

12 JULIO C. PENAGOS-CORZO

CREATIVITY AS AN ATTITUDE: AN APPROACH TO THE ORIGINS OF CREATIVITY

Introduction

There is relative consensus on grouping into blocks the various theoretical and methodological approaches, which apparently share certain criteria, to the study of creativity. Such classification is helpful in that it allows us to contextualize these approaches. The specialized literature considers the work of Rhodes (1961) as the starting point for this classification. It includes: a) person-centered approaches or those who see creativity as a personality trait, b) approaches focused on the process or that place it as or within a group of cognitive processes, c) product-centered approaches and d) approaches that focus on the environment. On the other hand, the study of creativity could also be classified as different levels of interacting forces from a macro level to a micro level. In this sense, Hennessey and Amabile (2010) suggest seven levels, from global to individual: Systems approach, Culture / Society, Groups, Individual / Personality, Affect / Cognition / Training and Neurological.

Each approach or group of approaches provides the means for understanding creativity. However, this object of study seems elusive and probably different to each of them. Is it the same to assume creativity is a cognitive phenomenon than a personality trait? If its definition is socially determined does it make sense to seek physiological correlates? Or, conversely, does it make sense to define it in terms of social judgment when there is evidence of psychophysiological correlates? The point is not to answer these questions. It is evident that there is no consensus about what is called creativity. There is fertile ground for approaches that can establish what creativity is or what is it that determines it. One of these approaches could be to consider it an attitude.

There are people with greater creative attitude and people with lesser creative attitude. It is important to separate this approach from those who see creativity as a personality trait. When creativity is approached as a personality trait, what is commonly done is to describe certain personality variables having any correlation with creativity. What is proposed here is that creativity, as an individual act, has the characteristics of an attitude. It is this attitude which may allow generating processes and products that can be labeled as creative or that can be creative for a particular person. While there is a notorious debate on the role social environment plays on creativity, a role that cannot be ignored, what we are talking about here is that there is something which may be called individual creativity where the social dimension of creativity is approached from the point of view of subjectivity, assuming that the subject is mediated by, and in turn, mediates the social environment.

Creativity is usually defined on the basis of two characteristics: originality and relevance (usefulness). It could also be operationally defined through various psychometric tests, i.e.

through the Torrance Test of Creative Thinking (TTCT). In so doing, some of its features such as originality, fluency, flexibility or production would also be defined at the same time (Torrance, 2008). These qualities are observed and inferred through the product generated in the psychometric test. The same is true of divergent thinking: It is "seen" in the test or in the behavior that is performed. But, what is it that triggers originality or the generation of creative products? A disposition, an inclination, a favorable tendency to rate stimuli in an open, permissive and inclusive manner. In other words, a creative attitude.

Overview of a creative attitude

There are different approaches to the study of attitudes. For example, it has been suggested that there are three different components or types of response in an attitude: cognitive, affective and behavioral (Breckler, 1984). The first one refers to the beliefs and thoughts about the object. The second one denotes the feelings of rejection, attraction, liking, etc., to the object. The third refers to the behavior toward an object. This approach is known as the Tripartite Model. Furthermore, and in contrast to this model, the Theory of Reasoned Action states that attitudes have only one component and this component is evaluative. Under this approach, attitudes are determined by the characteristics that seem important according to the observers (Worchel, Cooper, Goethals & Olson, 2002). However, it can be said that attitudes reflect both positive and negative evaluations toward an object (Fabrigar, MacDonald & Wegener, 2005) and behaviors derived from such assessments (Myers, 2005; Summers, 1978). Therefore, an attitude can be seen as "a lasting tendency or acquired predisposition to evaluate a person, event or situation in a certain way and act accordingly" (Vander Zanden, 1990, p 19). This tendency or predisposition may be conceived as an intermediate variable between a stimulus (object of the attitude) and the response or outward manifestation (Morales, 2006) and includes beliefs and feelings about this object (Summers, 1978).

As can be seen, these approaches lay special emphasis on the evaluation towards the object. This raises two conceptual problems: the term "evaluation" and the word "towards". The latter entails a conceptual problem by talking about creativity as an attitude, since we are not talking about an attitude towards creativity, but about creative attitude. Creativity is not the object of the action, but it is an adjective or a noun (creative attitude). Can the object of the attitude be part of the attitude? When speaking of favorable or unfavorable attitudes toward something it can also be said that someone simply has a friendly or hostile attitude. That is, the attitude incorporates, in this case, the type of behavior, cognition or emotion. Such is the case of what in this paper is called creative attitude. The attitude incorporates the emotional, behavioral and cognitive disposition called creativity, and that creative attitude can manifest itself towards or in mathematics, cooking, interpersonal relationships, etc. Now, when someone says they have a hostile or friendly attitude, it cannot be denied that hostility or kindness has an object, nor can it be denied that there is a group of behaviors can be called hostile or friendly. When a creative attitude is present, there is a tendency to think and act with a certain degree of flexibility. This is true for various fields of knowledge: artistic, scientific and cultural, and also for everyday life. That is, when people evaluate a situation and have favorable tendencies to associate it in unconventional ways, they have a creative attitude toward the situation. When people face an event and do so with openness to the experience, they have a creative

attitude. When modifying strategies and lines of action to recognize or solve a problem, they also have a creative attitude.

According to Katz (2008), one of the purposes of attitudes is to serve as an instrumental and adjustment means to help organize and interpret new information. If it were necessary to establish the role of creativity in addition to its clearly adaptive function, it would undoubtedly be the same function that Katz establishes for attitudes. According to this approach, the role of organizing and interpreting information, called knowledge function aims at achieving an organized and stable world. Attitudes will try to arrange things so that this goal is achieved. It may seem contradictory. Apparently, creativity breaks structures, and the ability to deal with uncertainty has been identified as a feature of a creative personality. However, in the act of creating, a major effort will be devoted to organizing or re-organizing and stabilizing the world in its new form.

The affective creating impulse

Due to the fact that creativity is associated with the quality of being a genius and with the extraordinary, it is common for the neophyte to think there are people who are creative and others who are not. The "genius" appears as a kind of person with a special gift for whom inspiration comes suddenly. Perhaps nothing is further from the truth. The "genius" required a high dose of experience and a considerable investment of working hours in order to have sufficient expertise that allowed him a great creative productivity. It has been reported that 10 years of sustained work or 20,000 hours are needed for geniuses to produce their masterpieces (Romo, 1997). This tenacity is a relevant variable associated to the creative process (Csikszentmihalyi, 1997). Tenacity by itself does not produce creativity, that much is clear. However, creativity by chance and without effort is not possible either. It is the effort and the form it takes what encourages creativity. Although there are countless cases of apparent randomness in scientific discovery, the truth is that such fortuitous events occurred under the watchful eye of the scientist. As Pasteur said: "Chance favors the prepared mind". Minds that spent much time working in one direction and that were flexible enough to change the trajectory when the unexpected came.

Maintaining a certain direction for a long period of time when the target is not always visible or contains many uncertainties, requires an extraordinary adaptive ability and a particular coping strategy. Being tenacious requires company and that company is called motivation; if this motivation is intrinsic, then the better. Intrinsic motivation has been identified as an important attribute in the creative process. Apparently, the creative problem solving occurs more frequently in the presence of intrinsic rewards rather than with extrinsic rewards (Amabile, 1986, 1996). Such motivation is not the cause of the creative process, while it is a condition that contributes to it, it does not control it (Runco & Chand, 1995) given that motivation depends on cognition. Being motivated for something requires different ways of interpreting and seeing the world. It depends on having goals to achieve and that these objectives have significant value. The target or the beneficiaries of the creative acts can be either the same person or the outside world (Forgeard & Mecklenburg, 2013).

The emotion that encourages the achievement of objectives includes a way to sense that there is some kind of direction. It is an emotion that functions both as an effect and as an additional impulse. That kind of projected target, of intuition of the right path, may be

what some call Analytical Wondering (Aldous, 2007). This process has been identified as part of the creative process. It can occur when an experience comes into conflict with well-established concepts and there is also a sense of walking in the right direction (Aldous, 2007). The crucial part of this wondering is the feeling that there is something fundamental in relation to the problem. Perhaps this is the somatic marker proposed by Damasio (1994). When someone makes a decision, the emotions are involved by way of necessity and probably guide this decision (Markic, 2009). These observations support the model proposed here (see Fig. 1). The emotion or affection nurture each other and nourish cognition forming an amalgam that is difficult to separate. In turn, it mediates or drives the effect of cognition on behavior.

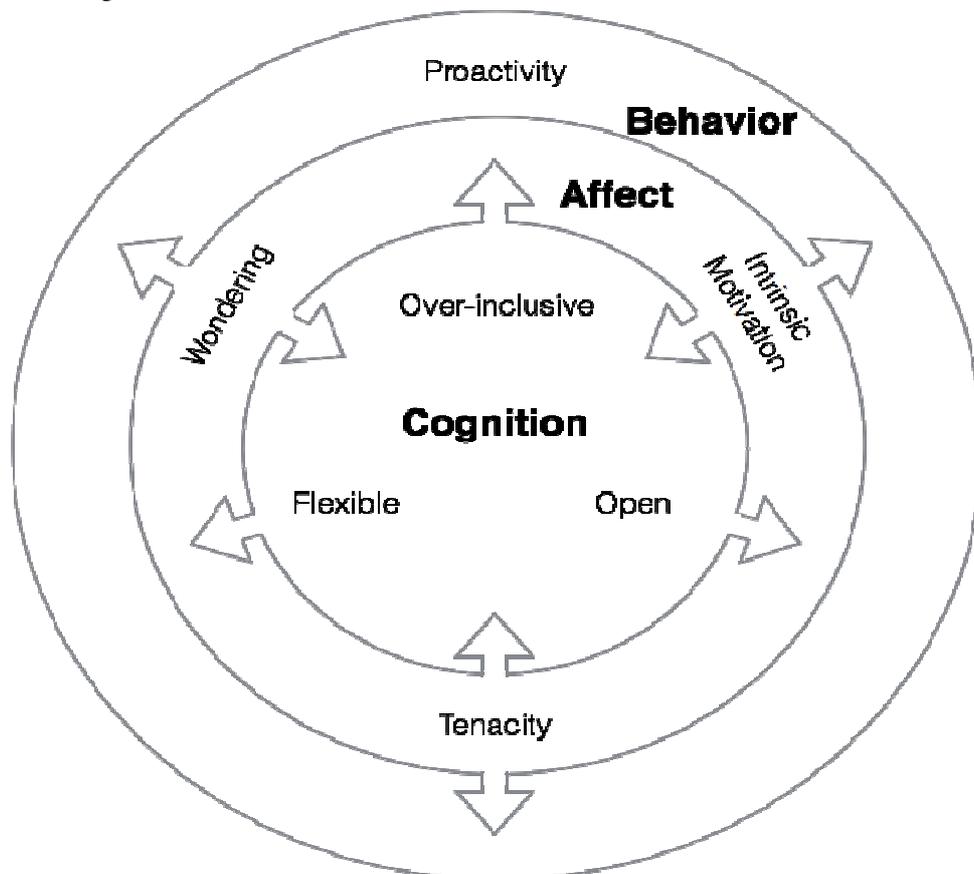


Figure 1: Components of creative attitude

Flexible, over-inclusive and open evaluative cognition

Cognitive processes associated with creativity have a solid base. Many authors have devoted their efforts to explaining how cognition intervenes in the act of creating. On this subject, the works of Wallas (1926), Guilford (1950) and more contemporary approaches proposed or reviewed by Fink, Ward and Smith (1996), Boden (2004) and Runco (2004, 2007) among other authors can be outlined. In general, all approaches underline flexibility as an important condition for creativity. Flexibility is defined as the tendency to generate a het-

erogeneous group of responses, or to use a variety of categories and themes when thoughts are produced (Runco, 1986). This ability plays a very important role in problem solving, helping human beings adapt to the demands of a changing world, and has a clear effect on creativity (Ionescu, 2012). Its central role in helping interpret the world in a different way and adapting to changes may contribute to a greater openness and a greater ability to make associations.

It was noted earlier in this paper that when people face an event and do so with openness to the experience they have a creative attitude. In this sense, there is abundant evidence linking openness to experience with creativity (Baer & Oldham, 2006; Connelly et al, 2014; Kaufman, 2013). Indeed, this variable contributes significantly to the explanation of the variance of scientific creativity (Grosul & Feist, 2013). One might ask whether the openness to the experience is a separate entity of creativity or if it is one of its components. The exploring mind and the inquiring intellect, factors identified as essential in the openness to the experience (Connelly, Ones & Chernyshenko, 2014) may also be descriptors of creativity.

When a situation is evaluated and there are favorable tendencies to make associations in unconventional ways, a creative attitude is present. Associating in unconventional ways is perceiving relationships where others do not. It is something that can be called over-inclusive thinking. Over-inclusive thinking is a feature identified in schizophrenia (Cutting, David & Murphy, 1987) and it occurs when a person places elements in the same category that are not part of it (Runco, 2007). This characteristic seems to be related to creativity. There is evidence of such a relationship both in people with psychiatric conditions (Payne & Van Allen, 1969) as well as in people without such conditions (Meyersburg, Carson, Mathis & McNally, 2014). In this sense, it has also been found that college students with high schizotypal personality are better insight problem solvers than students with low schizotypal personality (Karimi, Windmann, Güntürkün & Abraham, 2007).

From evaluation to behavior

The evaluations people, when they show a certain attitude, are the central part of the process –its core– but do not represent the entire process. For example, if someone has a negative attitude toward certain religious behaviors, it will also be evident that this negative evaluation was preceded by knowledge and experience and is also usually followed by behaviors that reinforce such assessments. The attitude is not always manifested in behavior, social influences change the degree to which the behavior is similar to the evaluative attitude. The same is true of creativity. Environments that are unfavorable to creative behaviors decrease the probability of occurrence of these behaviors, but the latent creativity in the assessment that people make will continue to exist.

Most of what is considered creative are actions or the result of actions. The score of a test of creativity is an action or a result of a series of actions. A painting is also a product and was, at a time, an action too. The resolution of a problem, whether day-to-day or highly sophisticated, has the above elements as well: being an action and the result of an action. However, when one has taken a creativity test, painted a picture or solved a problem, every act necessarily implied an evaluative process. One way of looking at something, "feeling" it and making a judgment. Thus, creative behavior is driven by affection and has an evaluative germination.

Although creative behaviors will be different for each discipline or field, when someone displays a creative behavior it will have something in common with every other creative behavior: it will be self-controlled and proactive. While self-control has a cognitive basis, it is also a set of attitudinal skills (Dacey & Lennon, 1998). Such skills are finally manifested in a certain behavior, given that abilities are observed in what one does. Self-control either allows or does not allow people do what they want to do, and it has been shown to have a correlation with creativity (Dacey & Lennon, 1998). Self-control hardly occurs without a dose of assertiveness and vice versa. There is evidence linking self-control with both assertiveness (Asokan & Muthumanickam, 2013) and with creativity (Garaigordobil, 1997).

A creative person not only seeks to solve a problem, but also strives for creativity (Sternberg & Lubart, 1995). Therefore, his behavior will be a generative behavior. The new, the original and the relevant is the product of affirmative conduct aimed at the generation of products, whether they be ideas, actions or things. They are fundamentally proactive, self-initiated and purposeful behaviors in a specific field of skills. It is on this basis that it is possible to suggest that the behavior of the creative attitude is manifested in productive or generative behavioral skills.

Conclusion

In this short paper an approach to raise the issue of creativity as an attitude was established. There is still a long way to go. This proposal is an outline, but its dissemination helps further debate about its validity. Empirical approaches are needed to validate its robustness and consistency. The idea presented here has been presented in other forums and has received positive feedback, but only data can confirm it. Only data may be able to indicate whether it is valid to assert that creativity, considered as an attitude, is a conglomerate of assessments, affects and behaviors that are primarily flexible, tenacious in the face of uncertainty and proactive, aimed at generating individual and socially relevant ideas or actions.

Correspondence

Julio C. Penagos-Corzo
Universidad De Las Américas Puebla (UDLAP)
Cholula, Puebla, Mexico.

Author's brief bio

Professor Penagos is specialist in creative process. He has been counselor about creativity, and has given workshops for managers, workers and executives of the most important companies in Mexico. His PhD is in Language Sciences. He has a MD in Quality of Education, and a Major in Clinical Psychology. Professor Penagos is International Affiliate of the American Psychological Association, member of the Interamerican Society of Psychology and the American Creativity Association. He received from Universidad de las Américas Puebla (UDLAP) the Teaching Award. At present he is Chief of Laboratories of Psychology at UDLAP.

References

- Aldous, C. R. (2007). Creativity, Problem Solving and Innovative Science: Insights from History, Cognitive Psychology and Neuroscience. *International Education Journal*, 8(2), 176-187.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview Press.
- Amabile, T. M., Hennessey, B.A., & Grossman, B. S. (1986). Social influences on creativity: The effects of contracted for reward. *Journal of Personality and Social Psychology*, 50(1), 14-23. doi: 10.1037/0022-3514.50.1.14.
- Asokan, M., & Muthumanickam (2013). A study on student's self control in relation to assertiveness behavior. *International Journal of Teacher Educational Research*, 2(1), 36-42.
- Baer, M., & Oldham, G. R. (2006). The Curvilinear Relation Between Experienced Creative Time Pressure and Creativity: Moderating Effects of Openness to Experience and Support for Creativity. *Journal of Applied Psychology*, 91(4), 963-970.
- Boden, M. (2004). *The creative mind. Myths and mechanisms*. 2nd Ed. New York, NY: Routledge.
- Breckler, S. J. (1984). Empirical Validation of Affect, Behavior, and Cognition as Distinct Components of Attitude. *Journal of Personality & Social Psychology*, 47(6), 1191-1205.
- Connelly, B. S., Ones, D. S., & Chernyshenko, O. S. (2014). Introducing the Special Section on Openness to Experience: Review of Openness Taxonomies, Measurement, and Nomological Net. *Journal of Personality Assessment*, 96(1), 1-16. doi:10.1080/00223891.2013.830620.
- Csikszentmihalyi (1997). *Creativity: Flow and the psychology of discovery and invention*. New York: HarperPerennial.
- Cutting, J. J., David, A. A., & Murphy, D. D. (1987). The nature of overinclusive thinking in schizophrenia. *Psychopathology*, 20(3-4), 213-219. doi:10.1159/000284501.
- Dacey, J. S., & Lennon, K. H. (1998). *Understanding Creativity. The interplay of biological psychological and social factors. The latest research for students, parents, teachers, trainers, and managers*. Danvers, MA: Jossey-Bass.
- Damasio, A. (1994). *Descartes' error emotion, reason, and the human brain*. New York, NY: Avon Books.
- Fabrigar, L. R., MacDonald, T., & Wegener, D. T. (2005). The structure of attitudes. In D. Albarracin, B. Johnson, & M. Zanna (Eds.), *The handbook of attitudes* (pp. 79-124). Mahwah, NJ: Erlbaum.

Finke, R., Ward, T. B., & Smith, S. (1996). *Creative Cognition. Theory, research an applications*. Boston, MA: MIT Press.

Forgeard, M. C., & Mecklenburg, A. C. (2013). The two dimensions of motivation and a reciprocal model of the creative process. *Review of General Psychology*, 17(3), 255-266. doi:10.1037/a0032104.

Garaigordobil, M. (1997). Evaluación de la creatividad en sus correlatos con conducta aser-tiva, conducta de ayuda, status grupal y autoconcepto. *Revista De Psicología Universitas Tarra-conensis*, 19(1), 53-69.

Grosul, M., & Feist, G. J. (2013). The Creative Person in Science. *Psychology of Aesthetics, Creativity, And The Arts*, doi:10.1037/a0034828.

Guilford, J. P. (1950). *Creativity*. *American Psychologist*, 5(9), 444-454. doi:10.1037/h0063487.

Ionescu, T. (2012). Exploring the nature of cognitive flexibility. *New Ideas in Psychology*, 30(2), 190-200. doi:10.1016/j.newideapsych.2011.11.001.

Karimi, Z., Windmann, S., Güntürkün, O., & Abraham, A. (2007). Insight problem sol-ving in individuals with high versus low schizotypy. *Journal of Research In Personality*, 41(2), 473-480. doi:10.1016/j.jrp.2006.03.008.

Katz, D. (2008). The functional approach to the study of attitudes. In R. H. Fazio, R. E. Petty (Eds.), *Attitudes: Their structure, function, and consequences* (pp. 221-229). New York, NY US: Psychology Press.

Kaufman, S. (2013). Opening up openness to experience: A four-factor model and rela-tions to creative achievement in the arts and sciences. *The Journal of Creative Behavior*, 47(4), 233-255. doi:10.1002/jocb.33.

Markič, O. (2009). Rationality and emotions in decision making. *Interdisciplinary Description of Complex Systems*, 7(2), 54-64.

Meyersburg, C. A., Carson, S. H., Mathis, M. B., & McNally, R. J. (2014). Creative His-tories: Memories of Past Lives and Measures of Creativity. *Psychology of Consciousness: Theo-ry, Research, And Practice*, doi:10.1037/css0000004.

Payne, R. W., & Van Allen, R. K. (1969). The relationship between overinclusive thin-king, perceptual rigidity, and the discrimination learning of new concepts. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement*, 1(3), 193-203. doi:10.1037/h0082699.

Rhodes M. (1961). An analysis of creativity. En S. G. Isaksen (Ed.) (1987). *Frontiers of Creativity Research: Beyond the Basics*, pp. 216–22. Buffalo, NY: Bearly.

- Romo, M. (1997). *Psicología de la creatividad*. Barcelona: Paidós.
- Runco, M. A. (1986). Flexibility and Originality in Children's Divergent Thinking. *Journal of Psychology*, 120(4), 345.
- Runco, M. A. (2007). *Creativity. Theories and themes: Research, development, and practice*. San Diego: Elsevier Academic Press.
- Runco, M. A., & Chand, I. (1995). Cognition and creativity. *Educational Psychology Review*, 7243-267. doi:10.1007/BF02213373.
- Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York, NY: Free Press.
- Summers, G. (1978). *Medición de las actitudes*. México: Editorial Trillas.
- Torrance, E. P. (2008). *Torrance Tests of Creative Thinking. Manual for Scoring and Interpreting Results*. Bensenville, ILL: Scholastic Testing Service Inc.
- Vander-Zanden, J. W. (1990). *Manual de psicología social*. Barcelona: Paidós.
- Wallas, G. (1926). *The art of thought*. New York, NY: Hartcourt Brace.
- Worchel, S., Cooper, J., Goethals, G. R., & Olson, J. M. (2002). *Psicología Social*. México: International Thomson Editores.