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**SCIENCE AND PSEUDOSCIENCE IN PSYCHOLOGY AND PSYCHIATRY**

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DO WE ADAPT PSYCHOLOGY TO SCIENCE OR SCIENCE TO PSYCHOLOGY?

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Taking a sideways glance at other disciplines, trying to gain a credibility that has eluded it for much of its history, psychology has embraced more strongly than any other of the humanities the label of “science”, in an attempt to gain the prestige associated with other prototypically scientific knowledge, such as physics, medicine, or computing. Few are the psychologists who do not emphasize its scientific character, few are the psychology textbooks that do not highlight in their first pages the scientific nature of the text to be read.

However, this interest in being included within the scientific disciplines is not usually accompanied by a similar interest when it comes to studying the philosophy of science. Just as there are sciences that study cells, others that study planets, and yet others, molecules, there is no science that takes the sciences as its object of study. In other words: what is science is not a scientific question but a philosophical one, and the obsession that the great majority of psychologists have with considering themselves scientists is only comparable to the lack of interest in acquiring the slightest training in epistemology, which would allow them to have an idea of science beyond the fundamentalism, myth, fashion, and ideology that we find at the popular level about what people in white coats do in their laboratories.

For this reason, the recent book “Science and pseudoscience in psychology and psychiatry” is particularly relevant, and it is another example of the ability of Marino Pérez Álvarez to deal with crucial issues that are hot topics in the field of psychology without losing for one moment the academic level that characterizes someone who is—let us be moderate in our judgment—one of the most extraordinary and indisputable leading figures of national psychology for several decades. Once again, Pérez Álvarez has authored a text that is both informative and rigorous, fully up-to-date and timeless, as well as clear in the exposition of necessarily complex positions. No one should expect to find in “Science and pseudoscience in psychology and psychiatry” either enthusiasm for a mundane and vulgar vision of psychology as a science—positivism of the 1950s, hypothetico-deductive method, Popperian falsifiability, or emphasis on quantitativism... so common in those who call themselves “scientific disseminators”—or a refutation of all rigor and criteria driven by pragmatism or metaphysics.

Neither one nor the other. On the contrary, Marino Pérez Álvarez, standing on the shoulders of giant philosopher Gustavo Bueno, seeks to put psychology in its place, and to clarify what scientific status corresponds to such a space. The place of psychology is not that of medicine or of humanistic individualism; neither is it that of neuroscience or that of the bluff of so-called “positive psychology”. The author has taught us throughout his career that equally as important as answering questions is to ask them correctly, and this principle involves presenting the reader in the first part of the work a whole theory of science, of course, beyond the mainstream, where the object of study is not cut, as the positivist Procrustean bed accustomed us, to the measure of a method

that is alien to psychology and is adopted by mere physicalist simplism and adulation. On the contrary, it should be understood that epistemology cannot be alien to ontology but dependent on it, and that the science of psychology can only develop in a complete way on a solidly philosophical construction of its object of study, centered on its functional character.

Marino Pérez Álvarez’s work is not a work “against method”, but it is a work “against methodological prejudices”. And the first test bench against which any theory of science is measured is the definition of its object of study, that is, the demarcation between science and other types of practices that would be excluded from such a rank. In particular, the demarcation between science and pseudoscience seems to be especially relevant today. We are all able to give examples of science and pseudoscience, but it is not so easy to formulate precisely the criterion that divides the two. The attempts that have traditionally been proposed have given prominence to the methodological aspects, implying that there is “one” scientific method, which unifies paleontology, quantum mechanics, comparative linguistics, inorganic chemistry, etc., that psychology should practice. In particular, in the field of psychology and psychiatry, this method would be based on randomized clinical trials, a type of study borrowed from medicine, which has become the gold standard of psychotherapy research.

Marino Pérez Álvarez applies this criterion of randomized clinical trials to one of the most controversial psychotherapies, EMDR—Eye Movement Desensitization and Reprocessing—, comparing it with cognitive behavioral therapy (CBT)—the standard of psychological therapy today, scientifically endorsed from the physicalist and methodological vision of the prevailing science. The results are ambiguous to say the least, and EMDR can present in its favor randomized clinical trials and meta-analyses that would place it in the same category as CBT. This is precisely the problem: purely quantitative analyses of outcomes are opaque to the processes at work in therapy. Biomedical research works with parathetic mechanical processes that can usually be directly inferred from the recording of their biological effects, but this is not the case in psychotherapy, where the therapeutic relationship, apothetical and interactive, is much more indirectly linked to the counting of contrived items in a questionnaire created precisely to be analyzed according to biomedical statistics.

The quantitativism that is proper to many biomedical measures does not seem appropriate for the issues that psychotherapy deals with. Science does not have only one boundary, that which separates it from pseudoscience, but it must also establish demarcation criteria with respect to scientism and scientific fundamentalism, equally serious errors into which we must not fall. The human sciences are too complex to be reduced to positivist criteria. Once again: we need an idea of science that adjusts to the object and logic that is proper to psychology, and not an idea of psychology that adjusts to the object and logic of other disciplines, no matter how much they surpass psychology in prestige and applications.

Rejecting the positivist method as the method to which psychology must adhere also allows us to place ourselves in a privileged position to understand the trap that is enclosed in coaching, neurocharlatanism, emotional intelligence, positive psychology, and many other formal psychologies that rely on alleged objective data, produced in the world as they show them, pretending that they are not being built based on theoretical or ideological assumptions—often unnoticed by the “scientific psychologist” him- or herself. And, on the other hand, clarifying conceptually what psychology is clears in a very important way the path to understanding what a psychological disorder is and what psychotherapy is as an intervention for such a problem.





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The final part of this work is dedicated to this, which begins with a radical questioning of the possibility of whether pharmacological interventions can really be considered as treatments for psychological problems, since the two are on incompatible scales. The very notion of the placebo effect—another classic issue in biomedical research that psychotherapy research has tried to incorporate into its designs in a simplistic way—is reinterpreted by Marino Pérez Álvarez from a holistic-conceptual point of view, from which it comes out enlarged and inherently associated to the psychotherapeutic intervention, without being able to distinguish the placebo effect from other specific effects due to the specific elements that the intervention incorporates. Finally, the concepts of person and situation allow the author to propose a contextualist conception of disorders and their therapies, far from what is “inside” or “outside”, where personal, biographical, and social aspects are integrated and not merely juxtaposed, as is usual among the defenders of the biopsychosocial mantra.

“Science and pseudoscience in psychology and psychiatry” is an academic work which, therefore, is not intended to be defended or invalidated, but to be debated, and its reading is essential for all those who are interested in the nature of psychology, psychological problems, and psychotherapy beyond the usual simplisms and clichés. It is not necessary to see the name of Marino Pérez Álvarez on the cover to identify him as its author, given the coherence that this work maintains with the previous bibliography of the Asturian professor, characterized by lucidity, excellence, heterodoxy, and solid argumentation, which will undoubtedly continue in his future production. If a person who only knows about psychology does not even know about psychology, a person who wants to practice psychotherapy only based on positivist scientific apriorism will not even be practicing psychotherapy. “Science and pseudoscience in psychology and psychiatry” can help them to begin to do so.

