# Creativity and emotion: Reformulating the Romantic theory of art

Joseph L. Flanders McGill University, Department of Psychology

#### Abstract:

The creative process has mystified thinkers in the western tradition at least since Plato. According to Oatley (in press), our contemporary view of creativity is predominantly Romantic. From the Romantic perspective, beauty, goodness, and truth are inherent in human nature and we have access this natural way of being through our emotions. Thus, romanticism offers a theory of the creative process: it is the exploration and authentic expression of The following paper tests the Romantic hypothesis by drawing on multiple perspectives within the human sciences. To begin, a more comprehensive statement of the Romantic hypothesis is offered via R. G. Collingwood's The Principles of Art (1938). From there, the hypothesis is evaluated with respect to the psychology of emotion, emotional neuroscience, dynamic systems modeling, and phenomenology. In conclusion, it is argued that, for the most part, the Romantics were right. However, contemporary science offers some valuable insights into the nature of emotion and creativity. With these insights in mind, a reformulation of the romantic theory is proposed.

#### 1. Introduction

The nature of creativity has mystified thinkers in the western tradition at least since Plato. According to Oatley (in press), our contemporary view of creativity is predominantly Romantic. From the Romantic perspective, beauty, goodness, and truth are inherent in human nature and we have access this natural way of being through our emotions. Thus, romanticism offers a theory of the creative process: it is the personal exploration and authentic expression of the emotions. The romantic poet William Wordsworth corroborates this theory in his description of writing poetry:

Poetry is the spontaneous overflow of powerful feelings: it takes its origin from emotion recollected in tranquility: the emotion is contemplated till by a species of reaction the tranquility disappears, and an emotion, kindred to that which was before the subject of contemplation, is gradually produced and does itself actually exist in the mind. (Cited in Oatley, in press; pp. 5)

Wordsworth's testimonial aside, it is worth considering whether the romantic theory of creativity is a good one.

## 2. Collingwood: Art as the creative expression of emotion.

In *The Principles of Art* (1938), R. G. Collingwood offers "the best exposition of the Romantic theory of art in relation to emotion" (Oatley, in press; pp. 8). For Collingwood, *art proper* (i.e. genuine creativity) needs to be distinguished from craft, magic, and amusement. Craft is the application of particular means (e.g. technique or skill) to generate a particular end (e.g. chair or violin). The definitive feature of craft is that the end product is conceived in advance and the craftsperson carries out some plan of transforming the idea into the finished product. Magic, like craft, is the application of means to accomplish an end. However, in magic, the desired end is the arousal of particular emotions in the audience. To accomplish this end, the magician has a refined understanding of his or her skills as well as the effect it they will have on the audience. Finally, in the case of amusement, the aim is escapist enjoyment. To amuse audiences, the entertainer treats emotions as a means to enjoyment.

Art proper is none of these things. Artists do not have a preconceived notion of the final product, nor a blueprint for creating it. Unlike the magician, the artist primarily addresses him or her -self. Unlike the entertainer, the artist treats emotions as an end in themselves. Art proper is the creative expression of emotions.

At first, emotions arise as diverse, inchoate feeling. The artist is conscious only "of some perturbation or excitement going on within" (pp. 109) and not of what the emotion actually is. Unexpressed and unresolved, the emotion is a burden. The artist frees him or herself from this "oppressive" state by exploring and expressing the emotion in some kind of language; be it a language of words, images, or notes. Through language, the emotion takes a definitive shape in consciousness. Somehow, as a result of this process, the burden is lifted and the mind is lightened or eased. Artists often have a characteristic, positive aesthetic feeling after having successfully expressed themselves.

The end of the artistic process is not something foreseen or preconceived. Until the artist has expressed the emotion, he or she does not have a definitive idea of the end product. Thus, the act of expressing an emotion, the act of creation, is fundamentally exploratory. It requires that the artist stretch beyond the set of plans and procedures currently available.

Since the publication of *The Principles of Art* in 1938, psychologists have significantly refined their understanding of emotions. The emergence of brain research in particular has provided psychologists with an entirely new image of human emotional life. By examining recent developments in the psychology of emotion, including those in emotional neurobiology, I hope to transport Collingwood's theory into the contemporary era.

# 3. The Psychology of Emotions

Collingwood's treatment of human emotions is consistent with William James' classical theory of emotion (1899). According to James, emotions are experience as a consequence of the internal perception of bodily changes. For example, imagine you are walking through the woods one day when you come across a bear staring at you as though you were lunch. Your autonomic nervous system reacts to this threat by increasing arousal, vigilance, perspiration, heart rate, and blood flow to your limbs, as it prepares you for fight or flight. Only when you perceive this particular pattern of change do you feel fear.

Over the past century psychologists have criticized James' theory. Arnold (1971) argued that in order for these physiological responses to be triggered in the first place, there has to be an initial of assessment or evaluation of the event. This "appraisal" determines the quality and quantity of physiological activity. In the example above, the appraisal is the recognition of the bear as a threat. Appraisals seem to occur along LeDoux' (1996) "low road" from the hypothalamus to the amygdala.

Cognitive theorists such as Schacter and Singer (1962) point out that the pattern of physiological activity is necessary but not sufficient for the experience of emotion. There must be a cognitive interpretation, which resolves the otherwise underdetermined physiological activity. By observing and interpreting your body's response to the bear, you can then label and refine the feeling. This process would be more akin to LeDoux' (1996) "high road" from the cortex to the amygdala. Thus, an emotional experience is the result of an appraisal, a bodily response, and a cognitive label.

## 4. Theoretical Framework of the Neuroscience of Emotion

Perhaps no other period in the 20<sup>th</sup> century has taught us more about human emotions than the "decade of the brain." In the first years of this Third Millennium, brain researchers are beginning to tell a fascinating story about our emotions. Ultimately, this story appears to have a Romantic theme.

The best possible telling of the neuroscientific story includes a description of the setting, in this case, the discipline's theoretical framework. Thus, it is worth noting that the most significant influence on the neuroscience of emotion was that of existential and phenomenological philosophy (Freeman, 2000). Thinkers such as Husserl, Heidegger, Sartre, and Merleau-Ponty argued that the world of the individual conscious human is most accurately construed as a subjective realm, actively constructed, rather than an objective space, passively perceived. As such, the world proper is already infused with the emotional and motivational properties of the subject.

Heidegger (1927/1975) argues that, the very notion of being implies *intentionality*: the location of the subject in a particular place, coming from particular background, and moving toward particular goals. Heidegger expresses this point by describing the human being as "the Dasein" (the "being there") - by describing the individual as an organism that is always and already "being-in-theworld." Thus, as intentional beings, our past and present determine not only what we do with the world, but also how the world appears to us. As a consequence, the world is "always and already" meaningfully, subjectively structured, for the conscious subject.

# Intentionality

For neuroscientists, emotion is an essential component of intentionality. According to Freeman (2000), the story of intentionality begins with the construction of goals comprising the brain's possible future states. These goals require that actions be planned and executed by the brain to transform the current state into the desired future state. Accordingly, Freeman construes emotions as "the departure from a state of calm rest without anticipation." The very word implies this definition: "e-", as in "ex" or "outward" and "-motion" (Freeman, 2000).

Emotion as the "stretching forth of intentionality" can be understood at multiple levels of analysis. Emotion can be observed in primitive animals who prepare to attack for food, escape from danger, or approach to reproduce. Emotions are primary causes within the animal:

The key characteristic is that the action wells up from within the organism. It is not a reflex. It is directed toward some future state, which is being determined by the organism in conjunction with its perceptions of its evolving condition and its history (pp. 214).

The states are emotional insofar as they include the essential qualities of emotion: endogenous origin and intentionality.

At the physiological level, emotion includes the behavioural expression of brain states. The body has to be prepared to act. The brain prepares motor output by coordinating the musculoskeletal system and mobilizing the metabolic support systems, including cardiovascular, respiratory, and endocrine. These preparatory changes reveal to observers the organism's propensity for particular kinds of action. At the

social level of analysis, through the evolution of shared experience, these behavioural changes come to predict the emergence of particular actions and signify specific internal states of meaning (Darwin, 1872). It is in this way that emotion serves a communicative function.

At a more complex level, emotions are subjective experiences. Emotion theorists still debate about the mechanisms of these feelings. However, it is becoming increasingly clear that emotional experience is a complex phenomenon comprised of interactions among multiple levels of physiological, psychological, and social processes. LeDoux (1996) argues this point is eloquently.

Freeman (2000) echoes LeDoux (1996) when he says: "it is neither necessary nor feasible to separate the expression of autonomic states and one's perceptions [or interpretations] or them, whether conscious or not, in the intentional loop. They evolve as an organic whole" (pp. 215). Through a variety of mechanisms, one becomes aware of one's own and others' emotional state and propensity for action. This awareness feeds back and shapes the basis for one's next action. The important message here is that emotions are multifaceted phenomena; however, they can be most effectively understood as emerging form intentional brain states: patterns of neural activity, organized around goals.

Freeman's (2000) neurobiological conception of emotion is consistent with variety of psychological definitions of emotion. For example, Oatley and Johnson-Laird (1987) suggest that emotions serve a communicative function. They communicate among disparate cognitive modules in order to integrate these modules for service of goal-directed behaviour. Averill & Nunley (1992) define emotions as internal states of affairs that are experienced as beyond personal control (passively), that involve evaluative judgements (subjectively), and that are not readily explainable in strictly logical way (nonrationally).

Perhaps a more refined definition comes from Lewis & Granic (1999). They incorporate a variety of theoretical perspectives in psychology:

We define an emotion as a global, non-reducible affective state that is non-specific as to semantic content (Izard, 1984)...elicited by a specific class of situations related to the organism's goals (Oatley and Johnson-Laird, 1987), and that motivates behavioural responses to these situations (Frijda, 1986). All of these features imply an adaptive biological function, and emotions are therefore considered to be phylogenetically specified and unlearned. (pp. 689)

Along with Freeman's neurobiological contribution, this definition will be the most helpful for the rest of this paper.

Dynamical Systems Modelling: Self-Organizing Brain States

Freeman's description of an emotional state as an "organic whole," is characteristic of the dynamical systems approach to modelling brain function. This approach emerged from advances in computer technology, which allowed for complex non-linear or chaotic computation. From the dynamical systems perspective, a complex, organic phenomenon, such as a brain, is best understood as whole, which is greater than the sum of its individual parts (Capra, 2000). The order and stability that define the coherent whole are consolidated through recurrent interactions among components. Coherent brain states, for example, emerge from interactions among psychological, social, and perception-action components (Lewis, 2000). Brain states

are, thus "self-organizing," meaning they spontaneously arises from the synchronization of multiple, lower-order elements (Lewis & Granic, 1999).

According to Lewis and Granic (1999), intentional states self-organize through the interaction of cognition and emotion. An initial appraisal triggers and constrains preliminary emotional activation. This emotional activation simultaneously directs and constrains cognitive activity involved in appraisal. Thus, appraisals and emotions arise in tandem and stabilize into a coherent *Emotional Interpretation* through ongoing feedback (Lewis, 2000). It is not until the Emotional Interpretation stabilizes that the individual realizes a comprehensive cognitive interpretation and experiences a differentiated emotion. This self-organization can occur at multiple time-scales, from seconds to years.

The interactions between cognition and emotion are carried out through neuronal connections between the brain's cortex and limbic system. The cortex houses perceptual, motor, and attentional centres, while the limbic system contains our emotional circuitry. Emotional Interpretations emerge as limbic activity harnesses attention, directs perception, and prompts action plans, while cortical activity updates and refines intentional directedness (Lewis, 2000).

The hippocampus and the time-space loop.

Freeman (2000) gives an even higher-resolution description. He suggests that intentional states arise out of an interaction between the entorhinal cortex and the hippocampus. The entorhinal cortex is a convergent zone of rich, multi-modal sensory information. It receives and combines input from all of the primary sensory areas in the cerebral hemisphere and sends its output back to all of them. The hippocampus assembles and integrates this sensory information over time. These two structures communicate readily: the entorhinal cortex is the main gateway to the hippocampus and main target for hippocampal output.

Freeman (2000) describes their interaction as a "spacetime loop." Space is the personal realm, which the organism has explored and in which it currently moves toward its goals. Time is "the personal laps that every movement in space requires, and that organizes each sequence of past present and expected states" (pp. 222). The hippocampus is involved in the orientation of behaviour in space and time. It maintains a low-resolution, experience-dependent map of the world - the world described by the existentialists and phenomenologists. The hippocampal map is continually shaped and revised by ongoing goal-oriented action and perception. Thus, corticolimbic interactions provide the basic representations of space and time, which organize action with respect to the world.

## 5. Intentional Brain States as Phenomenological Territories

Intentional brain states have correlates in conscious experience. As various brain components self-organize into a particular state, we move into a particular phenomenological territory. Jordan Peterson (1999) provides a compelling taxonomy phenomenological space. Most of the time we find ourselves in "Known" territory. The Known is comprised of the individual's current situation in time and space, an ideal future situation, and a set of plans and procedures designed to move the individual from the former to the latter. The Known is "explored territory," which means that the world has been rendered temporarily predictable and understandable. When our

plans and procedures produced the desired result, we are firmly positioned in the known and we experience the enjoyment of emotional regulation.

Unfortunately, the world is massively complex, perhaps infinitely so. Furthermore, our capacity to render such a world predictable and understandable is severely limited. As a consequence, the Known covers only minimal spatial and temporal territory. At the brain level, this means that coherent intentional states can only maintain themselves temporarily. Unknown territory is defined in opposition to what is Known; it is the unexplored chaos that lies outside of our provisional order. When our behaviours produce unexpected or unintelligible results, something about our current set of means is insufficient for us to reach our desired end. The appearance of anomaly signals the encroachment of the Unknown upon experience. The movement into Unknown territory is emotionally charged, as we lose the stability characteristic of the Known. Thus, emotions arise at the breakdown of our current set of means and ends. Similarly, Oatley (1988) suggests that emotions occur at the juncture between plans.

The Unknown is simultaneously threatening and promising. Consequently, experience in this territory is emotionally intense and diverse. Because it is defined in opposition to what is safe and sound, it contains all that is dangerous. Thus, we experience fear and anxiety. Because the Unknown is chaotic, the appearance of anomaly indicates that the current, comfortable state of order and stability is in jeopardy. Thus, we experience sadness and helplessness. At the same time, the Unknown is a source of infinite potential. As a result, we experience curiosity and excitement. It contains the possibility of a new, more comprehensive order; we experience hope and desire. This new, ideal territory can only be attained through exploration of the Unknown.

Conflict and dysregulation characterize the brain states underlying experience in Unknown territory. We are biologically prepared to respond to anomaly with contradictory motivations: initially avoidance and then, assuming no immediate danger is evident, approach (Peterson, 1999). Each of these basic motivations is comprised of several potential intentional states and emotions (fear, anxiety; curiosity, excitement, hope). All of these intentional systems struggle for dominance of the cerebral battleground and it is this struggle that defines the intense emotionality associated with the Unknown. Freeman (2000) expresses this point:

Emotion can be measured by the magnitudes of the tendencies to chaotic fluctuations in brain modules... [Emotional experiences] can be described in dynamic terms as an escape of chaotic fluctuations from a global order parameter, prematurely in respect to unity of mind and long-term growth toward the wholeness of intentionality. (pp. 233)

Eventually, brain modules self-organize and a new coherent intentional state emerges.

#### 6. Conclusion: A reformulation of the Romantic theory of Creativity

At various levels of analysis, the research reviewed here suggests that emotions occur with the disintegration of a state of order. The cause of this disintegration - and the emotions themselves - is initially undifferentiated and unknown. Yet disorder contains the possibilities of a new, ideal order, which can only be attained through exploration. Collingwood describes the compulsion to explore this potential as an

oppressive "burden." By bravely confronting emotional dysregulation, the explorer stretches beyond his or her current state of knowledge and maps unknown space.

Through exploration, emotions become more and more differentiated and articulated and specific goals emerge. Eventually a new, more comprehensive state of stability and order is established and intentional states self-organize. Collingwood describes a positive feeling that accompanies the successful expression of emotion. This feeling corresponds to the phenomenology of re-establishing Known territory and the neurobiology of re-emerging self-organization. The exploratory process transforms the anomalous and inchoate into the familiar and explicit. Thus, it is the exploration of the Unknown that defines the creative process.

Collingwood argues that emotions are expressed through language. In this context, language may be best understood as a set of exploratory tools. Every creative individual starts in Known territory, with a limited set of tools: a word-processor, a paintbrush, or an experiment. Creativity requires the mastery of a set of tools learned through culture. However, it is the use of these tools in exploration of new meaning that makes their application creative. The creative individual also has to make use of the generative aspect of that language. Though the creative products differ, the creative process is the same.

Contemporary psychology of emotion seems to suggest that basically, Collingwood had it right. Nonetheless, the last sixty-four years of research offers new insights into the relationship between emotion and creativity and provides a refinement of Collingwood's theory. Creativity is not the expression of emotion per se; it is the exploration of the Unknown and the expression of a new order. Emotional experience is the marker of creative exploration.

#### References:

Arnold, M. A. (1971). Motives as causes. *Journal of Phenomenological Psychology*. 1, 185-192.

Averill, J. R. & Nunley, E. P. (1992) *Voyages of the heart: living an emotionally creative life*. New York: The Free Press.

Capra, F. (1996). The web of life: a new scientific understanding of living systems. New York: Anchor Books.

Collingwood, R. G. (1938). The Principles of Art. London: Oxford University Press.

Darwin, C. (1872/1948). *The Expression of Emotions in Man and Animals*. London: Watts.

Ekman, P. (1984). Expression and the nature of emotion. In K. Scherer & P. Ekman (Eds.), *Approaches to Emotion*. Hillsdale, NJ: Erlbaum.

Freeman, W. (2000). Emotion is essential to all intentional behaviours. In M. D. Lewis & I. Granic (Eds.) *Emotion, Development, and Self-Organization*, New York: Cambridge University Press, pp. 209-235.

Frijda, N. H. (1986). The Emotions. Cambridge: Cambridge University Press.

Heidegger, M. (1927/1975). *The Basic Problems of Phenomenology*. A. Hofstadter (Tans.). Indianapolis: Indiana University Press.

Izard, C. E. (1984). Emotion-cognition relationships and human development. In C E. Izard, J. Kagan & R. B. Zajonc (Eds.) *Emotion, Cognition, and Behaviour*. Cambridge: Cambrdige University Press, pp. 17-37.

James, W. (1899/1981). *The Principles of Psychology*. Cambridge: Harvard University Press.

LeDoux, J. (1996) The emotional brain: The mysterious underpinnings of emotional life. New York: Touchstone press.

Lewis, M. D. & Granic, I. (1999). Self-organization of cognition-emotion interactions. In T. Dalgleish & M. Power (Eds.) *Handbook of Cognition and Emotion*. Chichester: Wiley, pp. 683-701.

Lewis, M. D. (2000). Emotional self-organization at three time scales. In M. D. Lewis & I. Granic (Eds.) *Emotion, Development, and Self-Organization*, New York: Cambridge University Press, pp. 37-69.

Oatley, K. & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition and Emotion*, 1, 29-50.

Oatley, K. (1988). Plans and the communicative function of emotions: a cognitive theory. In V. Hamilton et al. (Eds.) *Cognitive Perspectives on Emotion and Motivation*, Kluver Academic Publishers, pp. 345-364.

Oatley, K. (in press). Creative expression and communication of emotions in the visual and narrative arts. In R.J. Davison, K.R. Scherer, & H.H. Goldsmith (Eds.) *Handbook of Affective Sciences*, New York: Oxford University Press, chapter 25.

Peterson, J. B. (1999). *Maps of meaning: The architecture of belief*. New York: Routledge.

Schacter, S. & Singer, J. E. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, 69, 379-399