

## EDITORIAL

When one observes the turbulence of the various scenarios in which we are involved, practically all over the world, one of the many questions from the perspective of scientific analysis certainly consists of: what are their impacts on academic production? This master quest must, of course, be broken up into four levels which, though generically, can be systematized into the four poles of the conception and production of scientific knowledge. This guadripolar conception determines and imposes reflective density on the condition of the historicity of science. Historicity does not stand as a mere contingency of the evolution of knowledge, but is grounded as its reason for being. Subjects and objects of science manifest themselves as elements of the scientific eidéica. Thus, contingencies of scientific production imply full interactivity between subjects and objects, and their most significant evolutions and revolutions occur not clearly expected. After all, "To get to what you do not know, you will go where you do not know," as St. John of the Cross would say, or "Walker there is no path, path is made by walking ...", in Machado's interpretation. Thus historicity, or scientific creationism, is constructed in the eternal challenges of contextualizations, invalidations, refutations or tests, according to Popper, or even in the context of evolution in the meanders of epistemological anarchy, or methodological pluralism, according to Feyerabend, or by any other exegesis of scientific evolution.

In the conception, or epistemological attribute, in what dimensions can scenarios provide directions to new frontiers on the possible reasons of being scientific knowledge? From another perspective, to what extent is it possible to envisage an extension of these frontiers, given the new configurations in the functioning of societies and their institutions? In what contexts will the constructs of dialectic and phenomenology indicate new ways of thinking and producing scientific content?

At the second level, or theoretical dimension, some possibly pertinent inquiries would be consistent: at what intensity would their structures be, in each field of knowledge, prone to receive meaningful constructs and able to add relevant inputs, in order to advance knowledge, new environmental realities? To what extent would the new configurations of the contingent realities of our time significantly establish the construction of new heights in the structures of knowledge, especially in the field of management? Or, would be the multiple turbulent environments, providing fertile conditions for the aggregation of analytical contents that, effectively, substantively add each field of knowledge?

As a third dimension, it is possible to investigate in which contexts and magnitudes the present turbulent scenarios present new typologies and morphologies, new functional systems and new structural models, idealized in the perspective of scientific thought. Or were the turbulent realities of our time, apparently singular, prone to provide new structural configurations, in the logic of scientific research, significantly discriminant of the more classic, and more well-founded, structures?

From the perspective of the fourth dimension, or technologies of knowledge production, or modes of scientific inquiry, could the master inquiry be consistent: would the turbulent scenarios be prone to the creation and accelerated implementation of new resources substantively consistent with the new research



frontiers? Or, would the researchers' creativity be more fertile in the face of possible new offers of methodological research resources to meet the new realities?

To sum up, in what intensity the turbulence of the various social, economic, and political environments, among others, are demanding, to their knowledge, new frontiers in the perspective of scientific research? Or is it that such concerns are not relevant, at least in these times?

Certainly the scientific media are expecting to receive provocative productions that effectively contribute to the elucidation and the new multi-thematic questions of the turbulent realities, especially of our times. They can be defined as the mirrors that reflect the looks of the analysts...

The Editorial Team of the Journal of Management and Technology is committed to the purpose of gradually developing and consolidating this multi-thematic journal in the management area, as a vehicle of international reach. To this end, it has already indexed it in several national and international databases. For this purpose, this issue of the Journal of Management & Technology, in special edition in the Double Blind Review system, corresponding to volume 17, number 4, brings nine articles for the reading and appreciation of its readers. They are contributions that attend a special call to discuss a disturbing theme in the Brazilian context of our times. The theme chosen for discussions was: "Science, Technology and Innovation as determinants of development".

Thus, the agenda is opened with the presentation of the article entitled "Institutions and policies for regional technological development in the new knowledge-based economy paradigm: an analysis for Brazil using the triple helix model". The author argues that the growth of wealth and well-being in countries or regions in the new knowledge-based economy can only be achieved by promoting the culture of innovation and the competitiveness of enterprises and the associated technical and scientific institutions, indicating how to use the triple helix model to facilitate the development of innovation systems in other regions of the country. The second contribution refers to "Science, Technology and Innovation Management: Brazil's perspectives against the international context ", starting from the premise that "the global economies allied to dynamic and complex markets have launched to the nations a demand for proactivity in the pursuit of competitive advantage, a characteristic that drives economic growth and makes a nation competitive on the world stage. "For the authors, "achieving competitive advantage, however, requires efforts focused on Science, Technology and Innovation Management Policies, which, if well implemented, allow the construction of strong National Innovation Systems (SNI), facilitating the formation of innovative companies "and conclude that" the country, although one of the most active in the Latin American continent, has not yet achieved a prominent position as an innovator. One of the factors that most determine this position is the low interaction between Universities, Companies and Government as fundamental and harmoniously acting parts for the promotion of innovation".

The state of the subject in the United States is dealt with in the article: "Innovation, Science and Technology in the USA: A Sociocultural Perspective", in which the author emphasizes that "business bricolage and Protestant communitarianism facilitated rapid creation and diffusion commercial breakthrough of innovations, "noting the apparent frequency of the old transaction model in high-tech US environments. Addressing the state of the topic in Europe, the contribution "Science, Technology and Innovation in Europe: an analysis of the performance of innovation systems, based on indicators" is presented. In this context, the author notes that "it is



possible to observe great efforts of the member countries to create science, technology and innovation infrastructure, at both national and regional level. To support a policy aimed at encouraging innovation, a number of evaluation reports have been created by the EU, including the European Innovation Scoreboard (EIS). "The article aims to analyze the performance of EU innovation systems, based on indicators, and concludes that "EU innovation performance continues to grow, especially due to financial and human resource investments, the innovation-friendly environment and attractive innovation systems".

Aiming at contextualizing the field of science, technology and innovation in Brazil and in the world, the paper entitled "Brazilian Innovation Landscape: Analysis based on the Global Competitiveness Perspective" is presented. In it, the authors analyze innovation in Brazil from the perspective of global competitiveness studies, based on data from the Global Competitiveness Report, investigate the limitations for opening new business in Brazil and propose an innovation agenda based on investments in education and training of a corporate culture conducive to innovation. Another contribution that deals with the topic of the internationalization of science, technology and innovation, in a bibliometric approach, refers to the article "Science, technology and innovation and business internationalization; a bibliometric study at the Web of Science and Scopus". In this article, the authors seek to identify academic links between science, technology, innovation and business internationalization, based on the frequency and the ways in which such subjects have been approached by the academy, in a joint and paired manner. They point out that it was not possible to identify, in any of the searches, authors, publications or periodicals that could be considered as references in their fields of study, suggesting that there is much to be produced in order to better know the interplay of forces between the four themes researched.

Addressing specific issues in the context of science, technology and innovation, the following contributions are presented. The first article is titled "The science of service and something of a legitimate admirable new world" and starting from the premise that "complex market and societal demands lead innovative entrepreneurs to launch knowledge-based enterprises, which change the way of life for many people, "the authors argue that" this article exposes and reflects on Service Science and its environment; presents the reasons, nature and impacts of Service Science; synthesizes SDL: explains the Internet of Things and knowledge-based organizations; shows the vanguard of IBM on this journey; emphasizes the relevance of this Science to Brazil and encourages the practical adoption of these perspectives and the academic contribution to their evolution, "constituting a substantive contribution to the purposes of this journal, in this special edition. The second specific article refers to "Collaborative governance for research in health: an analysis of the design of the Unified Health System Research Program". The authors, based on the premise that the State presents itself as a fundamental agent in the direction of innovation directions through the financing and direct execution of scientific research. particularly in the health sector, besides the fact that risks associated to the nature of the innovative process, the objective of this study was to analyze the formulation of the Research Program for SUS: Shared Health Management (PPSUS) through the identification of the elements that make up the design of its governance, relating them to the conditioning factors of results present in the model collaborative governance theory. Thus, they concluded that "the PPSUS governance design contemplates several elements pointed out by the literature on collaborative





governance as good practices aiming at achieving results, nevertheless progress must be made in evaluating its implementation and its results on a regional basis".

The third article addresses the subject of frugal innovation, receiving the title "Frugal innovation beyond emerging countries: the key role of developed countries" and notes that "frugal innovation is no longer relevant only for emerging countries or for low-tech artifacts." The authors examine the literature to propose some possible paths. Through qualitative methods, such as semantic analysis, they argue that "research for the modification of the technological matrix of products, processes and organizational arrangements and the development of a better understanding of the frugal entrepreneur can be a key role for developed countries to contribute to the development of frugal innovation".

Thus, with these contributions to the literature, we express our gratitude to all authors, evaluators, collaborators, readers, and especially the Pedro Leopoldo Foundation, which maintains this journal.

Awaiting contributions in the form of submissions of articles, serious evaluations and consistent with the purposes of this periodical, its indications to its students and friends, as well as contributory criticisms, I renew the votes of good reading and of excellent reflections.

Happy holidays and a happy new year to everyone,

José Edson Lara, Editor-in-Chief Maria Celeste Reis Lobo Vasconcelos, Deputy Editor

