Emotions as Mediators and as Products of Creative Activity

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Emotions are related to creativity in many ways—as facilitators, inhibitors, and simply as adventitious by-products. In this chapter, I consider two of the more positive ways—namely, emotions as mediators and as products of creative activity. These two ways involve different meanings of emotion. In the first (mediational) sense, emotion refers to the broad matrix of experience in which all behavior is embedded. Various names have been given to emotions in this sense; for example, feeling tones (Getz & Lubart, 2000), affective tones (Isen, 2000), and background feelings (Damasio, 1994). A common theme that runs through these formulations is that emotional feelings (the term I use here) can act as catalysts to creativity without, however, entering into the final product. Until emotional feelings are given symbolic form and made manifest in behavior, there is little reason to speak of them as either creative or noncreative in and of themselves.

Emotion in the second sense refers to specific patterns of response that are manifested in behavior and that are symbolized in ordinary language by such names as anger, fear, and love. I call emotions in this sense emotional syndromes to distinguish them from emotional feelings as defined previously. Emotional syndromes can be creative products in their own right. How such creativity is possible, the criteria for its assessment, and its relation to other kinds of creativity are the major concerns of this chapter.

I begin with a brief discussion of how emotional feelings can help mediate creativity. This is an important topic in its own right, but I also want to short-circuit at the outset a potential source of confusion. Emotional feel-

ings are only part or one component of emotional syndromes. What is true of the part need not be true of the whole, and vice versa.¹

EMOTIONAL FEELINGS AS MEDIATORS OF CREATIVITY

Building associations among seemingly disparate ideas, as in the formation of metaphors, is critical to creativity in a variety of domains—art, business, science, and literature (Martindale, 1993; Mednick, 1962; Simonton, 1988). Therefore, in discussing emotional feelings as catalysts for creativity, I focus on the formation of metaphors and, in particular, on the emotional resonance model of Getz and Lubart (2000; Lubart & Getz, 1997).

In traditional accounts of metaphor (e.g., Gluksberg & Keysar, 1993; Ortony, 1993; Tourangeau & Sternberg, 1982), two seemingly disparate concepts become linked when their lexical representations overlap (and hence the activation of one directly activates the other), or because both concepts are instances of a more generic concept that mediates the link between them. These two cognitive mechanisms are depicted graphically in Panels A and B of Fig. 13.1.

According to Getz and Lubart (2000), neither of these two mechanisms is sufficient to account for the formation of truly novel metaphors (i.e., metaphors with no prior conceptual links), whether direct (Panel A) or mediated (Panel B). Getz and Lubart therefore proposed an emotional resonance model (ERM), which is illustrated in Panel C of Fig. 13.1. This model assumes that some associations between concepts are mediated by emotional profiles or feeling tones. When a concept is activated, a corresponding feeling tone presumably spreads as a global "wave" throughout the memory system, where it may resonate with another concept that has a similar emotional profile.

Feeling tones become attached to events through direct experience, particularly events that are self-involving. But people, as opposed to infrahuman animals, not only experience events directly, they also give meaning to experience within a conceptual system. When direct experience is conceptualized, a feeling tone becomes linked to the relevant concept. For example, the feeling tone associated with separation from a friend or loved one may be conceptualized as grief in Western cultures, but as illness or fatigue by the Tahitians (Levy, 1984), with corresponding differences in be-

¹Feeling is one of the vaguest terms in the English language; to adapt Wittgenstein's familiar metaphor, it covers a large, extended family, one united more by name than by resemblance (Averill, 1994). Thus, the use of feeling in this chapter should not be generalized uncritically to other contexts.

A: Direct link between two Concept A concepts Superordinate concept B I ink mediated by superordinate concept Concept B Concept A Concept A C: Link mediated by resonating feeling tones

FIG. 13.1. Three models of metaphor formation.

havior and social interactions. The conceptualization of feelings is most evident with respect to concepts such as "fear," "anger," and "love" that have an explicitly emotional connotation. However, nearly all concepts have affective qualities attached to them. Some of those qualities, such as overall feelings of pleasantness or unpleasantness, are general across persons and even cultures (cf. Snider & Osgood, 1969); other qualities are multifaceted (combinations of feeling tones) and idiosyncratic to the individual. The latter are the focus of Getz and Lubart's (2000) emotional resonance model; it is what sets their model apart from related models that focus almost exclusively on the positive—negative dimension of feeling.

Concepts necessarily have shared meaning. For example, my concept of a "lawyer" must overlap with your concept of a "lawyer," otherwise we would

not be able to communicate about lawyers. However, how I feel about lawyers, based on my experience, need not correspond with how you feel about lawyers, based on your experience. On the other hand, the way I feel about lawyers may "resonate" with the way I feel about broccoli. Creative metaphors are generated, according to Getz and Lubart (2000), when individuals with a rich store of idiosyncratic feelings access in working memory two resonating tones, thus leading to the formation of an original link between the otherwise remote concepts to which these feeling tones were experientially attached. For example, "Lawyers are the broccoli of the judicial system."

How are such links made? We can address this question from both a psychological and a neurophysiological perspective. Psychologically, Getz and Lubart (2000) postulate a threshold value for the detection of resonating feeling tones. When this threshold value is reached, the associated concepts can be brought into working memory and a metaphor can be established. A person's threshold value for detection can presumably be raised or lowered by a variety of personal (e.g., motivation) and situational (e.g., priming) variables.

From a neurophysiological perspective, memory for emotional events—and hence corresponding feeling tones—depends on a network of neural and chemical signals distributed widely in the brain; the same is true of the networks that mediate conceptual (e.g., declarative) knowledge. Because of their widespread distribution, emotional and conceptual networks interconnect in many ways, thus making possible the kind of linkages postulated by Getz and Lubart. Indeed, it is only in the abstract that we can speak of separate emotional and conceptual systems, as opposed to a single, integrated emotional-conceptual system. As the title of one of Damasio's books (Descartes' Error, 1994) suggests, Descartes made a fundamental error in making a sharp distinction between cognitive (mental) and emotional (physiological) processes.

I have used the emotional resonance model of Getz and Lubart (2000) to illustrate one way that emotions might mediate creativity in general. This is currently an active area of research about which I say more later. The major focus in this chapter, however, is not on emotional feelings as mediators of creativity, but instead on emotional syndromes as potentially creative products in their own right.

FROM EMOTIONAL FEELINGS TO EMOTIONAL SYNDROMES

As defined earlier, emotional syndromes are organized patterns of response that are symbolized in ordinary language by such terms as anger, love, grief, and the like. (Art and music are also important symbolic forms for ex-

pressing emotion; for simplicity, however, I focus on language.) Emotional feelings and emotional syndromes are often conflated, both in psychological theory and everyday discourse, as when such phrases as "I feel angry" and "I am angry" are used interchangeably. However, emotional feelings are neither necessary nor sufficient conditions for the attribution of emotion, whether the attribution is to another person or to oneself (Averill, 1994). Feelings are simply one component—albeit a very central component—of most emotional episodes.

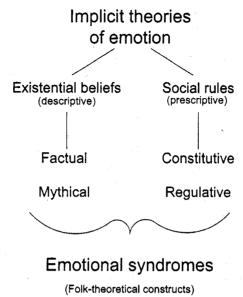
New concepts are continually being introduced into language, for example, on the forefront of scientific discovery. Arieti (1976) used the term endocept to refer to such concepts in the making. Arieti's concern was with creativity in the intellectual and artistic domains, but similar considerations apply to the emotions. As new emotional concepts come into common use, or old concepts pass out of use, corresponding changes occur in the emotional feelings—no less than in the thoughts and actions—symbolized by those concepts. The change, however, does not occur suddenly. Typically, there is a stage in which the emerging emotional syndrome is represented in ordinary language only by circumlocution or metaphor. Adapting Arieti's terminology, I refer to such embryonic syndromes as endoceptual.

Endoceptual emotional syndromes typically do not last. As humans, we have a strong need to impose order on, or make sense of, events—especially when those events include our own behavior. Hence, there is a tendency to short-circuit endoceptual experiences by assimilating events into some readily available conceptual category. Assimilation can sometimes be a creative solution; in terms of criteria to be discussed shortly, it may lead to behavior that is authentic but not particularly novel. More creative, and more difficult, is to change the category to better accommodate the new behavior.

Emotional Syndromes as Products of Creative Activity

A fully formed emotional syndrome is an organized pattern of responses (feelings, thoughts, and actions). The operative term here is *organized*—an emotional syndrome presumes principles of organization. Biological principles (information encoded in the genes) may predispose the individual to respond in some ways more than in others. This is particularly evident in the case of simple emotions, such as fright. For most emotions, however, the proximal organizing principles are more social than biological. That is, culturally specific beliefs (implicit folk theories) provide the blueprint according to which otherwise disparate components are integrated into a coherent whole.

Two types of beliefs can be distinguished: existential beliefs and social rules. These are illustrated in Fig. 13.2. Existential beliefs concern what is,



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FIG. 13.2. Emotional syndromes as constituted by implicit (folk) theories of emotion.

what exists. Some existential beliefs about emotions may be true in the sense that they are accurate reflections of how people respond when emotional. For example, it is true that when people are in love they generally want to be together. Other existential beliefs are mythical; for example, that love is made in heaven, that there is only one "true" love, and so forth. Needless to say, myths can lend meaning and significance to experience, sometimes even more than true beliefs. The important point is that emotional syndromes are organized, in part, by the existential beliefs we hold about them.

Emotional syndromes are also constituted, in part, by social rules. Succinctly put, our folk theories of emotion not only describe what is, whether in fact or myth, they also prescribe what should be. It is widely recognized that emotions are regulated by rules; for example, that you should not laugh at a funeral. But many rules also have an enabling functions. To illustrate with a nonemotional example, consider grammatical rules: They not only regulate how a person speaks a language, they help constitute the language that is spoken. Thus, without an English grammar, there would be no English language. The same is true with respect to the rules of emotion. Without the rules of anger, say, there would be no anger, only inarticulate expressions of rage or frustration.

Existential beliefs and social rules provide the prototypes according to which the emotions commonly recognized within a culture are socially constructed. However, beliefs change and rules can be broken. As an emotional syndrome diverges from its prototype, its conceptual representation becomes increasingly fuzzy and difficult to articulate. If the resulting behavior is detrimental, it may simply be labeled "neurotic." However, not all innovations are detrimental. On occasion, the behavior may prove effective for the individual or group, in which case it can be regarded as creative.

THE CRITERIA FOR CREATIVITY, WITH SPECIAL REFERENCE TO AUTHENTICITY

Implicit in the previous analysis are two of the most frequently mentioned criteria for assessing creativity: namely, novelty and effectiveness. A creative response is (typically) different from what is standard for the individual or group, and it is of some value (e.g., aesthetically as in art, theoretically as in science, or practically as in business). Most discussions of creativity stop with these two criteria. But a third needs to be added: authenticity. I examine this criterion in some detail, both because it is important in its own right and because it illustrates some conditions (e.g., the necessity of external standards) that also apply to the criteria of novelty and effectiveness.

To illustrate the importance of authenticity, imagine a very talented artist who copies a masterwork in every detail, so that there are now two paintings—one original and one copy—that are indistinguishable from each other. Because they are identical, both paintings are equally novel and equally effective (beautiful). Yet we prize the original for the creativity it manifests and only marvel at the copy for its technical competence. What makes the difference?

Arnheim (1966, p. 298) wrote of the "pregnant sight of reality" as a hall-mark of the creative artist. In the previous hypothetical example, the original painting reflects the artist's own vision—his or her beliefs and values—about the world. The copy, no matter how well done, remains an imitation; its inspiration comes from another, not from the self.

Because the origin of an authentic response lies within the self, the response may also be novel; that is, idiosyncratic to the individual. In individualistic (e.g., Western) societies, therefore, the criteria of novelty and authenticity tend to converge. By contrast, in collectivist (e.g., East Asian) societies in which the self is more identified with the group and its traditions, authenticity and novelty are more easily distinguishable as criteria for creativity (Averill, Chon, & Hahn, 2001).

At first, the criterion of authenticity might seem more relevant to creativity in the arts than in the sciences. Scientific discoveries are objective; that

is, divorced of idiosyncracies of the individual scientist. However, disputes over priority are as common in the sciences as in the arts. Moreover, Arnheim's (1966) phrase, the "pregnant sight of reality," would seem to apply to science scientific discoveries (and their heuristic value) even more than to innovations in art. (This is not to deny an important difference between authenticity in art and science: If Darwin had never lived, someone else would discovered the principle of natural selection; but if Picasso never lived, no one would have painted *Guernica*. This difference, however, is not critical to our present discussion.)

The criterion of authenticity raises particularly interesting questions when applied to the emotional creativity. The experience of emotion is often taken as prima facie evidence for authenticity, especially if the emotion is intensely felt and sincerely expressed. For example, the vivid emotions experienced by some persons as they recount being "abducted" by space aliens can be so convincing as to mislead even sophisticated observers (Kenny, 1998). But, of course, not all emotions are authentic, no matter how keenly felt or sincerely expressed. One need not adhere to psychoanalytic principles to realize how misleading emotional experiences can be, even to the person doing the experiencing.

Authenticity is not an inherent feature of emotion, but instead a judgment we make about emotions; and, like other kinds of judgment, a standard of comparison is implied. To take a nonemotional example, a painting attributed to Titian is judged authentic only if it matches other paintings by that artist, and a statue attributed to classical Greece is judged authentic only if it matches other statues bearing similar cultural characteristics. I am oversimplifying, of course. One might argue that the painting must not only match others by Titian, but that it must have been painted by Titian, and that the statue must have been sculpted by a person living in classical Greece. But these added stipulations raise complications of their own (Startwell, 1988), and they do not alter the basic argument I wish to make, namely, that judgments of authenticity involve some standard of comparison or frame of reference. By what standards do we judge the authenticity of an emotional response?

Sincerity is one standard but, for reasons mentioned earlier, sincerity is at best a necessary, not a sufficient, condition for authenticity. Sincerity, it might be said, is simply believing in the authenticity of one's own experience. The belief must still be justified.

In search of a firm foundation for judging authenticity, many theorists fall back on the hoary notion that "real" emotions are grounded in our biological heritage. The sociologist Arlie Hochschild (1983) illustrated this position. She analyzed the "emotional labor" expected by some organizations of their employees. She described, for example, how flight attendants are trained to smile and be polite even when confronted with rude and obnox-

ious passengers, and how bill collectors may feign anger to collect a debt, even while sympathizing with the plight of the debtor. No doubt, many employees, following company policies, are inauthentic in their expression of emotion; moreover, the stress of feigning emotion can exert a heavy toll on the employee (for a review, see Steinberg & Figart, 1999). The toll may be especially insidious when the emotions dictated by an organization—or society as a whole (Mestrovic, 1997)—are adopted and experienced as one's own; that is, when they acquire a faux authenticity.

But what is nature of the presumably authentic emotions from which a person becomes estranged in the furtherance of corporate or societal interests? The position adopted by Hochschild (1983) was that authentic emotions are akin to simple sensory experiences, such as "hearing, touch, and smell" (p. 219). This appeal to elementary biological processes hardly does justice to the complexity of the issue. Nevertheless, I believe an answer may be found in Hochschild's implicit assumption that inauthentic emotions are, in the long term, detrimental to an individual's welfare. Stated in positive terms, an emotion is judged authentic when it is consistent with a person's own best interests. This is admittedly a difficult standard to apply, because a person's best interests may not be recognized until long after the fact. The authenticity of an emotion can thus always be reevaluated as circumstances change.

The ancient Greeks had a saying: Count no man happy until he is dead. Most emotions are not as global in their implication as is happiness and hence are subject to more frequent reevaluation. For example, as a person matures, what was once considered the epitome of true love may with hind-sight be dismissed as mere sexual infatuation. On an even shorter time scale, the events of tomorrow may make today's anger (fear, hope, etc.) seem less than genuine.

To summarize, authenticity is one of three criteria by which a response is judged creative; the other two are novelty and effectiveness. I have focused on authenticity not because I believe it to be more important than the other two criteria, but because it is the most neglected in contemporary theoretical discussions. All three criteria are important and, to an extent, compensatory: A response that is particularly novel and authentic may be judged creative even while its effectiveness (value) remains uncertain. Likewise, a response that is particularly effective and authentic may be considered creative even though it is not especially novel, and similarly for a response that is novel and effective, although it falls short on authenticity.

One final point before leaving this topic. I have emphasized how judgments of authenticity presume some standard of comparison. The same is, of course, true of novelty and effectiveness. A response can be novel only in comparison to the commonplace, and a response is effective only within a context. In other words, judgments of creativity are implicitly relative. I em-

phasize this fact for reasons that become evident later in this chapter, when I discuss the domain generality and specificity of creativity. But first, I need to review briefly the empirical evidence for emotional creativity.

EMPIRICAL EVIDENCE

The evidence for emotional creativity can be divided into three main categories: cultural variations in emotional syndromes, individual differences in the ability to be emotionally creative, and improvisations during the course (microgenesis) of emotional episodes. These categories form a rough progression from the macro (cultural) to the micro (episodic) levels of analysis, and each helps to explain the others in a top-down or bottom-up fashion.

Cultural Variations

Some of the best, albeit indirect, evidence for emotional creativity comes from cultural differences in emotional syndromes. Much of the cross-cultural research on emotion has involved facial expressions, and has tended to favor the universality of at least as few "basic" emotions (e.g., Matsumoto, 2001); or it has involved linguistic expressions, and has tended to favor cultural specificity (e.g., Russell, 1991). However, expressive reactions and verbal behavior are only two of the many components that, taken together, help constitute an emotional syndrome. As evidence for emotional creativity, the most relevant research involves "thick" descriptions in which emotional syndromes are treated as integrated wholes and interpreted within the culture of which they are a part. The research of Lutz (1988) on the emotional life of the Ifaluk, a people of Micronesia, provides a good example.

Although cultural variations in emotional syndromes are well documented, their theoretical significance has not always been appreciated. As alluded to earlier, the tendency has been to interpret cultural variations as a result of regulatory or "display" rules, ignoring the enabling or constitutive function of social norms. Stated differently, cultural variations have too often been dismissed as mere patina or overlay on more "basic" (biologically primitive) emotions. Needless to say, cultural variations do not negate the importance of biology. However, the conception of emotions as biologically primitive ("animallike"), and hence relatively impervious to change, is based more on custom than on empirical evidence (Averill, 1996).

Given that cultural variations exist in emotional syndromes, the question becomes: How did they arise? The answer, I argue, is to be found in the emotional creativity of individuals within the society. That is, differences that exist today between cultures would not have occurred except for the

ability of individuals within a culture to introduce variations on "received" emotional syndromes.

Individual Differences

William James (1902/1961) observed that "when a person has an inborn genius for certain emotions his life differs strangely from that of ordinary people" (p. 215). I don't know whether emotional geniuses are different in this regard than geniuses in other domains. James did not mention names. But my concern is not with creative genius, in whatever domain; rather, it is with the emotional equivalent of "everyday creativity" (Richards, 1990).

To assess individual differences in everyday emotional creativity, a 30-item emotional creativity inventory (ECI) was constructed (Averill, 1999). The ECI consists of three facets. The first facet, comprising 7 items, assesses preparedness, that is, a person's background knowledge about, and the importance placed on his or her emotional life; the second facet (14 items) relates to the criterion of novelty; and the third facet (9 items) represents a combination of the other two criteria for creativity, namely, effectiveness and authenticity. (Using self-report measures, it has proved difficult to distinguish the perceived effectiveness of a response from its authenticity; people tend to judge their own emotions effective to the extent they are authentic, and vice versa.)

The ECI was developed as a research instrument, not for use in applied settings. Its purpose is to explore the correlates of emotional creativity on the individual level. People who score high on the ECI are rated by their peers as being emotionally more creative than are low scorers, presumably on the basis of everyday behavior, and high scorers are better able to express unusual emotions symbolically in stories and pictures (Averill, 1999; Averill & Thomas-Knowles, 1991; Gutbezahl & Averill, 1996). In terms of the "Big Five" personality dimensions (McCrae, 1992), the ECI is most closely related to openness to experience, but is independent of extraversion and neuroticism, two traits closely related to positive and negative emotionality, respectively (Averill, 1999). Scores on the ECI are negatively related to alexithymia, and positively to self-reported spiritual or mysticlike experiences (Averill, 2002). Both alexithymia and mysticlike experiences are marked by an inability to name the emotions one is experiencing. The reasons for the difficulty are, however, very different: Alexithymia reflects an external orientation and lack of discernment of one's own emotional state; mysticlike experiences involve an internal orientation and emotions that are inherently difficult to describe in ordinary language. People who score high on the ECI are also better able than are low scorers to benefit from solitude, a condition that traditionally has been associated with creative pursuits (Long, Seburn, Averill, & More, 2003).

Differences can be as informative as similarities. Therefore, let me contrast emotional creativity with a closely related construct, namely, emotional intelligence. As formulated by Salovey, Mayer, and their colleagues (e.g., Salovey, Bedell, Detweiler, & Mayer, 2000), emotional intelligence comprises four related "branches": namely, the ability (a) to identify accurately emotions in oneself and others; (b) to use emotions to facilitate thought and action; (c) to understand the meaning or significance of emotions; (d) to manage emotions in oneself and others. These branches form a rough hierarchy, from the most elementary to the most complex.

Research on emotional intelligence has been extensively reviewed elsewhere (Bar-On & Parker, 2000; Mathews, Zeidner, & Roberts, 2002). My concern here is limited to a single question. The abilities attributed to emotional intelligence would also be conducive to emotional creativity: Wherein, then, lies the difference?

In their numerous publications, Salovey, Mayer, and colleagues have been commendably clear on the criteria for assessing an "intelligence" (e.g., that there be explicit standards for success or failure), and they have constructed performance tests to assess each branch of their model: the multifactor emotional intelligence scale (MEIS) and its successor, the MSCEIT (Mayer, Salovey, & Caruso, 2000). They have been less clear on what counts as an emotion. "A reasonably canonical definition," Mayer et al. (2001) asserted, "might be that an emotion is an organized mental response to an event that includes physiological, experiential, and cognitive aspects, among others" (pp. 233–234). To narrow this very inclusive definition, Mayer et al. added two stipulations, namely, that emotions "typically occur in the context of relationships" and that they "show some universality across human beings and even closely related mammalian species" (p. 234).

In the Salovey et al. four-branch model, emotional intelligence may be related to creativity in two ways. First, at Branch 2 (using emotions), "emotional information" may facilitate thinking and creativity. This is consistent with our earlier discussion of emotional feelings as mediators of creativity. Second, at Branches 3 (understanding emotions) and 4 (managing emotions), different emotions may be combined and expressed in unusual ways. This might seem to correspond to changes in emotional syndromes. However, the concept of an emotional syndrome presented earlier is fundamentally different than the concept of emotion in Salovey et al.'s model of emotional intelligence. This difference is made explicit in the following observation by Mayer et al. (2001): "Discovering a new way of expressing an emotion doesn't necessarily involve inventing new emotional rules or having idiosyncratic emotional reactions" (p. 238). In contrast, emotional creativity as here conceived involves precisely that—a change in the beliefs and rules that help constitute emotional syndromes.

To complicate matters further, emotional intelligence as assessed by the MEIS emphasizes conformity to group standards rather than the novelty and authenticity of a response. That is, a correct response to an item on the MEIS is determined by its agreement with the pooled responses of a large group of test takers, or with the responses of a smaller group of presumed experts on emotion. Such consensus scoring may be a valid indicator of effectiveness, but it downplays the importance of novelty and authenticity, two of the criteria for creativity discussed earlier. In response to this objection, originally raised by Roberts et al. (2001), Mayer et al. (2001) noted that the MEIS is, like most intelligence tests, a measure of convergent rather than divergent thinking/feeling. That may be true, but it doesn't settle the issue. It is well known that a certain degree of abstract intelligence is necessary for creativity in a given domain—no one with an IQ of 60 will be a creative astrophysicist. However, beyond a threshold necessary for success in a field, there is only a modest relation between intelligence as measured by IQ tests and creativity. The same is true, I assume, of the relation between emotional intelligence and creativity.

To summarize, individuals differ in their ability to be emotionally creative, and those differences presume some of the same abilities encompassed under the broader rubric of emotional intelligence. However, intelligence is no guarantee of creativity in the emotional domain any more than it is in the intellectual domain. Moreover, individual differences in abilities do not explain the *processes* by which new emotional syndromes actually develop or come into being. For that, we must examine how an emotion unfolds within an episode—its microgenesis.

The Microgenesis of Emotional Episodes

The beliefs and rules that help organize an emotional syndrome (see Fig. 13.2) allow for a great deal of improvisation as an episode develops. In this respect, an emotional episode can be compared to a rhetorical argument—both involve the "art of persuasion" (Averill, 2001). To change metaphors, emotional episodes are constructed "on line" (Parkinson, 1995). In forming the sequence of responses that constitute an emotional episode, a person has recourse to a large database of previous experiences stored in memory, as well as beliefs about what the emotion is and should be like.

For obvious methodological reasons, it is difficult to study emotions as they develop on line. However, a study by Morgan and Averill (1992) illustrated some of the issues involved, especially as related to emotional creativity. Participants in this study were asked to recount incidents in which they experienced "true feelings," a common colloquialism for authentic emo-

tional experiences. The feature that most distinguished true-feeling episodes from other emotional episodes of approximately equal intensity was that the former implicated deeply held beliefs and values. This might occur, for example, when a participant was facing a moral dilemma or during the breakup of a romantic relationship.

Although the study by Morgan and Averill (1992) was retrospective, care was taken to assess participants' reactions toward the beginning, middle, and end of an episode. A typical episode began with confusion and was followed by a kaleidoscope of nebulous and ever-shifting emotions. This was basically a reversion to the endoceptual stage discussed earlier. As the episode progressed, one of two processes might have become dominant, corresponding to Piagetian assimilation and accommodation. One process (assimilation) led to a "normalization" of the experience, for example, by giving it meaning within a standard emotional category, such as anger or love, in which case the beliefs and rules that helped constitute that emotion were reinforced. The other process (accommodation) led to a change in the relevant beliefs and rules, resulting in an emotional variant, one difficult to describe in conventional terms.

Generalizing from an individual to a social level of analysis, it is easy to imagine how beneficial variants, if effectively communicated, might accumulate and diffuse through society. The ultimate result would be a new or transformed emotional syndrome. We thus come full circle, accounting for the historical and cultural differences in emotions discussed earlier.

GENERALITY VERSUS SPECIFICITY

One of the central issues addressed by the chapters in this volume is the degree to which creativity is general across domains or specific to a domain. This issue has been the object of considerable research and speculation for decades—and the answer seems to be an unequivocal *both*—creativity is general *and* specific. The question then becomes: Under what conditions do we find generality, and under what conditions do we find specificity?

Behavior is hierarchically organized. Whether or not one finds generality or specificity depends, in part, on the level at which the creative response is identified. Emotional creativity is a "midlevel" construct. Looking upward in the behavioral hierarchy, we can expect to find increasing generality, for example, between emotional creativity and creativity in the arts and sciences. The evidence for overlap between emotional and artistic creativity is largely anecdotal, but too ubiquitous to be dismissed. Poetry, in particular, has often been viewed as a means for giving form to emotions that are inadequately expressed in ordinary language; and, metaphorically

speaking, dance is poetry in motion. Acting, too, particularly deep or method acting, involves learning to be emotional in often unusual ways.

At an even broader level of generality, I would expect some overlap between emotional and intellectual creativity. Among university students, emotional creativity as measured by the ECI, is largely independent of intellectual ability as measured by SAT scores (Averill, 1999). This may be due, in part, to a restriction in the range of intellectual abilities among university students. (As noted earlier, even intellectual creativity is poorly related to general intelligence, beyond a threshold level of ability required for success in a field.) Be that as it may, emotional appraisals depend on the capacity to make fine discriminations in situations that are often complex, ambiguous, and stressful; a good deal of information processing also goes on between the appraisal of the situation and the experience of emotion; and, finally, the effective expression of emotion requires a certain finesse, both verbal and behavioral, often in coordination with the behavior of another (e.g., the target or instigator of the emotion). For these reasons alone, I believe it would be a mistake to draw too sharp a distinction between emotional and intellectual creativity.

Looking downward in the behavioral hierarchy, increasing specificity can be expected between emotional creativity in general and creativity in different domains of emotion. Some people are more aggressive than others, some are more nurturing, and some are more timorous. Corresponding to such temperamental differences, we should expect to find differences in the ability to be creatively angry, loving, and fearful.

However, the issue of generality (versus specificity) does not depend solely on the behavioral level at which the construct is defined, or even on attributes of the creative person. As discussed earlier, creativity is a judgment we make about behavior, not an inherent property of behavior. It follows that questions about generality or specificity must also take into account the characteristics of those doing the judging. For example, a literary critic is unlikely to have the expertise to judge a musical composition, and hence may fail to recognize commonalities in creativity across the two domains. In general, the more narrow the expertise of the judges, the greater the specificity of judgments of creativity is likely to be. This presents particular problems in domains that traditionally have not been considered open to creativity—the emotions being a prime example. In such instances, creativity may go unacknowledged.

Still a third factor must be considered. The criteria for judging creativity—novelty, effectiveness, and authenticity—are all relative to the situation; hence, consideration must be given to the "state of the art" in a domain at a given time. A person might potentially be creative in several domains, but if one of those domains is not ripe for exploitation, creativity

will be correspondingly restricted or may go unrecognized. This is one implication of Kuhn's (1970) familiar distinction between normal and revolutionary science. In terms of potential, scientists are no less creative during periods of normal science, although the problems they address allow for mostly minor advances on accepted theories, and hence are not generally recognized as being particularly creative (at least as far as the criterion of novelty is concerned). Only as anomalies accumulate do radically new approaches, or paradigm shifts, become feasible. Something similar occurs in the domain of art (Martindale, 1990), and, I would suggest, in the domain of emotion, as periods of traditionalism oscillate with periods of romanticism (as in the sexual revolution of the 1960s).

Three-way interactions are always difficult to visualize, particularly when each part (persons, judges, situations) can be analyzed in a hierarchically fashion (as described earlier for creative persons and their behavior). That is one reason why the issue of generality versus specificity seems so intractable. The tendency is to focus on only one member of the triad, typically creative persons, whereas holding constant (or ignoring) the other two. But the others never remain constant; hence, there always will be exceptions to any conclusion.

Locating creativity in the interaction among creative persons, judges, and situations is consistent with Csikszentmihalyi's (1999) systems approach to creativity. His analysis goes far beyond what I have said here, but to conclude this chapter I want to approach the problem of generality from a different perspective.

CONCLUDING OBSERVATIONS

The three-way interaction of persons, judges, and situations helps to set the boundaries of a domain as more or less inclusive. We can also ask about the interaction *among* domains, regardless of how the boundaries are set. From this perspective, generality takes on a different meaning. It no longer refers to the inclusiveness of a domain, but, rather, to the general "climate" in which creativity in a variety of domains may flourish together, each enhancing the others.

Historically, many societies have "golden ages" in which the arts, sciences, philosophy, politics, and commerce have all flourished. Classical Greece and Renaissance Italy are two familiar examples. However, let me take a recent and more mundane example. In an analysis of metropolitan regions within the United States, Richard Florida (2002) found that those with thriving economies, such as the San Francisco Bay Area and Austin, Texas, have a high proportion of creative people in a variety of domains. The presence of this "creative class" is indexed by such variables as the

percentage of college-educated workers in the labor force, the number of patents per capita, the number of artistically talented people, and even the concentration of homosexual couples (a proxy for a tolerance of alternative lifestyles). "On many fronts," Florida (2002) asserted, "the Creative Class lifestyle comes down to a passionate quest for experience. The ideal, as a number of my subjects succinctly put it, is to 'live the life'—a creative life packed full of intense, high-quality, multidimensional experiences" (p. 166).

Florida did not distinguish between emotions as mediators and as products of creativity, but both senses seem implicit in his description of the creative lifestyle. Assuming his analysis proves valid (for a critique, see Malanga, 2004), his findings suggest the potential importance of the emotions for creativity "in general."

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