

Critical Multiplism Applied To Prospective Research In The Field Of Complexity.

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Abstract: This article deals with reflections developed from general conceptions, exposed by different authors, who have been verifying their own theoretical approaches oriented understanding and attention of the multiple socio-contextual challenges, which have had a presence during the development of the different scenarios within the global scope. Some that in turn, by being able to be defined within the parameters of the own complexity, have been required of answers with capacity of resolution, that by themselves the different disciplines, from unilateral approaches, had not been able to prescribe. Allowing itself in this way, to grant orientations with great viability, from inter and transdisciplinary perspectives. From where also, the multiplism statutes began to redefine an adequate integration. Initially from a preliminary understanding, and later, developing towards a perspective of gradual character, emerged from the interrelation of prospective research within the scope of complexity from the inquiry of the critical multiplism itself and its infallible integration.

Keywords: critical multiplism, prospective, complexity, transdiscipline.

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I. INTRODUCTION

The general conceptions that conceive critical multiplism as a prospective possibility are presented; as well as, the own notions of the paradigm of complexity, as a preliminary development, that would allow to integrate the interdisciplinary vision, in its main aspect that converges in the interaction of prospective research, as a multiplism strategy. Likewise, the arguments concerning the feasibility, possibilities and proposals of direction towards the investigative perspective, as a conceptual precept, capable of understanding and inquiring into the most of the diverse contexts and scenarios of a global nature, from a perspective of integral orientation.

Perspective, which is based on the review of the different arguments raised over time, in which the fundamental question was the punctual resolution of the daily precepts, as well as the viable integration of emerging paradigms, which were outlined as possible criteria of resolution to each one of the existent challenges in the different stages of expansion of the own contextual interrelation. Allowing thus, the generation of new integrating premises, which empowered the multiple structures of disciplinary co-participation, now exposed in the so-called transdisciplinary category, whose singular aspect focuses on its characterization ascribed to complexity.

Understanding this way, a characterization that allows us to investigate, in the practice of critical multiplism, as the central axis in the definition of consistent parameters, with the capacity to attend and respond to real situations that request to be assimilated for the adequate conceptualization at first, and then attention to subsequent contextual possibilities, which from a prospective perspective, would be able to integrate, and thus access, interaction proposals from a greater precision.

II. DEVELOPMENT

Initially, from the conceptions proposed at the time by Thomas Chamberlin in 1890¹, developed in his work, the method of multiple work hypotheses, in which he argued the appreciation of possible tendencies toward an intellectual favoritism, in terms of the ideas themselves immersed in a research process, derived from the implementation of unidisciplinary conceptions, which were aimed at skewing the same results that were derived from the research. Since they argued, which when approaching objects of study from multiple hypotheses, these perspectives postulate several tentative answers in their initial hypothetical approach, before expectations of not reaching the total conception for any of these. In this way, later appreciations such as those of J.R. Platt, in (1964)², conferred the inclusion of multiple alternative hypotheses in his account of the so-called strong inference, which would allow a more viable driving.

In this continuous advance, to elucidate and approximate strategies of greater importance, in the investigation, the same frameworks of the reality allowed to go configuring new understandings and concepts to

be precise, reason why in (1978), Imre Lakatos³, supported the idea of a participative coexistence of the different paradigms in the research processes.

Punctualizing critical multiplism, in a postulatory scheme within scientific activity (Shadish, 1993)⁴. Thus, this position was based on the use of multiple multi-disciplinary and interdisciplinary theoretical-methodological approaches, as a basal strategy, towards a greater understanding and interaction with the objects of study that could occupy research. Therefore, it would be opportune to address the instructive concepts that have allowed to configure the critical multiplism as such.

Initially, it could be established that during the last period of the 20th century, an unprecedented advance was made in most areas of knowledge, accompanied by innumerable emergent circumstances inherent in the same developments implemented in different contexts. These, in turn, encouraged unprecedented approaches on the part of the participating sectors, which initially acquired a denomination were identified under a common name; in this case under the term of complexity, which became from the scientific debates in relation to the new conceptions of the own and changing reality. (Sotolongo, 2006)⁵.

Also, it is exposed that the contributions exerted in the analysis that contemplate this perspective, have been multivariate and the denominations that have permeated in this direction have been the theoretical developments, which have converged towards the formulation of new types of vision of the objects of the world and of this as a whole. Framing itself, in conceptions such as complexity, before which different authors have described with different terminologies referred to as a "philosophy of instability" (Prigogine, 1989)⁶, "theory of chaos" (Lorenz, 1963)⁷, "complex thinking" (Morin, 1994)⁸, "radical constructivism" (Foerster, 1998)⁹, "complexity" (Gell-Mann, 1998)¹⁰, as well as "complexity sciences" (Maldonado, 1999)¹¹.

In this reality, and in accordance with these new or current trends, science has taken on itself the challenge of examining properties beyond reductionism, which provides a unidisciplinary approach, so that the conception of complexity becomes a whole process gradual and that in turn emerges from the approaches and attempts to decipher the different spectrums of reality, and in this sense that of interactions also of a dynamic act (Sanjuán, 2005)¹².

Thus, the basal precepts that promote the interdisciplinary approach from a strategy towards the multiplist conception, which is considered as the investigative application from which, based on this assessment, there is the conglomeration of diverse teams of people that make up the information-emitting constructs, data, techniques, tools, perspectives, concepts and / or theories, from which two or more of the immersed disciplines and in their interrelation, is where precisely the fundamental understandings for the resolution of the different contextual convergence challenges are improved, which would be beyond the understandings that would be offered from only one of the unilateral positions.

In this way, Gibert (1999)¹³, already stated, that in a collaboration agreement, detailed, broad and inclusive, it would be possible to venture into the mysteries of reality from new perspectives, free from bias and covered with a precise formality.

Being in these processes, of argumentation that Stahel (2006)¹⁴, also posed, that the consideration of the multiple dimensions, fluctuations, interdependencies and indeterminations that the different disciplines present, would be from where one can contemplate an optics of greater current significance.

Even, from this position, to guide towards a progress of greater understanding, towards the application of a really critical multiplism, one could notice the transdisciplinary perspective. Which would be understood, according to Romero (2002)¹⁵, towards what is placed in turn, between disciplines (interdisciplinarity), through disciplines (pluridisciplinarity) and beyond disciplines (transdisciplinarity) and from where the purpose it is the understanding of the present world based on the uniqueness of knowledge.

In this sense, the term "transdisciplinary" is applied to the forms of research that are used by the disciplines with the sense that their way of thinking are rationally understandable, available and can be activated beyond their limits to be able to especially contribute to the solutions from an integral perspective (Wille, 2008)¹⁶.

What would allow from prospective research, understand the task of a critical multiplism, oriented to the incursion, inquiry and construction of knowledge, from models capable of addressing the current and subsequent challenges of the global context.

The prospective research.

Within the assessment of global character, an understanding towards the different authors that have raised their approaches to the purpose or object of study of the prospective investigation will be explored, which approach these premises and perceptions that allow to conceptualize strategies of facultative nature, in which, in a structured manner, this prospective inquiry would allow resolving or envisioning, possibilities with a broader scope of resolution, but that also redefines conceptions, with a capacity for preliminary action, in the area of acquiring greater participation and responsibility, before the schemes or scenarios that are noticed in subsequent stages.

In this sense, the conceptualization as such from the prospective vision, would have to conceive, in definitions, that authors, such as Berger, in 2003¹⁷, who already pointed out the one, a limited and segmented current participation, within an exercise of significance real and that according to this manifestation in the main context is from where they were and ascribed, arguments oriented to a possible optional proposal.

However, from positions somewhat of and towards a wide incidence, they would refer, conceptions such as those of Bas et, al (2002)¹⁸. In which it supports an interaction with more precision, and of real significance, in which, in addition, It promotes a formal integration of current notions of development, and possible implementations is allowed, on findings currently shown, for an adequate direction of statutes or emblems with ability to exercise, an appropriate influence and interrelation towards the areas in development, and spectra of a prospective nature.

Likewise, within the strategies, which would allow an appropriate investigation, towards the topics derived from this research structure, they are shown in the different manifestations, in terms of the achievements reached from the different areas of knowledge. Precisions, that would be achieved to integrate, from a premise of greater direction, in as much to the studies previously obtained, and from where in addition it would be split, of a focus of greater precision, in the multiple integration; that is, from what has already been shown, as argued by authors such as Balbi (2008)¹⁹, the aspects of greater resonance would be redirected, with the capacity to understand, and allow development, of remarkable order, with the capacity to solve challenges, at present, they only remain in categories of uncertainty, but in turn, they are shown as priority schemes, in the challenges that arise from the multiple contexts, from everyday reality. Which, in turn from a scheduled action, would be able to interact from a platform, with perspectives of greater incidence.

Defining, that if one of the preliminary objectives of scientific research as such supports, the correct investigation, application and conceptualization of knowledge, with purposes, and arguments for improvement and social utility, within the implementation of the bases, from which can be presented and show real social benefits as well as applicable. Thus, prospective research oriented from the perspective of critical multiplism, as a side with possibilities for resolution, action and implementation, with objectives and well-founded aims and high precision in which the items, proposed and traced, while the development proper to science and its strategic scope, that supports a broad viability.

Likewise, within the current complex environment, in which concise demonstrations can be made, in the sustainment of being an area in which it is possible to advance in a coordinated manner, not only with the integration of the more of the existing disciplines, but also at the same time, they can be shown, as interactors, with the capacity for conscious resolution, in the face of the new real scenarios that have been seen and from which they extend to the broadest areas of knowledge, which are also aimed at the resolution and current possibility from where they are concatenated, before the new challenges of a socio-contextual nature and from where possibilities are shown, with the capacity to resolve the new slogans of reality itself, as well as, its correct characterization, from the sphere of complexity.

III. CONCLUSION

Faced with this requirement, one would have to elucidate, in an initial way, the own conceptions, that allow the interdisciplinary approach as a possible current way, which, is ascribed to the resolution, approach and contextual interaction, already formalized, in a general understanding, and developed from a multidisciplinary perspective, able to include and allow an advance in an integral way, in its position of sequential participation, according to the statutes and proposals of procedural nature, from where the multiplist position would allow to investigate; not only, to achieve progress, from a singular perspective, but from, the own plural understanding, able to envision and address, the challenges that from the same spaces of the global scope are promoted and empowered towards a general interaction, with attention capacity, towards the actual scenarios of current complexity. Likewise, the dynamic, flexible and permanent interaction of the precepts and findings that from the application of prospective research, could be realized from a possible integral argument, which reflects the real position of a Critical multiplism in its current known development.

Achieving in this way integrate as a feasibility proposal to the critical multiplex itself and prospective research, as a solution strategy in the field of complexity, not only of inquiry but also of resolution, and co-participation in the creation of scenarios and contexts of plural inference.

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