Review of Luca Tateo, A theory of Imagining, Knowing and Understanding, Cham (Switzerland), Springer, 2020, pp. 1-97

GUILHERME SIQUEIRA ARINELLI*, JULIANA SOARES DE JESUS**
& MAURA ASSAD PIMENTA NEVES*

How to cite

1. Author’s information
* Pontifícia Universidade Católica de Campinas, Brazil
** Centro Universitário UNIMETROCAMP, Brazil

2. Author’s contact
Guilherme Siqueira Arinelli: gsarinelli[at]gmail.com
Juliana Soares de Jesus: julianajsj[at]gmail.com
Maura Assad Pimenta Neves: mauraiapneves[at]gmail.com

Article first published online: October 2020

Additional information can be found at Journal of Mediterranean Knowledge-JMK
Abstract

Keywords: Cultural-Historical Psychology, Imaginative Processes, Human Development.

In the first chapter, *Introduction: The Myth of Hippocrene*, Tateo opens his book with the following sentence: "This is a book about imaginative work and its relationship with the construction of knowledge" (p. 1). More than a simple projection of the content that will be presented on the following pages, the sentence locates the starting point of the perspective adopted by the author on the theme of imagination - and imaginative work - and knowledge that will be sustained throughout the book. First, imagination is conceived as work and, thus, as a process that involves effort and action undertaken in a given time and space. In this sense, imagination holds a material basis and it is real-ized in the permanent inter-action of the subject in the world involving body-mind as a whole. Second, by analyzing the relationship between imaginative work and the construction of knowledge, Tateo proposes another important argument for his reflections: knowledge is not given, but constructed. That is, he brings the subject's action back to the center of the discussion by assuming that knowledge is transformed throughout human history by the action - individual and collective - of all subjects that affect society. In this sense, knowledge is not only given - passed passively - from one generation to the next, but involves tension, contradiction, ruptures and dissent.
Tateo stands for a dialectical perspective of knowledge, one that assumes all forms of knowing as non-neutral and non-static, hence culturally-constructed through imaginative processes and in permanent reorganization due to individual and collective deeds. In the first chapter, Tateo presents imagination as a higher mental function fundamental to human experience, due to its role in the production and apprehension of knowledge. By defending it not as a product but as a process - imaginative activity -, the author locates imaginative work in everyday and scientific knowledge and in the arts. For instance, when demonstrating the ancestral interest of humankind in the act of imagining, Tateo brings as an example the myth of Hippocrene which, based on the figure of Pegasus, provides a complex symbolism on the relationship between imagination and knowledge. Then, he defends the epistemic value of imagination, both in basic and applied research, an understanding that is based on the assumptions of Maria-Noel Lapoujade, Dennis Sepper, Leslie Stevenson and on his own works on epistemology and imagination. Finally, the chapter is concluded with Leonardo da Vinci’s imbricated link between imagination, knowledge, and art.

In Chapter 2: A Glance on the Imaginative Processes; Tateo reinforces the understanding of imaginative work as an activity, assuming it as an intentional act which is carried out in terms of a goal oriented towards the future: "Imagining is an activity involved in promoting or inhibiting meaning-making" (p. 14). He exemplifies the relevance of imagination in science recognizing instances that are absent in the empirical world - from gap "feeling" to gap "filling" - based on the experiment of “Hume’s blue”. He also gives as an example the effort made by scholars to define the principles and to find the constituent elements of chemistry in the periodic table in a conference held in Germany in 1911. Based on Vygotsky and Lapoujade propositions, Tateo argues that imagining is fundamental to expanding the field of experience and a fundamental part of knowledge creation. However, pointing to the best-seller book "50 Shades of Gray", he also demonstrates how art might fail in promoting this movement of expansion when it doesn’t transgress the limits of the empirical world and classical logic.

On the third chapter, "Imagination in Science", Tateo delves into the role of imaginative activity in scientific investigation. Early noted by the natural sciences as being present in the entire scientific process - from the moment
of observation to the formulation of hypotheses - , as reported by van't Hoff, Tateo highlights that imagining is a teleogenetic action useful not only to identify causal relationships, but also for expanding the limits of science producing new research goals. The author brings examples of how imaginative activity acts in all branches of science, not only in terms of creating something new, but at the very desire of persisting in the investigative process: "The imaginative activity [...] is purposefully directed toward existential, political, theological, and economic future goals" (p. 20).

The author presents another important element when he argues about the historical understandings of imagination on the chapter "A Brief History of an Unachieved Definition", and reflects on the various definitions that have been created in the Humanities and Social Sciences on the topic. Through a chronological overview, Tateo explains the dimensions pointed out by different authors, contextualizing and highlighting the obstacles and challenges of each perspective. However, "to close the circle" (p. 30) - as the author says - a definition based on the constant characteristics and expansions throughout the historical framework is proposed. Expanding the historically related notion of imaginative work as a mere reproduction of the past or the exclusive creation of new elements not-yet-existing in the empirical world, Tateo argues that imagination is a core higher psychological function to comprehend the present and project the future in a dialectical process that includes the concrete-abstract relation - non-imaginative and imaginative - in a complementary dimension.

In Chapter 5: "Imaginative Processes and Generalization", Tateo expands his discussion when he introduces the role of imaginative activity in the construction of discourses in everyday life and scientific literature and includes the concept of intersubjectivity. Considering the individual, the others and the tools culturally produced by the humankind, Tateo discusses the production of scientific knowledge through a dialectical perspective in which the relationship between imaginative and non-imaginative processes are necessary and essential for inference, generalization, and, above all, for the creation of new syntheses that surpass the status quo present in science.

To conclude, on Chapter 6, entitled "Conclusion: How Can We Build a Theory of Imagining", Tateo ends by defending his theory of imagination from the perspective of Cultural-Historical Psychology. The author returns to some arguments presented throughout the book and analyzes the
sociogenesis of imagination, pondering its characteristic to expand and, at the same time, limit knowledge construction. In this sense, he emphasizes the complementarity of imaginative and non-imaginative processes in everyday life, science, human development and in the collaborative act of constructing the world, expanding the possibilities of connections between cultural and symbolic elements.

After Chapter 6 - in which Tateo synthesizes the central elements of the book's general proposition - the following two chapters are written by collaborators in which they comment, while expanding, some of the arguments addressed by Tateo. In Chapter 7, entitled "Don't block the path of inquiry": Imagination, Inquiry, and Knowledge", Dazzani and Filho begin with initial remarks organized in two topics: (1) positing imagination as a fundamental ability to know the world; and (2) proposing the exploration on the role of imagination in the process of investigation or inquiry based on Charles Peirce contributions.

The authors first bring the thoughts of Peirce to introduce how signs are related to humans' ordinary involvement in the world and, therefore, how the dynamics of experimentative and imaginative works "lead to the discovery of new (and surprising) aspects of reality" (Dazzani & Filho 2020, p. 59). In this sense, the pair doubt-belief creates movement and incites a genuine - and necessary - act of inquiring reality. Thus, inquiry is directly related to the relation human-world, hence thought-sign, to which the authors highlight the concepts of continuity (synechism), interpretation, and representation, based on Peirce's proposals: "when we talk about inquiry, we are talking about the way our mind behaves in the continuous of the world in the effort to symbolize the experience - to make it part of the human symbolic universe" (p. 61).

Finally, the authors describe Peirce's types of reasoning - deduction, induction, and abduction - related to the imaginative work. According to Dazzani and Filho, while deduction and induction indicate how something must be or show how it operates, abduction is the logical operation that introduces a new idea and infer how something may be. Thus, abduction is taken as a form of cognitive imagination, an inferential type of reasoning and the first step for scientific inquiry. Hence, reside in it the possibility to expand knowledge into not-yet-known fields.

In Chapter 8, "Imagination in Science", Poliseli and El-Hani begin by summarizing Tateo's main arguments presented in the book - from history
and philosophy of imagination to the defense of it as a core higher mental function both in everyday and scientific reasoning. Later, the authors pose questions and comments in order to discuss and expand some issues brought by Tateo, such as the need to better define and characterize the concepts of knowledge, understanding, ideas, and hypotheses; to clarify mediation; and, also, the description of what means non-imaginative work. Finally, Poliseli and El-Hani propose connections between Tateo's arguments and "developments in philosophy of science and intercultural communication" (p. 70). In concluding remarks, the authors highlight how Tateo's insights and propositions compose a fruitful scenario for the upbringing of new perspectives on imagination - and imaginative work - resulting not only on the development of the scientific field but also of new creative solutions for contemporary problems experienced by humankind.