



Theories - Research - Applications

# The Psychology of Creativity:

## A Discussion Between Creative Potential and Its Realization

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#### ABSTRACT

This text is devoted to a discussion of current achievements in the psychology of creativity, as well as to the further development of the field. It is concerned with a criticism of former and current theses in the field of the psychology of creativity discussed by Glăveanu (2014). The arguments presented indicate that, despite Glăveanu's (2014) proposition, the psychology of creativity is not in crisis. It is pointed out that the difference in views between supporters of the social psychology approach to creativity and psychology researchers oriented towards the study of creative potential on how to conduct creativity research, stems from a concentration on different levels of creativity, and not necessarily from an ineffective theory of creativity. As a consequence of these different perceptions of creativity at its particular levels, determining the prime standard of creative potential is not sufficient to understand the social conditioning of creative activity and the social assessment of creativity, and vice versa.

Firstly, I would like to thank Dr Glăveanu and the Editors of this journal for the invitation to discuss the vision of an area particularly close to my heart - the psychology of creativity. I believe that the discussion encouraged by Glăveanu's text (2014) is needed. Forestalling the facts, I must admit that I agree with Glăveanu's (2014) main thesis, namely, as emphasized in many parts of the text, the need to increase research efforts in the analysis of social determinants of creativity. It can be described as the need to intensify research in the field of social psychology of creativity. Like Glăveanu, I believe that creative activity, which brings about all sorts of creations, that are considered more or less creative by different kinds of audiences, does not take place in a social vacuum. However, I am convinced that such a view is shared by the vast majority of creativity researchers, despite the extensive criticism expressed by Glăveanu in the text. Moreover, this belief is the cause of my disagreement with Glăveanu. The source of my discord towards this part of the critical argument referred to by Glăveanu (which will be discussed

later), lies in differences in the perception of the ontological assumptions of the psychology of creativity.

In the first paragraph of his text, Glăveanu (2014), poses a question concerning the direction in which the psychology of creativity is developing, where is it going? The question is perfectly justified; however, in my opinion, the arguments invoked by Glăveanu take on a different perspective if we ask ourselves the question, already put by Kuhn (1962) and Popper (1974), namely, not "where are we going", but "where we are coming from or what assumptions are we coming from?". In this context, if we assume that the starting point from which Guilford (1950) and his successors began to work, came down to determining the content and types of creative abilities, their measurement, and their place in the structure of the intellect, then the critical arguments formulated by Glaveanu (2014)<sup>1</sup>, stating that: a) creativity studies are dominated by studies of inter - and intra-psychological traits that make up an individual's creative potential; b) studying divergent thinking has become the field's "golden standard", and the main tools available to psychologists of creativity are divergent thinking tests that neglect the individual's real creative activity; c) creativity studies are dominated by psychometry and an ethos of measurement; d) the field is dominated by cross-sectional studies, which focus more on states rather than processes; e) the psychology of creativity is dominated by the method-driven nature of the research; f) studies of creativity glorify the individual and neglect the environment, idea generation is perceived as an intra-psychological activity, something that brings the individual to the fore and relegates the environment to the background or even drops it entirely out of the picture – lose much of their strength.

Without challenging the appropriateness of the question posed by Glăveanu on where the psychology of creativity is going, and before fully accepting his criticisms, we should instead think whether we are able to answer the questions that the precursors of the psychology of creativity asked themselves. Are we even sure that creative ability is not the same as intelligence? Despite a long tradition of research on the relationship of creativity with intelligence, recent reports have revealed results (at times, unfortunately, also contradictory) that still continue to surprise us. In fact, some suggest that creativity is a subsystem of intelligence (Carroll, 1993; Sternberg & O`Hara, 1999; Preckel, Holling & Wiese, 2006), others, on the other hand, that it is relatively independent of intelligence (Kim, 2005), whereas still others reveal the very complex nature of the relationship between these two distinct constructs (Jauk, Benedek, Dunst & Neubauer, 2013; Karwowski & Gralewski, 2013; Nusbaum & Silvia, 2011, Sligh, Conners & Roskos-Ewoldsen, 2005).

<sup>&</sup>lt;sup>1</sup> I am listing paraphrases of the main ones.

The question, therefore, arises as to whether studies of this type should be continued? In my opinion decidedly so!

In my opinion, it is only reasonable to agree with Glăveanu's statement (2014, p. 19), that "creativity, just like cognition, needs to be studied and theorised more in the wild, outside the cognitive or computational models of psychologists and within the real world, in the very contexts of its production and evaluation". However, I also believe that the above statement has a serious limitation, in so far as it can only be successfully applied to people who already have achievements of lesser or greater creative value. The question thus arises as to whether this statement can be fully applied in relation to research work on people who have not yet manifested their creative activity? How can we study this type of work? This question is answered in Guilford's conceptualization of the problem as described above. At this point it is necessary to distinguish between creative potential (Karwowski, 2009; Necka, 2001; Runco, 2003; 2004; Kaufman & Beghetto, 2009), understood as the ability to create, which may or may not lead to the emergence of creative activity and tangible creative products, from creativity understood as the social effect of estimating the tangible products of an individual's activity that, from the point of view of a particular audience or experts, are considered creative (Amabile, 1996).

This brings us to a common issue in the psychology of creativity, namely, distinguishing between levels of creativity. This idea is omitted in Glăveanu's text (2014), which leads, in my opinion, to excessive criticism of this line of research, focusing as it does on the study of a broadly understood creative potential, which is a key, though not exclusive condition, of all creative activity. This raises the important question of how to study creative potential that has not yet been manifested in the form of any activity or product? In my opinion, this type of research will, sooner or later, inevitably encourage the individual being studied to demonstrate a variety of behaviours, that from the perspective of the researcher represent an indirect measure of the ability to create, but from the point of view of the respondent, will be forms of activities detached from everyday life. Consequently, we come full circle and receive, what we now call, a critique of the psychometric approach.

With regard to criticism of the psychometric approach however, I stand by the view that work on tools to measure creativity should be continued in order to improve the quality of the instruments designed for these purposes. Despite a multitude of available tools, their psychometric properties are not perfect, and are often at the limits of acceptability. Although commonly used divergent thinking tests are criticized in the same way as intelligence tests, their psychometric properties are often much worse. Creativity researchers

refute the charges associated with low accuracy, mainly theoretical and prognostic, for divergent thinking tests (Plucker, 1999), but measures of their reliability, understood as the internal consistency or coherence in time, leave a lot to be desired.

In my opinion, Glăveanu's (2014) excessive criticism of the lack of a person-centered psychology of creativity, should be seen in the context of the "incommensurability of scientific theory" (no common measure), postulated by Kuhn (1962; 2000). The conceptualization suggested by Glăveanu (2014) and in his earlier proposals (Glăveanu, 2010) on the development of the social and cultural psychology of creativity, reflects the lack, in a sense, of a "common language" or "common measure" with a psychology of creativity, focused on the creative potential paradigm. Therefore, it is difficult to imagine a situation in which each of these theories, considered as a group of sentences, would translate into a common language without each of them losing something. Incommensurability may also lead to a situation where, for supporters of social psychology within the current creativity research paradigm, this will be a defect, representing a path towards a dead end, but for researchers focused on the search for individual differences, it will be an asset and an advantage. Unfortunately, as noted by Kuhn (1962), this type of discussion between supporters of various theories or paradigms is difficult and rarely successful (as far as reaching agreement is concerned). Generally, this leads to a situation in which, the followers of the different approaches increasingly refer to their own paradigms, arguing and strengthening their own positions - and contrary to Glaveanu's (2014; 2010) intentions, do not seek consensus. An advantage of this type of discussion or even conflict, may be the intensification of research within each of the competing approaches, which in turn, may allow the dispute to move from the rhetorical and persuasive level to the research laboratory. And this is what I sincerely wish for, on behalf of myself and other participants in the discussion.

Finally, I wish to maintain that, in spite of Glăveanu's arguments, the modern psychology of creativity is not in crisis. In my opinion, the differences in views between supporters of the social psychology approach to creativity and psychology researchers oriented towards the study of creative potential on how to conduct creativity research, result not only from the inefficiencies of creativity theory in solving "the existing puzzles" and problems, but from the focus on other aspects of creativity. Conditions essential for the formation and evaluation of tangible creativity products are in the area of interest of researchers applying the social psychology approach to creativity (Amabile, 1996; Kasof, 1995; Sawyer, 2006; Simonton, 2009), but they do not always lie in the interests of creative, potential researchers. Moreover, the differences between them do not necessarily lead to a crisis of the entire discipline, but only intensify the pace of its development. In the opinion for-

mulated by Kuhn (1962; 2000), disagreement between competing theories or paradigms also leads to the intensification of scientific work. As a consequence, either perceived anomalies in the functioning of the existing paradigm are removed (for example, through its refinement) or a scientific revolution takes place, i.e. conceptual changes occur that are important for the further development of scientific knowledge.

This view does not change the fact that creativity researchers should be alert to the symptoms of crisis in current creativity theories and should respond responsibly. In this context, as a postscript to this text, there remains the question of the role of the specificity of creative abilities (Baer, 1998; 1999; Weisberg, 2006) for the further development of the psychology of creativity. Despite the widespread assumption that creative potential at the lowest levels of creativity is general, follows a normal distribution, can be developed (Scott, Leritz &, Mumford, 2004; Wisniewska & Karwowski, 2007) and is a relatively good predictor of creative achievement (Plucker, 1999), the great issue now is to explain why only a small percentage of people have recorded works of objective creative value. Thus, there is the essential question of whether, during the change from the level of creative potential to professional creativity, a specialization of creativity merely occurs (see Beghetto & Plucker, 2004), or whether different levels of creativity are associated with different creativity characteristics, not necessarily resulting from each other? The proposed issue is extremely important for the development of the discipline that we are discussing here, and may in fact lead to a change in the nature and structure of our views on creativity, ways of testing it and the direction of future development of the field. This may lead to specialization and the emergence of distinct areas of the psychology of creativity, corresponding to each of its types.

## REFERENCES

Amabile, T. M. (1996). *Creativity in context.* Boulder, Co: Westview Press, Inc.

- Baer, J. (1998). The case for domain specificity of creativity. *Creativity Research Journal*, 11, 173-177.
- Baer, J. (1999). Domains of creativity. In M. A. Runco & S. R. Pritzker (Eds.), *Encyclopedia of creativity* (pp. 591-596). San Diego, CA: Academic Press.
- Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytic studies*. Cambridge: Cambridge University Press.
- Glăveanu, V. P. (2010). Paradigms in the study of creativity: Introducing the perspective of cultural psychology. *New Ideas in Psychology*, *28*, 1, 79-93.
- Glăveanu, V. P. (2014). The psychology of creativity: A critical reading. Creativity. Theor-

- ies Research Applications, 1, 10-32; DOI: 10.15290/ctra.2014.01.01.02.
- Guilford, J. P. (1950). Creativity. American Psychologist, 5, 444-454.
- Harrington, D. M. (1975). Effects of explicit instructions to "be creative" on the psychological meaning of divergent thinking test scores. *Journal of Personality, 43*, 434-454.
- Jauk, E., Benedek, M., Dunst, B. & Neubauer, A. C. (2013). The relationship between intelligence and creativity: New support for the threshold hypothesis by means of empirical breakpoint detection. *Intelligence*, 41, 212-221.
- Karwowski, M. (2009). *Zgłebianie kreatywnosci. Studia nad pomiarem poziomu i stylu tworczosci*. Warszawa: Wydawnictwo Akademii Pedagogiki Specjalnej.
- Karwowski, M. & Gralewski, J. (2013). Threshold hypothesis: Fact or artifact? *Thinking Skills and Creativity, 8,* 25-33.
- Kasof, J. (1995). Explaining creativity: The attributional perspective. *Creativity Research Journal*, *8*, 311-366.
- Kim, K. H. (2005). Can only intelligent people be creative? A meta-analysis. *Journal of Secondary Gifted Education*, *16*, 57–66.
- Kuhn, T. H. (1962). *The structure of scientific revolutions*. Chicago: The University of Chicago Press.
- Kuhn, T. H. (2000). *The road since "structure"*. Chicago: The University of Chicago Press.
- Necka, E. (2001). *Psychologia tworczosci*. Gdanski: Gdanskie Wydawnictwo Psychologiczne.
- Nusbaum, E. C. & Silvia, P. (2011). Are intelligence and creativity really so different? Fluid intelligence, executive processes, and strategy use in divergent thinking. *Intelligence*, *39*, 36–45.
- Plucker, J. A. (1999). Is the proof in the pudding? Reanalyzes of Torrance's (1958 to Present) longitudinal data. *Creativity Research Journal*, *12*, 103–114.
- Plucker, J. A. & Beghetto, R. A. (2004). Why creativity is domain general, why it looks domain specific, and why the distinction does not matter. In R. J. Sternberg, E. L. Grigorenko, & J. L. Singer (Eds.), *Creativity from potential to realization* (pp. 153-168). Washington, DC: American Psychological Association.
- Popper, K. R. (1974). *The logic of scientific discovery.* London: Hutchinson Publishing Group Ltd.
- Runco, M. A. (2003). Education for creative potential. *Scandinavian Journal of Educational Research*, 47, 317-324.
- Runco, M. A. (2004). Everyone has creative potential. In R. J. Sternberg,

- E. L. Grigorenko, & J. L. Singer (Eds.), *Creativity from potential to realization* (pp. 21-30). Washington, DC: American Psychological Association.
- Sawyer, R. K. (2006). *Explaining creativity. The science of human innovation*. New York: Oxford University Press.
- Scott, G., Leritz, L. E. & Mumford, M. D. (2004). The effectiveness of creativity training: A quantitative review. *Creativity Research Journal*, *16*, 361–388.
- Simonton, D. K. (1999). Genius 101. New York: Springer Publishing Company.
- Sligh, A. C., Conners, F. A., & Roskos-Ewoldsen, B. (2005). Relation of creativity to fluid and crystallized intelligence. *Journal of Creative Behavior*, *39*, 123–136.
- Sternberg, J. R. & O`Hara, L. (1999). Creativity and intelligence. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 251-272). Cambridge, NY: Cambridge University Press.
- Weisberg, R. W. (2006). *Creativity. Understanding innovation in problem solving, science, invention, and the arts.* Hoboken, NJ: Wiley.
- Wisniewska, E. & Karwowski, M. (2007). Efektywnosc treningow tworczosci podejscie metaanalityczne. *Ruch Pedagogiczny, 3-4,* 31-50.

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