizations for the concept *game* include, for example: playing a board game with a friend, a game of tennis against a fierce rival, a series of back and forth flirtations with a love interest, a card game online, and so forth. In each situation, conceptualization supports appropriate (i.e., situated) interaction in the relevant situation. Consider various possible situation conceptualizations of *compassion*. The feelings and behavior that one experiences in response to a homeless person likely differ from those felt for a co-worker or a romantic partner in distress. For a homeless person, one might offer money; for a co-worker, one might offer to take on a share of the workload on a difficult project; for a romantic partner, one might offer loving condolence via an embracing hug. Situated conceptualizations are the mechanisms that allow one to tailor these actions during the emotion state to threats or opportunities in the situation at hand. Recently, we have demonstrated great heterogeneity in the emotional instances of fear, sadness, anger, and happiness that stems from situated conceptualizations (Wilson-Mendenhall, Barrett, Simmons, & Barsalou, 2011; Wilson-Mendenhall, Barrett, & Barsalou, 2013).

**Summary.** The key idea in the first half of the chapter can be restated as follows: a momentary array of sensations from the world (light, sound, smell, touch, and taste) combined with sensations from the body (X) counts as an experience of emotion or a perception of emotion (Y) when categorized as such during a situated conceptualization (C). Via categorization (which is the name of the process that constructs a situated conceptualization), sensations acquire functions that are not intrinsic to them because prior knowledge captured in the situated conceptualization fuses with the impinging sensations into a unified representation that guides action, and thus the unified state—including the sensations—acquires a new functional significance. As a result, new functions are not based solely on the physical properties of sensations alone (as body states or actions as represented in the physiology of the body and/or in neural activations within the brain). For example, a change in blood pressure (X1) counts as feeling joyful (Y1)

when category knowledge about joy is activated as a specific, embodied representation of joy (C1). A smile on someone else's face (X2) counts as perceiving joy (Y2) when another embodied, situation-specific representation of joy is activated (C2).

Conceptual knowledge is not applied to make meaning from sensations in a linear, mechanistic way, after the fact. Instead, the hypothesis is that over a few hundred milliseconds, knowledge from the past is reconstituted in a way that is tailored to the immediate sensory array, such that a situated conceptualization shapes those initial sensory representations, perhaps changing them, as a meaningful, momentary gestalt of emotion emerges. In this way, culture-specific experiences of emotion actually shape the physiology and actions that are observed in an emotional episode. This is a quick process—occurring in the first 150 ms or so and barely detectable by behavioral means. It is an unconscious process—a person will not experience it happening. It is an ongoing process, because mental events do not occur in punctate form, like beads on string, or like responses issuing from stimuli—mental life is more continuous (see Spivey, 2007). The important point here is that physical sensations *become* an emotion by *representing* them as an emotion. It is possible to make reasonable inferences about physical sensations, to predict what to do with them, to communicate our experience of them to others, and to use them to influence the actions of others.

**Review of evidence.** Several empirical findings provide initial evidence for the role of conceptual knowledge in emotional responding. A neuroimaging experiment designed to test predictions of the Conceptual Act Theory (Wilson-Mendenhall, et al., 2011) revealed that different situated conceptualizations of an emotion (e.g., fear during social evaluation versus fear during physical danger) produced different patterns of brain activity. Furthermore, the different situated conceptualizations consisted of distributed multimodal neural patterns reflecting information relevant to the situation at hand, including sensory-motor information (Wilson-Mendenhall et al., 2011). Thus, any given emotion category contains various situated conceptualizations. In other recent work, the activation of knowledge about fear (versus anger) while experiencing highly-arousing unpleasant affect made people less likely to endorse risky behavior, such as binge drinking or riding a bicycle without a helmet, suggesting that it was the conceptual activation of fear combined with negative affect that led them to experience the world as threatening and exhibit behaviors that are functional during fear states (Lindquist & Barrett, 2008a). Thus, emotion concepts act as a constituent of emotion experience and emotional behavior. This hypothesis has been supported by a number of other findings. When participants generated words associated with pride, their subsequent posture height was higher than when they generated words associated with disappointment (Oosterwijk, Rotteveel, Fischer, & Hess, 2009), suggesting the activation of a positive emotion concept can result in behaviors typical of that discrete emotion category. Conceptual knowledge also impacts autonomic physiology typically associated with discrete emotion categories. When participants unscrambled sentences that contained words and concepts associated with fear, they experienced greater electrodermal activity and startle modulation during subsequent fear pictures compared to those who unscrambled emotionally neutral sentences, suggesting that conceptual knowledge about emotion potentiated the emotional response (Oosterwijk, Topper, Rotteveel, & Fischer, 2010). As evident here, the bulk of this research has examined negative emotion concepts. The extent to which the activation of knowledge about positive emotion terms (e.g., *gratitude*, *pride*, *compassion*) affects emotional responding remains uncharted territory for empirical research. In the second half of this chapter, we explore the light and dark sides of positive emotion through the lens of situated conceptualization.

## A CONSTRUCTIONIST PERSPECTIVE ON THE LIGHT AND DARK SIDE OF POSITIVE EMOTION

The positive psychology movement revealed that positive emotions convey benefits beyond the mere pleasure of positive affect (e.g., Lyubomirsky, King & Diener, 2005). This, in turn, invigorated the study of positive emotion within the scientific community. Recent trends, however, have begun to illuminate maladaptive consequences of positive emotion (e.g., Gruber, 2011b; Gruber, Mauss, & Tamir, 2011). Psychological construction offers a new way to think about the functions of emotion, and in doing so, offers a new way to investigate when and how positive emotions contribute to well-being. A situated conceptualization approach, in particular, has the potential to illustrate the circumstances in which specific discrete positive emotions underlie adaptive behavior and when they underlie less than optimal behavior. Non-normative conceptualization, for example, can help explain aberrant emotional behavior. In this section, we discuss the "light" and "dark" sides of positive emotion from a constructionist perspective, highlighting a few new areas that will benefit from additional research.

**Situations determine whether behaviors are "positive."** Recent evaluations of positive psychology have questioned the practice of labeling certain psychological processes and traits as "positive" (e.g., McNulty & Fincham, 2012). As these authors assert, a number of "positive" traits known to predict well-being, such as forgiveness, optimism and kindness, might also result in a number of detrimental outcomes. McNulty and Fincham (2012) suggested that the interpersonal context in which the "positive" phenomenon occurs determines whether the outcome is beneficial or detrimental. Although forgiveness is typically intra- and interpersonally beneficial, it might lead to decreases in well-being over the long run in the context of an abusive relationship. The psychological constructionist perspective—because of its emphasis on heterogeneity of experience within an emotion category—aligns with this argument and suggests that the so-called "positive" emotions can influence behavior in relatively benign or destructive ways depending on the context in which they occur.

Situated conceptualization explains how some exemplars of a given positive emotion category, such as pride, joy, or optimism, can prove beneficial whereas others prove maladaptive. Different situated conceptualizations underlie the variety of experiences within an emotion category, such as pride, and therefore underlie different behavioral responses. In some cases, expressing and experiencing pride is likely to contribute to adaptive outcomes for oneself or others (e.g., in team leadership contexts) whereas in others experiencing and expressing pride is likely to contribute to destructive outcomes for oneself or others (e.g., in cases where pride results from another's misfortune, like *schadenfreude*). During the construction of a situated conceptualization, the presence of other relevant concepts, such as *another's misfortune*, may predict whether a particular experience will fail to convey benefits to one's own (or another's) well-being. In a similar manner, positive emotions can result in a number of detrimental outcomes, such as an increased propensity to engage in risky behavior (Martin et al., 2002) or increased reliance on stereotypes in interpersonal judgment (e.g., Forgas & Fiedler, 1996; Park & Banaji, 2000). Like other psychological processes and traits (McNulty & Fincham, 2012), "positive" and "negative" emotions are not inherently positive or negative—and calling them so will mask the light and dark sides of both.

Similarly, although experiencing negative emotions in excess across contexts can be detrimental, some instances of a given negative emotion category, such as fear, can have beneficial

effects in domains relevant to human flourishing. A variety of studies that examined affect and cognitive processing documented the benefits of an unpleasant state relative to a pleasant state. Forgas and colleagues found that unpleasant states result in a number of beneficial outcomes (see Forgas, this volume), such as enhanced performance on a memory task (Forgas, Goldenberg, & Unkelbach, 2009), the ability to effectively suppress unwanted thoughts (Wyland & Forgas, 2007), the ability to construct effective and persuasive messages (Forgas, 2007), and the ability to disregard misleading information when constructing eyewitness memories (Forgas, Laham, & Vargas, 2005). In recent work, experiences of fear resulted in greater appreciation of art (Eskine, Kacirik, & Prinz, 2012). Participants had more positive impressions of artwork following a short fear-inducing video compared to those who watched a happiness-inducing video or completed a simple exercise that increased arousal. Eskine et al (2012) suggested that fear might enhance the appreciation of art through its ability to remove a person from daily life and hone one's interest and attention. To the extent that incidental fear causes a person to focus attention, engage in an activity, and experience the moment, he or she may accrue more resources, attain goals, and enhance overall well-being. The ability of negative emotional episodes to bring about pleasant experiences and build resources remains an area ripe for empirical investigation (see also Oishi & Kurtz, 2011).

The situated nature of emotion points to further questions regarding the variability in behaviors across and within discrete positive emotion categories. A given positive emotion category contains many situated conceptualizations varying with the situation, all of which produce widely varying perceptions and actions. A single emotion category may result in a variety of behaviors, with some being more typical than others, depending on other relevant concepts present in the construction of a situated conceptualization. Consider the range of behavioral responses that might stem from affective experiences that fall within the emotion category *compassion*. Depending on context, different experiences of compassion might result in behaviors meant to (a) help a person in need (Batson, 1991), (b) punish a freeloader so that everyone in a group can benefit from the common good (Fehr & Gächter, 2002) or (c) act as a silent presence, thereby offering non-judgmental companionship while a person expresses his or her suffering (e.g., Back et al., 2009). The focus on context might also explain seemingly divergent findings. Compassion, for example, might lead to a decrease in punishment for a third-party transgressor (e.g., Condon & DeSteno, 2011) or to an increase in punishment as a means to protect a victim or get revenge on the victim's behalf (Meyers, Lynn, & Arbuthnot, 2002). In the first case, incidental compassion for a victim was redirected to a transgressor whose actions had no connection to the victim's plight (Condon & DeSteno, 2011). In other words, the transgressor's actions were not integral to the victim's suffering in the situated conceptualization of compassion. In the second case, compassion for a victim contrasted with anger at the transgressor whose actions led to the victim's plight (Meyers, Lynn, & Arbuthnot, 2002). In the latter context, the transgressor's actions were directly tied to the victim's suffering in the situated conceptualization of compassion. In general, any given emotion category contains a range of behaviors, some beneficial or detrimental to well-being depending on context.

Another generative hypothesis concerns the typicality of behaviors and functions associated with a given discrete emotion category. Typicality refers to how good of an example an instance is of a given category (Rosch & Mervis, 1975). For example, *apple* is a more typical example than *olive* of the category *fruit* (Rosch & Mervis, 1975). Instances of an emotion category vary in how typical they are of the category. For example, although the typical fear experience is unpleasant, there are instances of fear that feel pleasant (Wilson-Mendenhall et al., 2013). As described

above, a given emotion category may contain a range of behaviors considered to be adaptations to different situations, with some behaviors considered more typical than others. The experience of winning a competition ahead of one's best friend, who happened to come in a close second, might result in an atypical experience of unpleasant pride. In this case, the situated conceptualization for pride will lead one to refrain from celebration, and rather console the friend or seek ways to share the accomplishment. Discrete emotion categories are likely to serve a range of functions, with some being more typical than others across a range of situations.

**Positive emotion differentiation.** Situated conceptualizations are proposed to underlie functional actions associated with discrete emotion categories that are specific to the situation at hand. Interestingly, substantial individual differences exist in the degree of specificity, or "granularity," with which different people report on their affective states (Lindquist & Barrett, 2008b). Some people report on their affective states with precise and specific emotion adjectives (e.g., "sad," "angry," "joyful")—called high emotion granularity—whereas others use the same words with less precision to represent broad global affective states (e.g., using "sad," "afraid," and "angry" to represent the same unpleasant feelings)—called low emotion granularity (Barrett, 2004; Barrett, Gross, Christensen, & Benvenuto, 2001; Demiralp et al., 2012; Feldman, 1995; Lindquist & Barrett, 2008b). The ability to conceptualize one's affective state with discrete terms tailored to the situation is an adaptive skill that appears to underlie intelligent emotion regulation (Wranik, Barrett, & Salovey, 2007) and therefore might act as causal force toward enhanced well-being.

Specific and precise positive emotion differentiation (i.e., high emotion granularity) may yield adaptive benefit because it invokes a situated conceptualization tailored to the threats or opportunities in the present situation. As we have described, categorizing one's affective state through situated conceptualization as *pride*, *hope*, or *gratitude* for example, assigns a function to that affective state that it could not have by virtue of its biological nature alone. In particular, discrete emotion concepts provide information regarding behavioral actions for dealing with an experience and capitalizing on the situation at hand (Barrett et al., 2001). Individuals who differentiate their states with precise conceptual labels (e.g., "I'm feeling hopeful, not content") will experience greater well-being through the ability to tailor behaviors to the situation. Given the variation of experiences within an emotion category, we further predict that the ability to differentiate among experiences *within* an emotion category will result in optimal emotional behavior. This is a testable hypothesis: people who contextualize and differentiate experiences of pride, for example, will experience greater well-being in the long run.

A wealth of empirical evidence has demonstrated that emotion differentiation underlies adaptive emotional responding and well-being. An early experience-sampling study found that greater emotion differentiation correlated with larger repertoires of emotion-regulation strategies, indicating that the ability to recognize and utilize information from discrete, negative emotion concepts can have beneficial effects on emotion regulation (Barrett et al., 2001). High emotion differentiation also protects against destructive emotional behavior, such as decreased aggressive tendencies when provoked or in a state of anger (Pond et al., 2012) and decreased propensity to drink alcohol when in a negative mood state (Kashdan, Ferrisizidis, Collins, & Muraven, 2010). In general, the ability to differentiate negative emotions appears to facilitate healthy emotional responding.

The extent to which differentiating positive emotion proves adaptive has received less attention in empirical literature. One extant study revealed that high positive emotion differentiation is particularly relevant to coping (Tugade, Fredrickson, & Barrett, 2004). People with high

positive emotion granularity reported experiencing less mental self-distraction, less automatic coping styles, higher experiential engagement, and higher behavioral disengagement (Tugade et al., 2004). People who differentiated their positive emotions over a one-month period also indicated that they gave careful consideration to various behavioral options when responding to a situation at hand. Given that distinct positive emotions are associated with different functional outcomes, the differentiation of positive emotion states should likewise prove adaptive in social and non-social endeavors. The examination of benefits gained from positive emotion differentiation stands as a viable question for future research.

Emotion granularity *training* is an exciting next step in this line of research. The Conceptual Act Theory states that what people know about emotion might influence what they actually feel (Barrett, 2006b; Barrett, Mesquita, et al., 2007). Increasing a person's emotion vocabulary might be one avenue for diversifying his or her emotional experiences. Furthermore, where positive emotions have an unwanted influence (e.g., in the case of incidental emotion, which are states unrelated to the decision or context at hand), emotion granularity training may override that influence. Recent work on moral decision-making and negative emotion differentiation provided support for this view (although the focus in this study was on negative emotion differentiation, the same logic applies to positive emotions). It is well known that moral decision-making can waver as a result of incidental emotion. Dirty environments that prime disgust, for example, lead to harsher moral judgments about issues that have nothing to do with the environment (Schnall, Haidt, Clore, & Jordan, 2008). Yet people can learn to differentiate their negative emotional states and thereby correct for the unwanted influence of incidental emotion on moral judgment (Cameron, Payne, & Doris, 2013). In an experimental study, Cameron et al. trained some people to differentiate their emotions while others received no such training. Using an incidental disgust paradigm, Cameron et al. found that those trained to differentiate their emotions disregarded disgust primes but capitalized on integral disgust (i.e., disgust induced by the target of judgment) when making moral judgments. One could easily extend this line of work to the positive emotion domain and test whether training in positive emotion differentiation counteracts the effects of positive emotion, for example, on heuristic processing or risk-taking behavior. Elsewhere, quasi-experimental work examined the impact of increased emotion vocabulary (which presumes emotion granularity)<sup>4</sup> on social and emotional competence among grade-school children as part of a social and emotional learning program called the RULER Feeling Words Curriculum. Compared to students in a control group, students in the RULER classroom earned higher teacher ratings of social and emotional competence (e.g., leadership, social skills, study skills) and higher year-end grades in English Language Arts courses (Brackett, Rivers, Reyes, & Salovey, 2012). In sum, interventions that train emotion granularity might help people cultivate skills for knowing when to rely on positive emotions, when to disregard them, and how to tailor them to the situation at hand.<sup>5</sup> The extent to which training in positive emotion differentiation leads to beneficial outcomes awaits empirical research.

**Non-normative situated conceptualizations as an indicator of poor mental health.** The situated conceptualization perspective offers a new lens from which to examine the dysfunction of positive emotion. When an emotional response and behavior are tied to the situation at hand, they will be more likely to produce an adaptive outcome. If one's ability to conceptualize an affective state is compromised or if one fails to conceptualize the situation normatively (i.e., in accordance with one's culture or societal norms), the resulting behavioral response may prove less than adaptive and thereby decrease one's overall level of well-being.



A focus on non-normative situated conceptualizations promises to offer new insights on various psychological disorders of positive emotion, such as bipolar disorder (BD). People with BD conceptualize the world in a non-normative manner, which appears to result in experiencing pleasant affect to a greater degree than healthy controls, often in situations that typically elicit negative affect (e.g., in response to viewing a man digging through a feces covered toilet) (Gruber, Johnson, Oveis, & Keltner, 2008). Gruber (2011a,b) argued that BD is characterized by positive emotion persistence, suggesting that BD patients experience positive emotions in contexts that are typically conceptualized as unpleasant or less pleasant among healthy people. BD patients likely experience heightened attention to reward at the expense of contextualized conceptualizations in which those rewards occur (e.g., in risk-taking contexts that could cause harm, such as gambling). Such atypical conceptualizations may result in destructive outcomes because the response in the situation is not one that is adaptive when facing harmful or aversive stimuli (for a similar discussion of non-normative conceptualization and post-traumatic stress-disorder, see Barrett, Wilson-Mendenhall, & Barsalou, in press). Thus, focusing on the deficits or excesses in producing non-normative situated conceptualizations might stand as a viable route to understanding the various emotional dysfunctions that characterize psychological disorders.

A number of factors might explain the production of non-normative conceptualization. Some individuals may lack the appropriate situated knowledge to begin with (e.g., they never developed the range or depth of conceptualizations for a given emotion category; i.e., they have low emotional expertise), some individuals may have learned non-normative situated conceptualizations (e.g., from parents and close others), or learned culturally-specific situated conceptualizations that do not translate to another culture. Conceptualizations that are not well-tailored to the situation in terms of social and cultural norms will produce actions that are not effective in that particular cultural context. Dysfunctions in the production of situated conceptualization might also result from deficits in attention or problems with accessing information from long-term memory. Although this discussion is very speculative, it points to a new way to understand psychological disorders and new areas for future research.

**"Liking" and "wanting" contribute to the light and dark sides of positive affect.** A situated conceptualization approach to emotion suggests a focus on basic operations or "ingredients" that create instances of positive emotion. From this perspective, the interplay of basic psychological ingredients produces a wide variety of positive emotion states. Importantly, understanding how these ingredients work has the potential to illuminate when and how positive emotions contribute to well-being. As discussed at the outset of this chapter, core affect (i.e., pleasant or unpleasant degree of arousal) is one key ingredient of emotions and part of the pattern that initiates a situated conceptualization. Research suggests that pleasant affect (i.e., feeling good) is a significant predictor of well-being (Diener, Lucas, & Scollon, 2006; Ryan & Deci, 2001; Lyubomirsky, et al., 2005), along with other social and self-related variables (Keyes, 2007; Ryan & Deci, 2000, 2001; Ryff & Keyes, 1995). Nonetheless, pleasant affect is not always beneficial. Excessive pleasant affect and positive emotion is sometimes a symptom of disordered mental health (e.g., bipolar disorder; Gruber, 2011a,b). Pleasant affect is also thought to be the root of drug addiction (Esch & Stefano, 2004; Naqvi & Bechara, 2010) and of other types of craving and addiction (e.g., those related to food and obesity; Berridge, Ho, Richard, & DiFeliceantonio, 2010). This begs the question: when is pleasant affect beneficial and when is it destructive?

Recent discoveries in neuroscience offer intriguing possibilities concerning the relationship between pleasant affect and well-being. In neuroscience, pleasant affect is primarily studied in the context of reward. The idea that specific neural circuitry maps onto reward processing was first proposed upon discovering that rats would work for electrical stimulation in specific brain sites (c.f., Olds & Milner, 1954). It is now known that the reward circuits identified in animals become active when human participants experience primary rewards (e.g., food), abstract rewards (e.g., money), and social rewards (e.g., positive feedback) during neuroimaging studies (Haber & Knutson, 2010; Rolls, 2011). This research has focused almost exclusively on the incentive-based learning, motivation, and goal-directed behaviors associated with external rewards, with little research devoted to studying the hedonic feelings often involved in reward processing. Recent neuroscience evidence suggests, however, that the "liking" (or pleasant affect) of reward is dissociable from the "wanting" (or motivation) of reward (Berridge & Robinson, 2003; Berridge & Kringelbach, 2008; Berridge, Robinson, & Aldridge, 2009). The hedonic experience of pleasant affect is different from desire in the same way that the experience of pain is different from threat.

Evidence for the dissociation between "liking" and "wanting" primarily stems from animal models. Whereas the motivation and desire of reward tends to be associated with dopaminergic reward circuits, the hedonic "liking" of reward tends to be associated with opioids and endogenous cannabinoids (Berridge, 2007; Mahler, Smith, & Berridge, 2007; Pecina, Smith, & Berridge, 2006; Smith & Berridge, 2007). Because humans can report feeling subjectively pleasant, it is possible to study a variety of hedonic experiences that are not tied to the "liking" behaviors studied in animals (e.g., tongue protrusions related to sweet tastes). Much remains to be learned about "liking" and "wanting" in humans. A recent proposal is that the relationship between "liking" and "wanting" may underlie human happiness and well-being (Kringelbach & Berridge, 2009). One possibility is that happiness is "liking" without "wanting"—experiencing pleasure in the moment without encroaching desires. Another possibility is that moderate desire facilitates engagement with the world, which results in pleasant feelings (that would not be possible without the initial desire). We know very little about the variety of pleasant human experiences, and the degree of "liking" and "wanting" involved in these experiences. Understanding the role of core affective processes has the potential to illuminate much about happiness and well-being.

It is often assumed that positive emotions are different phenomena from core affect (especially sensory pleasure). Following from this distinction, positive emotions are typically assumed to be beneficial (Fredrickson, 1998, 2001), whereas simple pleasures are often associated with addiction (e.g., food; Berridge et al., 2010). As just discussed, however, core affect is not so simple because pleasant affect (or "liking") is dissociable from desire (or "wanting"). A consideration of the liking/wanting distinction offers new ways to think about positive emotions. Consider optimism as an example. Although optimism is generally considered to be a beneficial emotion, it can also produce less favorable outcomes. An example of the latter is when smokers are optimistic that they will not suffer from lung cancer in the future. A constructionist perspective suggests examining variety within the emotion category *optimism* to better understand the relationship between optimism and well-being. One possibility is that optimism becomes more destructive when a conceptualization produces pleasant affect (or "liking") that is tightly coupled with unrealistic desires (or "wanting") (e.g., optimism that one can lose weight extremely quickly).



## DO EMOTIONS CAUSE BEHAVIOR?

Recent theorizing has specifically argued that emotions *do not* directly cause behavior (Baumeister, Vohs, DeWall, & Zhang, 2007) because (a) emotions are too slow to cause behavior and (b) emotions are not tied to specific actions, but (c) when emotions do cause behavior, they do so through their effects on cognition. Baumeister et al (2007) proposed that behaviors are better understood as forms of emotion regulation (i.e., attempts to avoid certain emotional states or to experience others more often). For example, an apology or the avoidance of a transgression can be understood as an attempt to avoid guilt. Our psychological construction framework, however, offers a new way to understand the links between emotion and behavior.

The argument that emotion is too slow to influence behavior presumes that emotion is a special category of mental experience that differs from cognitive processing. Baumeister et al. (2007) state that, in contrast to conscious emotion, "automatic affect will arise almost instantaneously and therefore be available to steer behavior even at a moment's notice" (p. 169). As we have described, however, the situated conceptualizations that produce an emotion unfold rapidly, often within about 150 milliseconds. The Conceptual Act Theory of emotion hypothesizes that emotions dynamically emerge from affect and conceptual knowledge, both of which operate automatically to prepare a person for action (Barrett, 2006b; Wilson-Mendenhall et al., 2011). Conceptualization typically occurs at an unconscious level (Pulvermüller, Shtyrov, & Hauk, 2009), but even at a conscious level, can influence behavior (Lindquist & Barrett, 2008a).

Like many theoretical discussions in the past, Baumeister et al. (2007) rely on the Cartesian assumption that cognition and emotion are two separate systems in the brain. In our view, processes presumed to be "cognitive" or "cold" are integral to the construction of an emotion. Emotions and cognitions are not ontologically distinct categories with distinct systems in the brain (Duncan & Barrett, 2007; Pessoa, 2008), but rather, refer to different phenomenological states that serve different functions. Our working hypothesis is that two ingredients, affect and conceptualization, together exert an influence on behavior. Although many behaviors do result from anticipation of emotion (in fact, this view fits the situated conceptualization perspective), the argument that emotions *do not* cause behavior is counterproductive. Positive emotions have both beneficial and detrimental consequences with respect to human flourishing—their effects on behavior are one route through which this occurs.

The criticism that specific emotions do not map onto specific patterns of behavior (Baumeister et al., 2007) constitutes one of the predictions of the Conceptual Act Theory (Barrett, 2009b). Baumeister et al. (2007) stated "neither full-blown emotion nor automatic affect contains a built-in prescription for specific actions" (p. 170) and reviewed evidence that specific emotions do not always result in specific behaviors. This analysis of emotion and behavior, however, stems from the assumption that each discrete emotion category is associated with a specific mechanism or action tendency. Our view suggests that emotions are emergent products that occur during situated conceptualizations of an affective state and include information about the surrounding situation. Thus, discrete emotion categories will influence behavior in a way that flexibly depends on the situation, which is more adaptive for responding in a wide variety of situations. As suggested earlier, some behaviors may be more typical of an emotion category than others, but any given discrete emotion will elicit a variety of behaviors tailored to the situation at hand.

In the face of psychological construction, many of the existing debates in the emotion literature (e.g., do emotions cause behavior?) dissolve to reveal different questions (e.g., why is there such variability in the behaviors associated with discrete emotion categories?). The view offered in this chapter presents a more nuanced approach to emotion and behavior. Discrete emotions are not specific categories of stimulus-response type behavior, but rather refer to emergent states. As a result, behaviors associated with categories of emotional experience will widely vary depending on the situation. Although the current view differs from traditional accounts motivated by evolutionary approaches (e.g., Ekman, 1992; Tooby & Cosmides, 2008), our approach is nevertheless consistent with an evolutionary argument. In the current view, evolution selected for the processes that contribute to an emotion state (i.e., conceptualization) rather than selecting for discrete mechanisms dedicated to discrete categories of emotion (Mesquita, Barrett, & Smith, 2010). The ability to tailor behaviors to situations via situated conceptualization of affective states is critical to survival and human flourishing over the long run. Human emotional life includes a variety of different experiences within and across discrete positive emotion categories. As this volume suggests, some are lighter and some are darker than others. The key to understanding the differences between and within different categories of positive emotion (e.g., *awe*, *gratitude*, *pride*) lies in understanding the contents and workings of the various situated conceptualizations that underlie different instances of those categories. Research generated by this approach will help disentangle when positive emotions prove beneficial and when they prove detrimental for well-being.

## NOTES

1. The Conceptual Act Theory of emotion was introduced in 2006 and has been elaborated through a series of theoretical and empirical papers (Barrett, 2006b, 2009a, 2009b, 2011a, 2012; Barrett & Bliss-Moreau, 2009; Barrett & Kensinger, 2010; Barrett, Mesquita, et al., 2007; Barrett, Ochsner, & Gross, 2007; Lindquist & Barrett, 2008b; Lindquist et al., 2012; Wilson-Mendenhall et al., 2011). In this chapter, we present a summarized view.
2. See Barrett (2012) for a similar discussion of plants as "weeds" or "flowers."
3. There are several examples of ontologically subjective categories that humans have created as a part of social reality. A person's race as "Black" or "White" does not derive from the melanin concentration in his or her skin—these categories did not even exist until it was necessary to quantify the value of a human life for the purposes of slave trading many centuries ago. And, of course, it is possible to have a very sophisticated empirical science of ontologically subjective things (e.g., economics and sociology, respectively).
4. Emotion vocabulary and emotion granularity are not necessarily synonymous. Although a person may possess a vast knowledge of different emotion words, he or she may not always capitalize on that knowledge when categorizing an affective state (e.g., he may still use "fear," "anger," "sadness," and "jealousy" to refer to any unpleasant state). Emotion granularity is the precision with which a person uses different words to represent different states. Nonetheless, most studies measure emotion granularity by looking at people's use of emotion words. Other methods of measuring emotion granularity might include similarity judgments of different situations that do not include a clear emotion label (e.g., a situation that describes loss for *sadness*; a situation that describes frustration for *anger*).
5. Current psychotherapeutic practices, particularly cognitive behavioral approaches, might in part improve emotion granularity, although they do not explicitly use the phrase "emotion granularity" or "emotion differentiation."

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