

Article

What is Psychology?

Sergio Álvarez-Fernández 

Consejería de Educación del Principado de Asturias, Spain

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ABSTRACT

This paper addresses the question “What is psychology?” and seeks to resolve some of its epistemological entanglements: its plurality, the definition of its object of study, and its presumed pre-scientific nature caused by an eternal struggle between schools of thought. It is concluded that psychology is not one discipline but many, and that to qualify as a science, it must be one of what are known as the “genetic functions.” The paper also presents attempts to establish a foundation for this general psychology, ultimately proposing a controversial thesis: that such a project is impossible as it would necessarily remain philosophical. All these entanglements are attributed to the problematic nature of the ideas of function and finality.

¿Qué es la Psicología?

RESUMEN

Este trabajo pretende responder a la pregunta «¿Qué es la psicología?», intentando resolver algunos de sus entuertos gnoseológicos: su pluralidad, la definición de su objeto de estudio y su presunto carácter precientífico, resultado de una eterna lucha de escuelas. Se concluye que la Psicología no es una disciplina, sino muchas; y que, si quiere ser una ciencia, tiene que serlo de aquello que se ha dado en llamar «funciones genéticas». Se presentan, además, algunos intentos de fundamentar una psicología general, planteando, finalmente, una tesis arriesgada: que semejante proyecto es imposible, pues tal disciplina solo podría ser filosófica. Todos estos enredos se atribuyen al carácter problemático que las ideas de función y finalidad tienen en filosofía de la ciencia.

Palabras clave

Psicología
Ética
Escuelas de psicología
Finalidad
Función

What is Psychology?

To the Jew who forged such arduous crystal, the first to confuse ethics with psychology; but also to the rest of my teachers, from whom I have learned so much.

Psychology has always been a needy discipline, insecure about its own scientific status; burdened with an inferiority complex, perhaps understandably, but ultimately unfounded. Under scientific premises, believing that the only valid knowledge is scientific, it has attempted to present itself as a science in the image and likeness of the natural sciences. This obsession is as harmful as it is unnecessary; for the science of the subject and its behavior, there is little use for those truths that arise precisely from its annulment. Nothing purely objective is of interest to those whose goal is to study what subjects do.

The status of psychology in the republic of sciences is, however, a common topic of debate among psychologists, perhaps because their livelihoods depend on it. There is much to be gained from the name "science." A scientific psychology is respectable, solid, and, above all, true; it is worth investing in, and participating in it imbues one with an aura of sobriety, rigor, and prestige. Practicing a scientific psychology, when we refer to the clinical realm, means knowing what one is doing, showing genuine concern for the client, and maintaining a healthy distance from the various pseudosciences. It matters little if traditional demarcation criteria prove incapable of distinguishing one thing from the other in psychology (Pérez-Álvarez, 2021a).

Most of the time, people say that psychology is a science without making it clear what they mean by that. The problem is that you don't become a scientist by saying it more often, or louder. To determine what is science and what is not, you need a theory of science; a theory that is not psychological, but philosophical. In other words, psychologists, as psychologists, can say nothing about the scientific nature, or lack thereof, of their discipline, and if they do, it is not in their capacity as psychologists, but as part-time philosophers. When a psychologist, even from academia, shouts with conviction, "Psychology will be scientific or it will be nothing!", we can be almost certain that they do not know what they are saying. They do not know what science is, but worse still, they do not know what psychology is either.

This question about the scientific status of psychology is what led me to philosophy. It was while studying for my degree in psychology that I realized that this question could not be answered within the discipline itself—that I had to look beyond its boundaries. That is how I came across philosophy and its tools; years later, armed with them, I feel ready to venture an answer.

But in order to offer it, we must first start from some philosophy of science, since what we consider science or not will always depend on the philosophical coordinates we are using. We will take the side of the *Theory of Categorical Closure*, presented by Bueno (1992/1993, 1995b) in the five volumes of the same name and in the pamphlet *What is Science?*, but also in other articles and publications. Once that is expounded, we will attempt to apply this philosophy to the field of psychology, as it is studied today in our universities. We will see whether everything studied there is science or not and, if not, what kind of knowledge it is. To do this, we will also have to devote a section to examining the old problem of the

unity of psychology and its struggle between the schools. Finally, we will attempt to offer an answer as to why psychology has such gnosological problems. Anticipating part of our thesis, we will say that psychology has had so many problems because, exactly as is the case in biology, the ideas of function and purpose—so reviled by certain philosophies of science—are essential for this discipline.

What is Science?

This is the fundamental question of the philosophy of science, and it is no trivial matter, since saying what science is amounts to knowing how to identify what it is not. The Greeks used the word to refer to knowledge in general, distinguishing *episteme* (science), from opinion (*doxa*), and technique (*techne*). This was the case until the birth of modern science. Since then, "science" has become stricter, not only in its methods but also in its meaning. In this sense, Bueno (1995b) distinguishes four modulations of the idea of science. The first conceives it in the Greek manner: as knowledge in general, allowing talk of the shoemaker's science or the artisan's science. The second is more restricted and refers to science from the point of view of logic, understanding it as an ordered system of propositions derived from a set of premises. The third now encompasses the set of positive sciences, as we understand them from Modernity onward. Finally, the fourth and last sense emerged with the development of the so-called "human sciences," seeking to bring together a broad set of disciplines that, despite their differences from the strict, positive, or natural sciences, still aim to cloak themselves under the mantle of scientificity.

The Theory of Categorical Closure (TCC)

The theory of categorical closure (TCC) was developed between the 1970s and 1990s, in opposition to neopositivism, Popper's falsificationism, and the sociological drifts of Kuhn and Feyerabend. Through it, starting from Plato's principle of *symploké*, Bueno sought to affirm an irreducible pluralism: there would be no science, but rather sciences; each with its own terms, operations, phenomena, relations, referents, essences, norms, dialogisms, and autologisms; that is, each with its own irreducible field of work.

What characterizes the sciences, as opposed to other forms of knowledge, is the type of truths they give rise to: what Bueno called *synthetic identities*. This is a truth arrived at by confluence; that is, a truth defined by the ability to reach it through different paths. If two processes of demonstration lead to the same result, we can conclude that said result is independent of the course of demonstration followed. If I am able to provide a geometric and an algebraic demonstration of the Pythagorean Theorem, it can be considered an objective truth, in the sense that the subject—in this case, I—would be, along with my operations, annulled during the demonstration process. This is what the sciences do: arrive at results, at truths, independent of the subjects who produce them. The problem, of course, is that it is not always that simple. TCC's solution was to establish a gradient between what counts as a science and what does not. Thus, the different sciences can be classified according to the degree to which they eliminate both the gnosological subjects (the scientists) and the subjects under study, insofar as these are turned into objects. This spectrum ranges from sciences that are completely anthropic or alpha-

operational, such as physics or biochemistry, to other disciplines that are unable to neutralize one (or even none) of their subjects—in the case of techniques—and are therefore called anthropic or beta-operational.

TCC also represents a shift from the traditional conception of the relationship between science and other disciplines. From Aristotle onward, but especially since Modernity, the image of the tree of science has been considered valid: as if philosophy were a prior, propaedeutic knowledge that preceded it. For Bueno (1995a), on the other hand, philosophy is a reflexive or second-degree knowledge; the end and not the beginning of knowledge. To do philosophy, one must first know something about the other forms of knowledge that feed into it: first-degree knowledge, such as the sciences, the arts, or techniques.

The relationship between technique, science, and technology is also reversed in philosophical materialism. Bueno holds that techniques, not philosophy, are the mothers of the sciences. The sciences systematize a series of prior forms of knowledge, giving rise to theorems—if they are capable of achieving them—that form their body. Thus, for example, chemistry systematizes the type of operations that, technically, by combining and separating different substances, have been practiced since ancient times; the operations developed by healers, cooks, or shamans of some primitive tribes. The same is true of mathematics and any other science. The content of Pythagoras' theorem, for example, was applied by Mesopotamian peasants without needing to know the steps of its demonstration.

Techniques are therefore those disciplines that make up the *categories of doing* in its dual aspect: that of *praxis* (the *agere*), and *poiesis*, (the *facere*). Technologies, on the other hand, are not the "mothers" of anything, but rather, if anything, they are "daughters"—daughters of the sciences, since they involve the transformation of the world, just like techniques, but the transformation they bring about is mediated by scientific knowledge. Launching a ballistic missile, a technology, requires a set of well-established physical, chemical, and mathematical knowledge, without which the missile would not take off or, even worse, would fulfill its function in the wrong place and at the wrong time.

As for the pseudosciences, we can define them as those forms of knowledge that, while not scientific, claim to be so. To disguise oneself as science is to present oneself as true knowledge—something very useful when this is not the case, yet there is still an attempt to convince people that what is being said is true. In psychology, many therapies and pseudotherapies attempt to do this, sometimes successfully. In any case, the truth is that TCC is not overly concerned with questions of demarcation. After all, psychoanalysis and astrology, like so many other disciplines usually rejected as pseudoscientific, are still forms of knowledge. One cannot psychoanalyze someone without knowing about psychoanalysis, its techniques and procedures; likewise, to read someone's cards or to read the future or someone's personality in the stars, one must also know the methods of astrology. It is another matter whether the conclusions are false and inoperative. Psychoanalysis, assuming its therapies do not work, and especially astrology—to continue with the example—constitute technical knowledge that, unlike that of the shoemaker, is not pragmatic—at least not for its users, although perhaps for its practitioners, which is certainly a good reason to reject it.

The Place of Psychology in the Body of Knowledge

The Controversial Unity of Psychology

Psychology, as it appears in the curricula of psychology departments, is a chimera. Its unity is deictic in nature: that which is pointed to with the finger. In this sense, the psychology that is institutionalized in its various curricula does not aid in the gnoseological analysis of the discipline; rather, it hinders it. In the same degree program, it is possible to find courses in neuroanatomy and neurophysiology, ethology and comparative psychology, applied statistics (psychometrics), and evolutionary psychology, not to mention those that operate on a strictly technical level, from behavior control to psychotherapy in the broad sense, educational psychology, and community intervention. The fact that the label "psychology" covers this whole jumble of disciplines makes it absolutely impossible to define rigorously what psychology itself might be: only an intentionally vague definition could accommodate such an extensionally broad field.

Academic psychology thus appears as a kind of Frankenstein's monster: a patchwork job in which some parts fit together better than others. Therefore, before resolving the mess of the battle between schools, we would do better to take down the sign that says "Faculty of Psychology" from its frontispiece and replace it with the more pluralistic "Faculty of Ethological and Psychological Sciences (or, better yet, Disciplines);" a longer name, and perhaps less attractive to new generations of psychologists, but much more accurate to what lies behind its doors.¹

Anyone who has crossed those doors can see this. Behaviorists work with animals in laboratory settings, are not concerned with the functional or structural anatomy of their nervous systems, always prioritize the inductive method, claim to study behavior as their object, and believe that scientific knowledge of behavior is equivalent to being able to control it. There is no room for statistical analysis, at least if by statistics we mean inferential rather than descriptive. A frequency or latency graph suffices; no trace of regressions to the mean, degrees of freedom, or null hypotheses. Neuroscientists, on the other hand, take the anatomy of the nervous system as their object of study; their work is full of complex statistical analyses and colored images of this or that region of the brain; their method is not inductive, but hypothetical-deductive. As for their results, they never refer to an individual subject, but are diluted in the samples they work with—the larger the samples, the more insignificant the conclusions.² Psychometricians do the same, but their interest is no longer even in the behavior or the brain of the animal they study, but in its responses—or rather, in the responses that any subject—that is, no one in particular—might give to the set of items that make up their tests. What one group does has little or nothing to do with the others. In TCC terminology, these three disciplines do not share terms, operations, phenomena, relationships, references, essences, norms, dialogisms, or autologisms—all elements that define the field of the different sciences. In fact, it cannot even be said that all three are sciences,

¹ As one of the reviewers of this article has rightly pointed out, this solution is as cumbersome as it is pedantic and would, on its own, warrant deleting the paragraph in which it appears; however, this does not make it any less true to reality. Let the pedantry and cumbersomeness challenge and annoy the reader, for that is its sole purpose.

² It is well known that the larger the sample size, the smaller the differences between groups must be in order to be statistically significant.

or at least not to the same degree: the behavior control carried out by the behaviorist does not segregate the gnoseological subject or, above all, the subject that constitutes their object of study; certainly not to the same extent as neuroscience and psychometrics do. One is closer to mere technique; the other two, to biology and sociology.

Therefore, it can be said that the behaviorist, the neuroscientist, and the psychometrician do not share an object, do not share a method, do not share interests, nor do they seek the same thing, and because they do not share, they do not even share a family resemblance, since neither the behaviorist thinks the neuroscientist is a psychologist, nor does the neuroscientist often think the behaviorist is a scientist. One believes that the other loses sight of behavior in order to do biology; the other believes that the first is a kind of fanatic, incapable of accepting something as obvious as that our behavior is determined by our genes, our brain, or our basic anatomy. A priori, there is no common ground between them that could serve as a basis for any form of understanding. Their disciplines are completely foreign to each other, and yet this is not a popular view in contemporary psychology.

In fact, most psychologists prefer to think that a theoretical unification effort is possible; that it is possible, in short, to resolve these differences in order to establish a unified science, even if it must necessarily be pluralistic. Loredó (2009), but also Sánchez, following Fernández (2009), have insisted on this possibility, pointing out how a certain reading of Kant, through classical constructivism, could allow us to recover the idea of the subject as the core of a true psychological theory. In their view, what this constructivism achieved, through the work of Darwin and, above all, Baldwin, was to naturalize the Kantian subject. This would have been the main contribution of experimental psychology from Wundt onward. If Kant had denied the possibility of developing a science of the subject and its activity, this constructivism would aim precisely to establish it, while avoiding falling into both objectivist and reductionist tendencies and radical subjectivist and constructivist deviations (Sánchez, 2009a).

Here, too, Yela (1996), a distinguished figure in our psychology, attempted to unify the discipline by appealing to a proposed three-part structure of behavior: consciousness, stimulus, and situation; or, following Pérez-Álvarez (2021b): subject, behavior, and situation. Both authors were, or are, fully aware of the plural nature that their discipline has had since its "founding" in 1879. Pérez-Álvarez's (2019) solution, however, has involved trying to reclaim a more human than technological psychology; attempting to combine the objectivity of experimental psychology with the subjectivity of a tradition that is equally psychological but closer to phenomenology. This phenomenological root is not trivial, since as early as 1874, five years before Wundt founded his famous laboratory, Brentano (2020) published the result of his many efforts—the attempt to base psychology on a set of very special phenomena: intentional phenomena. Before pursuing this path, however, we still have to close the previous one. Until now, we have encountered a plural psychology, a discipline that is not one but a melting pot. Perhaps it cannot be otherwise. Yela (1996) spoke of its unification as a utopian undertaking, possible perhaps, but unachievable. We therefore have an essentially divided, plural discipline with different approaches and schools. What is studied in psychology departments is not one science, but many, as well as another series of other disciplines that are not sciences either,

because they are either technical, predating the sciences, or technological, subsequent to them. What remains to be seen is whether the utopian project of developing a *general psychology*, as suggested by Yela (1996) and Pérez-Álvarez (2018a, 2018b), but also by Loredó (2009), is possible; whether, ultimately, a unified psychological science is possible.

Is Psychology a Science, and can it be one?

Traditionally, psychology has been defined as the science of the mind and behavior (Zagaría et al., 2020). This definition is a compromise between the cognitivist and behaviorist trends in psychology which, because it is eclectic, does not satisfy anyone. Defining it in this way involves asking what the mind is and what behavior is. The mind, to begin with, is something of dubious ontological density. For more than a century, philosophy of mind, as an academic discipline, has been wondering about its nature, and it would be untrue to claim that any conclusion has been reached. Historically, the discussion has moved between dualism and monism; however, neither of them has the final word. Philosophical materialism, for example, has defended a non-reductionist ontological pluralism, a view that informs the constructivist psychology of Loredó and Sánchez, but also the phenomenological behaviorism of Marino Pérez—both pluralist and anti-dualist. All of them therefore share a rejection of any subject/object, internal/external, mind/body dualism, accepting the old dialectical principle of co-determination: there is no subject without an object, just as there is no object without a subject; there is no mind without a body, just as there is no body without a mind; there is no convexity without concavity, and so on. The subject is always operative.

From this point of view, it would be appropriate to recover the mind, or the soul, not as a substantial principle, but as a synonym for *life*; as that which characterizes living beings, which are "animated" for a reason; namely, a set of functions that allow them to persist in being. A stone does not need mental or psychological faculties because it is not alive. What differentiates it from a living being is that, if you leave it to its fate in a vacuum chamber, when you return to pick it up, the stone will remain unscathed, without any damage. Leave a living being in a vacuum chamber and after a few minutes you will have an inert being. That is the nature of life: self-consumption. To remain in being, animate beings, Darwinian organisms, have to do things; among them, devour other beings. To live is, therefore, to strive, and for that, one must be able to do what is necessary to stay alive. Psychological faculties or functions are the means that allow living beings to do just that, and they consist of relating to the world (sensitivity), moving and acting (movement and will), receiving feedback (affect and emotion), remembering all of this (memory), learning from successes and mistakes (learning), and making inferences (reasoning or thinking). If this is what is meant by mind in the traditional definition of psychology, we can accept it. Unfortunately, mind is often understood only as cognition, in the sense of modern cognitive psychology: as inputs and outputs of information to be processed; as if the computer, a product of our intelligence, could be a good model for understanding the very intelligence that created it; or, worse still, as an immaterial substance, in the manner of the old Orphic idea of the soul or Descartes's *res cogitans*.

Similarly, if the mind is a thorny issue, behavior is no less so. Traditionally, Pérez-Álvarez (2018b) tells us, behavior has been understood as that which the mind uses to relate to the world; its instrument. In his opinion, however, behavior is something more: a relationship between the subject and the world, but one that is constitutively interrelated. "I am myself and my circumstances, and if I do not save them, I do not save myself" (Ortega y Gasset, 2021, p. 77). In this sense, behavior—what organisms do—would be "the bodily, affective, cognitive, and operative articulation of the subject with the world, where behavior implies intentionality, know-how, and understanding" (Pérez-Álvarez, 2018a, p. 168). This idea is none other than the recovery of that structure of behavior that Yela (1996) defined as "the unity of interdependence of the stimulus, the subject, and the action" (p. 131). That is why Pérez-Álvarez (2018b) seeks to make psychology a science of the subject and behavior.

The problem with talking about psychology in this way is that, leaving aside the question of the subject, behavior becomes what the subject does-in-the-world. But of course, subjects do many things. Doesn't economics study what subjects do? And doesn't sociology also study what subjects do? Doesn't history study what they have done? And anthropology? What do all these sciences study if not conduct or behavior? Should we reduce them to psychology and assert, as Dilthey and so many others did in the 19th century, that psychology is to the human sciences what physics is to the natural sciences—the science that underlies them? One could argue, then, that psychology studies what the individual subject does; but every subject is a socialized subject. There are no individual subjects, because to be a subject is to be subject to—among other things—social, cultural, and historical processes and norms.

In this way, all the humanities and social sciences study behavior: whether economic, cultural, social, political, or "individual." The behaviorist could then defend himself by arguing that what psychology does is study the fundamental principles of behavior; how it is acquired and modified, as if it were a general science of learning. The problem with these principles, which are so general, is that they are formal principles: they tell us how we learn in general, but not how we learn this or that. They can tell us that students learn better and faster if certain reinforcers are offered in a certain way, but not how to explain the *Critique of Pure Reason* to them so that they understand it.³ Ultimately, what the psychology of learning teaches us is nothing more than common sense: that associations are made between stimuli and responses in classical conditioning, and that contingencies are learned in operant conditioning, that is, how certain behavior in a certain situation leads to a certain reinforcer. However, reducing love to an exchange of reinforcers, as Skinner did, in a humorous way, is to blindfold ourselves so as not to see how these exchanges, in fact, change, have changed, and will continue to change under the influence of historical, economic, sociological, and anthropological pressures. And that is what matters; because anything can be a reinforcer, but what matters is knowing what counts as one at any given moment and, above all, why. Falling in love today is not the same as it was a hundred years ago, even though in both cases there are exchanges of reinforcers. By the same token, to say that depression is an

increase in behavioral response cost is to misunderstand what it means to be depressed; it is to ignore the existential and personal dimension of the problem, merely renaming one of its presumed pathognomonic symptoms: anhedonia.

In fact, the concept of reinforcer is rather opaque. Behaviorism does not comment on what can function as a reinforcer and what cannot; that, they would say, is something we can only know a posteriori: by seeing whether its appearance promotes or hinders the repetition of that same behavior in a similar situation in the future. Why a whipping is a punishment for the prisoner and a pleasure—certainly not a guilty one—for the Marquis de Sade, is something inscrutable a priori for the behaviorist, who will throw the mystery into the bottomless pit of their respective learning histories. These histories, however, like the cultural history of love or sadism, cannot be understood without taking into account the historical, cultural, social, and other pressures and developments that shape and determine what is experienced today as pain or pleasure. To attribute it to the history of learning is to send it to the black box, along with the phylogenetic components, which are acknowledged, but left unexplained. This may be useful for the control of behavior, but it is misleading if the aim is to understand and explain it. Control is a form of practical knowledge, but it is less demanding than understanding and knowing things *sub specie aeternitatis*, as Spinoza would say. To make a rat jump, all you need is two clips and a car battery; to make a cow jump, you just have to increase the voltage. Neither of these things implies knowing what a rat or a cow is, nor how they behave; at most, they are sentient beings that do not like to be electrocuted. Yet the behaviorist does not claim to know even this, since to speak of liking or disliking, as if to suggest that the rat is seeking to avoid the shock, would amount to recognizing that its behavior is an intentional act—unacceptable to those whose aim is to banish intentionality from science.

Does this mean that there is no place for psychology as we know it in the republic of science? Kant would have said as much—that reason, in its theoretical use, can know nothing about the subject, about the self. Pérez-Álvarez (2018a, 2018b, 2019), however, has sought to reposition this science of the subject and its behavior within the human sciences. In the same vein, viewing it at least as a possible science, are Sánchez and Loredo (2007), who also advocate, like Yela and Marino Pérez, the need to re-found psychology on a new idea of the subject. Their associated term, however, would no longer be behavior, but action, understood in terms of function and genesis; or, better, *genetic function*. In this sense, Sánchez (2009a) understands genetic function as "the realization of utility" (p. 138); that is, what organisms do to achieve a certain outcome: evolutionary, in its simplest forms; socially, historically, and symbolically mediated, in its most complex forms. Drawing on Baldwin's *circular reaction*, this idea of function, of genesis, is presented as a kind of dialectic of action; as a spiral in which, based on progressive modifications and feedback, the new can be born from the old (*genesis*). There is selection, but it is not mechanical; there is innovation and there is purposiveness or intentionality, but not that of an autonomous subject—rather that of a subject who, in order to be such, requires an object; just as the object also needs a subject. Psychological functions, which are always those of a subject and are embedded in a specific ontological and phylogenetic history, would thus consist of a succession of

³ Although some of these principles of learning may, perhaps, make it more enjoyable.

attempts—trials and errors—that progressively give rise to increasingly complex forms of action and organization.

Certainly, a science can be developed whose object is how these genetic functions develop. This was the basis of Soviet cultural psychology. It is also possible to study, as comparative psychologists do, what functions different animal species perform, and how far their similarities and differences extend. This psychology, moreover, could very well draw from developments in evolutionary psychology and, why not, from the research that information-processing psychologists carry out on different psychological processes, from perception to reasoning and language, by way of memory and learning. The degree of segregation of the subject that this psychology is capable of achieving may be debatable, varying in degree depending, among other things, on the methodology used. Thus, for example, the statistical study of the famous “reading pathways” will not evacuate the subject in the same way as the ethological observation of a certain species of fish’s capacity to discriminate quantities. In any case, to the extent that this science claims to be a science of the subject and what it does, it can never be—under the coordinates we have been using—a science in the same sense as physics or chemistry. This, however, is no cause for concern; it might even be cause for joy. Not being able to completely evacuate the subject may make it a less objective discipline, but also less alien; more human. *Homo sum, nihil humani a me alienum puto.*

The problem lies in the fact that psychology often attempts to go beyond the functions studied by Soviet psychology, sliding down a slippery slope with dangerous consequences. This happens, for example, when the psychologist, studying the more complex functions, takes biology, history, culture, or economics not as independent variables, not as the context that allows one to compare some faculties with others or a prior developmental stage of one of them with a later one, but as something to be explained from psychology itself. One can, of course, study how the concept of beauty is formed in a specific subject, or how the concept of permanence is formed in an infant, but neither the idea of beauty nor that of substance can be reduced to these psychological concepts. One might account for the aesthetic experience from a psychological point of view or from the emotions we experience associated with what we call *happiness*, but psychology can never say what art is, nor what happiness is, for these are matters that concern aesthetics and ethics respectively. The same is true of love, science, and psychology itself—unless we make it a kind of ultimate knowledge, capable of accounting for all others. This, however, is not its role; that domain belongs to philosophy.

Here is the thesis I seek to defend: what psychology is will depend on the role we assign it as a discipline. Is it possible to speak of a scientific discipline—at least to some degree—that studies the functions or faculties of organisms? Yes. This conceded, do psychologists’ aspirations usually stop there? Rarely, because what psychology is usually understood to pursue is something more; that is, to show or understand why subjects do what they do. Describing how they perceive, attend, emote, learn, remember, speak, and think might be the task of a *genetic psychology*; but this is not usually enough for the aspirations of psychologists, who are never satisfied with these very important descriptions—because, they are, after all, still descriptions, however genetic they may be. Psychologists tend to seek, above all, to understand the motives, the causes of our

actions; their meaning. This requires, however, taking history, anthropology, sociology, biology, the arts, the sciences, and countless other disciplines, not as independent variables, not as the context against which to examine the development of our faculties, but as genuine determinants of what the subject is and what the subject does; as the very subject matter of our research. No single science can take on all these pressures alone; to do so would require a different, more reflective, second-order type of knowledge. If we wish to understand psychology as a discipline capable of telling us why subjects do what they do, in the way they do it (without settling merely for its genetic description), delving into its deeper meaning, its *why*, we must admit that this discipline is not scientific, but philosophical: a true *praxeology* or theory of action. This must take into account the developments of “genetic psychology,” but also those of all the other disciplines that have much to say—despite not being psychological—about the behavior of organisms. This, however, need not be something negative or a shortcoming. Philosophy is not synonymous with a lack of science or an absence of rigor. It is in fact rigorous and, in a certain sense, more scientific than any science—if only because it must take into account not what one science says, but what all sciences say.

A Response to the Battle Between Schools

We still have to address the well-known and perennial battle between the schools of thought, for it tends to be the main difficulty that all psychologists point to when it comes to considering psychology as a unified science. This problem stems from a Kuhnian conception of science; from diagnoses similar to the one offered by [Watson \(1971\)](#). For him, psychology was not a science—at least not yet—because it was in a pre-paradigmatic state. In his view, each school of psychology constituted a completely different theory or approach. The lack of common ground, of a paradigm capable of giving rise to a period of normal science, would make psychology a discipline that was, if not anti-scientific, then pre-scientific. In this situation, most psychologists would have sought to offer a true paradigm, usually consisting of prioritizing one of the schools over the others. Other psychologists, such as [Loredo \(2009\)](#), and at times [Pérez-Álvarez \(2018a\)](#), have chosen to highlight this theoretical, practical, and methodological plurality, making it a characteristic of the discipline. Watson’s diagnosis (1971), in my opinion, shed a little more light on the matter, albeit negatively. Let us recall it.

For [Watson \(1971\)](#), each school of psychology constituted a position with respect to a whole series of opposing prescriptions: determinism/indeterminism, mechanism/vitalism, monism/dualism, objectivism/subjectivism, etc. Thus, for example, behaviorism would be, in his view, deterministic, mechanistic, monistic, and objectivist, while humanism, on the contrary, would be indeterministic, vitalist, dualistic, and subjectivist. Any school of psychology could be linked to a particular combination of positions in this list of pairs of opposites. From this point of view, the unity of psychology would be a controversial unity; a diagnosis shared, albeit from different coordinates, by [Yela \(1996\)](#) and [Loredo \(2009\)](#), but not by us—or, at least, not in the same sense. The fact is that there is something in these prescriptions that catches the philosopher’s attention: all these pairs of opposites express ideas, not concepts. What Watson is telling us, perhaps without realizing it, is that the different schools of psychology are not psychological

schools, but philosophical ones. Remember how Skinner himself (1994) defined behaviorism, not as the science of behavior, but as the philosophy underlying it.

Here is one more indication in favor of the argument made above. No self-respecting psychologist can content themselves with the findings of their discipline, be it scientific, technical, or a crucible.⁴ Psychology has a natural tendency toward philosophy. Every psychologist wants to answer the question of why we do what we do, what is the meaning and purpose of our actions. The problem is that answering that question requires assuming a series of ontological, ethical, and anthropological commitments that knock on the doors of so many other disciplines with similar concerns; commitments that, moreover—like it or not—hold philosophical citizenship.

Thus, each school of psychology is, in reality, a philosophical anthropology. That is why psychology exhibits that peculiar unity of philosophy: dialectics. Now, how could something so clear have gone unnoticed for so long? Of course, the main reason is the widespread contempt that psychology, since its alleged founding in 1879, has shown towards philosophy. Psychology's aspirations to scientificity were built on the rejection of and independence from its supposed philosophical past—as if philosophy came first and science second, as if one could escape philosophy.⁵ One need only open any history of psychology textbook, such as that of Leahey (1998), to find this self-interpretation of its own history. Nor can one blame it; sciences, like countries, need founding myths, and these are often linked to stories of freedom and independence.

If this thesis is true and the different schools of psychology are in fact philosophical schools, the psychologist seeking to resolve their eternal battle would be facing a Sisyphean task. Their effort would be futile, because in philosophy, although some theories can be recognized as false, discussions are rarely resolved in terms of truth and falsehood. Several theories may be consistent with the same phenomenon, and the discussion must be settled in terms of their respective explanatory powers; they are not so much true or false as more or less powerful. In any case—and this is the moral of the story—psychology would have spared itself many problems had it not sought so soon to rid itself of its philosophical heritage. Like a child who tries to switch from a tricycle to a bicycle too soon, it risked—and indeed ended up—becoming disfigured.

The Idea of Function in Psychology

The unique nature of psychology as a discipline derives from the nature of what it studies. The behavior of organisms is always intentional. Brentano (2020) already realized that psychological phenomena—what we have called *functions*—are always intentional. This idea would later be taken up by Husserl to develop his philosophical project, continued by Ortega and, following in his footsteps, by Pinillos, Yela, and Marino Pérez, already psychologists *stricto sensu*. "Intentio" means "to tend

toward," and in this sense, intention has to do with purpose. What organisms do always implies purposefulness: they eat to satisfy their appetite, they cry to express disappointment, they wink to show complicity, and they caress or kiss to show affection. The idea of function is nothing more than a reflection of this intentionality; it is purpose adapted to the conceptual framework of biology. In biology, function is what an organism does with a view to a specific end—which, normally, according to the theory of evolution, tends to be viewed from the point of view of the organism's adaptability to the environment and its reproductive efficiency. The problem is that teleological explanations of this kind, fundamental in biology but also in psychology, have historically been rejected by modern science, which has tended to identify the idea of purpose with the ends and designs of a presumed divine intelligence.

Function and Purpose in the Philosophy of Science

Finality is a fundamental idea in Aristotelian philosophy. As one of the four causes, the final cause introduces a teleological order into the universe. For Aristotle, everything has its natural place, that toward which it intrinsically tends. This is also the foundation of his ethics, as he identifies the natural end of each thing, that toward which it naturally tends, with its good. On the other hand, in his philosophical system, the unmoved mover served as a universal final cause, an idea that Scholasticism would later use to articulate that of a first cause, not only final but also efficient: God.

From this point of view, the teleological order of the universe would have to be sought in the intelligence of that Supreme Being and organizer of the cosmos. Modern science, however, after the scientific revolution, began to gradually reject the idea of an order dependent on divine intelligence and will; the universe had to be explained according to natural and mechanical causes. The final cause had fallen into disgrace, dethroned by efficient causality. Spinoza (2011) is a good example of this rejection of finality: for him, nothing in the universe has ends; there is no purposiveness, only necessity. Our illusion of purpose and intentionality is just that: a deception.

In this sense, modern science and its philosophy were built by denying all finality. The explanations of the natural sciences had to be non-teleological, for otherwise they ran the risk of slipping into unscientific territory. The model for these explanations, of course, would be provided by physics, as a paradigmatic example of what a natural science is.

The problem with biology is that it does not work like physics and, as Ayala (1968) points out, functional explanations are not only valid in biology; they are necessary. When the biologist asks about a particular morphological trait, they are asking, among other things, how that species came to develop it. That "how" can refer to a series of efficient causes: certain mutations and genetic selections; but, inevitably, it will also imply a "for what", a function. On the other hand, the theory of evolution has traditionally been interpreted blindly and mechanically, as if natural selection were an objective instance, independent of the actions of organisms. Some aspects are, such as random mutations; but, as Baldwin saw when he postulated the idea of *organic selection*, the theory of evolution must also take into account what organisms do, their behavior. Consider the example of industrial melanism in *Biston betularia*.

4 To be fair, the same should be said of any other scientist, as this is not an error exclusive to psychologists. Scientists, like priests, believe that the city is best seen from the top of their own bell tower, hence their reductionist tendencies. Neither can resist taking their *first* philosophical steps, whether by delving into the dark recesses of cosmology or fantasizing about the ideal nature of mathematical objects—to give just two examples of what are considered the most "pure" sciences.

5 Contemporary psychologists, such as Pérez-Álvarez (2021a), are fully aware of the myopia of this blind rejection, advocating for the study and in-depth knowledge of philosophy, as well as other disciplines, as a necessary requirement for good psychology; because, as he likes to remind us, the psychologist who only knows psychology does not even know psychology.

This has always been presented as a paradigmatic case of the random and blind mutationism characteristic of natural selection. However, the adaptive function of this melanism cannot be explained without the predatory behavior of the birds that hunted them. It was these birds that selected the moths through their behavior, not some kind of blind and objective mechanism (Sánchez, 2025). As if this were not enough, even the mechanistic reading of natural selection is forced to assume a functional or teleological perspective, since no process of natural selection can be understood without reference to a specific end: the adaptive achievement of survival and reproduction. Its “why” necessarily implies a “for what”.

The Idea of Function in Ethics, Biology, and Psychology

Ethics, biology, and psychology are three disciplines that have historically been greatly misunderstood. At first glance, it might seem that they have nothing in common, yet they share important connections that often go unnoticed. Ethics has typically been understood as the philosophical discipline responsible for judging human actions in terms of their goodness or evil, their value or worthlessness, and their rightness or wrongness (Gómez, 2018). In general, its historical panorama is usually presented as divided into two major currents: the Aristotelian and the Kantian.

For Kantian deontology, ethics has to do with duty; with the universal laws that reason gives itself by virtue of its own nature: free and rational. Kantian deontology and its categorical imperative, as formal as it is counterfactual, is, however, more of a desideratum than a true philosophical theory. Ethics has to do precisely with those other imperatives that its philosophy discarded: the hypothetical ones. Hence, in the last half-century, progress has been made precisely by going backwards, rediscovering in Aristotle's work a moral philosophy that may be metaphysical but is at least not delusional.

The truth of Aristotelian ethics lies in its definition of what is fundamentally important to this discipline: the good. For Aristotle (2019), the good is that toward which all things tend. It has to do, then, with the idea of *finality*; with the *function* that most properly belongs to each thing. The virtue of a knife is to cut; that of a coat is to keep warm. The good or virtue therefore has to do with the satisfaction of an end; with those means that contribute to its realization; evil, on the other hand, with those that work in the opposite direction. Ethics, however, as Aristotle said, is not studied in order to know what is good; it is studied to be good; to build that *dwelling* in which we live; that *ethos* that constitutes us and that we are above all else. This is where the word “ethics” comes from, from the Greek “*êthos*,” but also from that other “*êthos*” meaning “habit” or “custom” (Gómez, 2018). Indeed, building that *dwelling*, that house, is a *habitual* effort. One becomes virtuous by practicing virtue and doing so on a daily basis. As we know, one swallow does not make a summer.

For this reason, in other works, and inspired by Ricoeur (2019), I have attempted to defend a vision of ethics as that practical discipline that studies two things: the meaning of life, that is, happiness understood as a life full of meaning; and the forging of character, that is, the construction and acquisition of those virtues and ways of being that can guide us in that search for a happy and fulfilled life (Álvarez, 2025a, 2025b).

As for biology, it has been no less misunderstood than ethics, starting with its very name. The Greeks had two words for life: *bios* and *zoé*, meaning biographical life and biological life, respectively. What we currently call “biology” is actually zoology: the study of animal life, not human life. Aristotle's *biós*, on the other hand, had to do with the different meanings that could be given to life: a life devoted to pleasures, one devoted to politics, and one devoted to knowledge. There is, however, a branch of zoology—*ethology*—that studies what organisms do, not just what they are made of. The root of the word is transparent, *ethology*, and points precisely to *habit* and *custom*, the foundation of behavior, action, or conduct for much of the psychological tradition. Habit and custom is the process by which an organism, through the practice or repetition of a certain action, forges a certain character or way of being. In humans, this character has a personal meaning; it is a way of being a person. In other species, it is a specific way of being: a way of being a worm, a way of being a sheep, or a way of being a meerkat.

Of course, psychology, insofar as it asks why organisms do what they do, what the meaning of their actions is, and how they carry them out, must necessarily take biology into account. After all, these organisms are Darwinian organisms that have evolved to be what they are. In this sense, there is more of a relationship between psychology and biology than might initially appear. There is no discontinuity between biological and psychological phenomena. The latter, psychological functions, are based on biological ones; they involve their intentional, purposeful, intelligent reorganization. This intelligence, however, is no longer that of a supreme being, but rather the intelligence of a living organism, one that has to do things in order to remain alive. Pavlov's dogs would not have associated the sound of the bell with the appearance of food if the latter had not elicited the unconditioned response of salivation. Biological functions, like psychological ones, serve organic life. This is lost sight of when one focuses only on cells, when one abandons biology in favor of biochemistry, incurring a kind of downward reductionism. Ethology, however, an eminent but forgotten discipline, does not do this. That is the biology that matters to us.

We can now appreciate the intimate link between ethics, biology, and psychology; all three are teleological disciplines, which have to do with the idea of function or finality. All three analyze what organisms must do to achieve a certain end; all three have organic life as their object. Does this mean that the three are one and the same thing? Obviously not. Why? To begin with, because ethics, although not exclusively, concerns happiness and the meaning of life, and it would be very difficult to argue that chimpanzees have such ideas and concerns. These are culturally and symbolically mediated ideas; they are functions that are not within the reach of just any creature, even though we are just one among many. It can be said, however, that animals have a specific character, a way of being of this or that species; although, again, as we have already noted, this character does not have the same connotations as the personal characters of human beings. Above all, we cannot say that they are the same because the relationship between ethics, psychology, and ethology, as we have conceived them, is one of identification between the first two and inclusion of the third in them. From this point of view, ethics would serve as a general theory of action, of life, understood as what organisms do and what happens to them; of their ends and functions; of what they do,

among other things, to stay alive and in the best possible way. Ethology, as it has been studied until now, could offer material for this reflection, as could psychology—understood in the traditional sense—but this ethological material has a limited scope and cannot be identified with ethics as a whole. After all, our species is, as far as we know, unique in the use of its symbolic capacities or functions. Culture dialectically reorganizes strictly natural materials, giving rise to degrees of complexity that were not there before.

As for psychology, with the necessary conceptual modifications, it is a discipline that, in my opinion, and as I have already mentioned, could be identified with ethics. "Psychology" says "psyché" and it says "*logos*"; that is, it says animated life and it says reason: the knowledge of the former through its necessary causes; that which Spinoza (2011) did not hesitate to call "Ethics," even though he did not believe in finality. Life, much to its regret, however, is essentially purposive; it is loaded with teleological and functional connotations; it is nothing more than what the organism does and what happens to it.

Of course, no self-respecting psychologist, ethologist, or philosopher would be willing to change this nomenclature; nor is there any need to do so.⁶ One cannot fight against a thousand-year-old error. It is enough to take responsibility for its implications. We can continue to call ethics "ethics," psychology "psychology," ethology "ethology," and biology "biology," as long as we accept the consequences of my argument: that explaining why a subject does what they do is a matter of reflective, philosophical knowledge, not just scientific knowledge; that such knowledge will have to draw on other prior knowledge, some of it perhaps scientific, but also technical or even technological knowledge; and that offering such an explanation will always require adopting a teleological or functional perspective, since everything that organisms *do*—everything that does not simply *happen* to them—is intentional. Understanding why subjects do what they do is a matter for a theory of action, *ethics*, *psychology*, or *praxeology*; and it necessarily involves taking responsibility for their motives.

What could be the method of this discipline? I am not entirely sure, but—however sentimental it may sound—perhaps *empathy*, in the etymological sense: the adoption or mimesis of another's point of view; coming to understand the other, as Kant would say—what they do, their practices—even better than they understand themselves. This would be the method, hermeneutic if you will, of this discipline. However, this empathy should not be understood in a purely subjective sense; that perspective should also include the complex institutional world that surrounds and determines it. Good and evil, the achievement or non-achievement of a particular goal, are not gratuitous, but rather a matter of perspective; they are neither purely objective nor purely subjective, but rather something subjectual or objectual—given the dialectical nature of this pair of conjugated concepts. Ultimately, understanding the ends and motives of someone or something is nothing more than putting oneself in their place; contemplating the world from their unique perspective.

⁶ However, it would not be foolish to consider it. Many topics specific to traditional psychology are better understood when considered as conflicts of values or ends, starting with much of psychopathology and psychotherapy. Mental disorders have a lot to do with moral disorders, if not directly with demoralization. This does not mean that those who suffer from them are evil people. I do not consider myself evil. To call them *moral* is to say that they have to do with *mores*, with customs, with our habits and our character; but above all, with how those habits and characters—those ways of being a person—conflict, for example, with the demands of life in society.

Conclusions

Throughout this paper, we have addressed the scientific nature—or lack thereof—of psychology. To do so, we have had to adopt a particular theory of science: the theory of categorical closure (TCC). In this sense, the sciences, unlike other forms of knowledge, such as philosophy, would be characterized by the type of truths they produce: as synthetic identities. It is the elimination or neutralization of the operations of gnoseological subjects and research subjects—when they are present—that gives objectivity to the sciences. This elimination, however, is not always absolute, allowing them to be classified according to the degree of "objectivity" they are able to achieve: absolute when they are ananthropic; non-existent in the case of techniques.

Based on these coordinates, we have examined what place psychology might occupy within the body of knowledge. Along the way, we have encountered a series of gnoseological entanglements that we have had to untangle in order to offer an answer.

We have seen, first of all, that *psychology does not exist*; that we cannot say that curricular psychology is a unified discipline. Psychology faculties study a crucible of disciplines; some scientific (such as physiology), others technological (such as psychometrics), and still others strictly technical (such as behavior control). Does this mean that we cannot talk about psychology—that it does not exist as a discipline? No, it only means that we must go beyond its curricular confusion to get back to the essentials. In this sense, beyond its institutional or deictic unity, many psychologists have striven to resolve the issue.

We have thus presented the theories of Yela (1996), Pérez-Álvarez (2018a, 2018b, 2021b), Loredo (2009), and Sánchez (2009a, 2009b) as paradigmatic examples of this attempt to reestablish psychology as a scientific discipline. All of them share a fundamental interest in the subject and its behavior, although each—depending on their own scientific and philosophical influences—speaks their own language and introduces their own nuances. Despite this, what these authors understand by conduct, behavior, action, or genetic function is quite similar. Taken together, their proposals are an alternative to the conceptual problems posed by the traditional definition of psychology as the science of the mind and behavior. The subject they envision is that of a naturalized, operative, Darwinian, and embodied subject that acts with its brain, but also with its body, its language, and its hands, always with a view to some end. What it does also transforms its environment and itself—not mechanically, but intelligently. In the ebb and flow of its actions, these acquire, in line with their consequences, increasing degrees of elaboration and complexity.

There is, however, a problem. While these proposals would provide a basis for the scientific study of these *genetic functions*, in the style of Soviet psychology, *psychology* is usually understood to mean something more far-reaching: the attempt to understand why organisms do what they do, the elucidation of the deeper meaning of their actions and not just how they develop and acquire them.

Such a discipline, which we could call "general psychology" and not just "genetics," cannot, however, be a scientific discipline. Not only because the subject is unavoidable in it but also because offering such an explanation necessarily involves drawing on many different disciplines: starting with that genetic psychology and the Frankenstein's monster that shapes the curricula of psychology

References

faculties; but also history, anthropology, sociology, biology, and many other disciplines, not only scientific but also technical and technological. General psychology, as a theory of action, would have to be a philosophical or reflexive discipline, capable of gathering, coordinating, and elaborating all the knowledge we have been discussing. That general psychology would have to be, in short, a *praxeology*.

Once this—undoubtedly controversial—thesis has been established, we have reinterpreted the struggle between schools, a reason that is usually cited when discussing the theoretical fragmentation of psychology, as a struggle between philosophical schools. It is not that psychology is pre-scientific because, as Watson (1971) noted, a unified paradigm has not yet been forged in it; no. Rather, what happens is that psychological schools imply a philosophical, dialectical, and irreconcilable position-taking on fundamental ontological and anthropological questions. That is why the struggle between schools is and will be eternal, because the struggle between philosophers of all stripes is eternal.

Finally, once this issue has been resolved, we have ventured to explain the characteristically *sui generis* nature of psychology as a discipline, attributing it to the role played in it—as in biology—by the ideas of function and purpose.

Now, since ethics is concerned with the study of ends, we have concluded, based on their respective etymologies, that both biology—reinterpreted and with emphasis on one of its branches, ethology—and general psychology are, in fact, ethical disciplines. All three analyze what organisms must do to achieve a certain end; all three refer to organic life and what must be done to live appropriately. In all three, the ideas of *habit*, *custom*, and *character* also play a fundamental role; and, finally, in all three, the ideas of meaning and finality are essential: read, of course, in specific and evolutionary terms in the case of ethology and in personal and biographical terms in ethics and psychology.

Thus, it is suggested that the term "ethology" be reserved for the study of those ends and functions specific to non-human animals, not mediated symbolically, culturally, or institutionally—thus encompassing what was once ethology, but also many areas of contemporary psychology, especially animal and comparative psychology. The genetic study of those other complex functions that characterize human beings, now culturally, symbolically, and institutionally mediated, could well be called "genetic psychology"—recognizing, of course, its links to those other ethological functions that serve as its foundation. Finally, I have identified *general psychology*—understood as the theory of action or *praxeology*, as a theory about why organisms do what they do and what the meaning of their actions is—with *ethics*. However, the practical use of these terminological deviations is less important than their theoretical understanding; the aim is not for anyone to learn to speak anew, but simply to take on board the argument and its implications, both theoretical and practical. In psychology, as in philosophy, disputes are often nominal and useless; at other times, however, discussing names is extremely useful. In any case, the power of words should never be underestimated; this is a serious mistake, especially when they are loaded with meaning.

Conflict of Interest

There is no conflict of interest.

- Álvarez, S. (2025a). Prácticas de sentido: filosofía y psicología del tatuaje, el culturismo y la modificación corporal extrema [Practices of meaning: philosophy and psychology of tattooing, bodybuilding and extreme body modification]. *Eikasía Revista de Filosofía*, (126), 47-87. <https://doi.org/10.57027/eikasía.126.1007>
- Álvarez, S. (2025b). Crítica de la filosofía moral de Gustavo Bueno [Critique of Gustavo Bueno's Moral Philosophy]. *Eikasía Revista de Filosofía*, (128), 223-235. <https://doi.org/10.57027/eikasía.128.980>
- Aristóteles (2019). *Ética a Nicómaco. Ética a Eudemo* [Nicomachean Ethics. Eudemian Ethics]. Gredos.
- Ayala, F. J. (1968). Biology as an autonomous science. *American scientist*, 56(3), 207-221. <http://www.jstor.org/stable/27828186>
- Brentano, F. (2020). *Psicología desde el punto de vista empírico* [Psychology from an empirical point of view]. Sígueme.
- Bueno, G. (1992/1993). *Teoría del Cierre Categorial I-V* [Theory of Categorical Closure I-V]. Pentalfa.
- Bueno, G. (1995a). *¿Qué es la filosofía?* [What is philosophy?]. Pentalfa.
- Bueno, G. (1995b). *¿Qué es la ciencia?* [What is science?]. Pentalfa.
- Fernández, T. R. (2009). Esbozo para una historia del sujeto desde Kant [Outline for a history of the subject since Kant]. In J. C. Loredó Narcandi, T. Sánchez Criado & D. López Gómez (Eds.), *¿Dónde reside la acción? Agencia, Constructivismo y Psicología* [Where does action reside? Agency, Constructivism, and Psychology] (pp. 73-89). UNED.
- Gómez, C. (2018). El ámbito de la moralidad: Ética y moral [The realm of morality: Ethics and morals]. In C. Gómez & J. Muguera (Eds.), *La aventura de la moralidad. Paradigmas, fronteras y problemas de la Ética* [The adventure of morality. Paradigms, frontiers, and problems of ethics] (pp. 19-52). Alianza Editorial.
- Leahey, T. H. (1998). *Historia de la Psicología. Principales corrientes en el pensamiento psicológico* [History of Psychology. Main currents in psychological thought]. Prentice Hall Iberia.
- Loredó, J. C. (2009). *¿Es la psicología un Aleph?* [Is psychology an Aleph?]. In J. C. Loredó Narcandi, T. Sánchez Criado & D. López Gómez (Eds.), *¿Dónde reside la acción? Agencia, Constructivismo y Psicología* [Where does action reside? Agency, Constructivism, and Psychology] (pp. 15-30). UNED.
- Ortega y Gasset, J. (2021). *Meditaciones del Quijote* [Meditations on Don Quixote]. Cádiz.
- Pérez-Álvarez, M. (2018a). Para pensar la psicología más allá de la mente y el cerebro: un enfoque transteórico [Thinking psychology beyond the mind and the brain: a trans-theoretical approach]. *Papeles del Psicólogo*, 39(3), 161-173. <https://doi.org/10.23923/pap.psicol2018.2875>
- Pérez-Álvarez, M. (2018b). Psychology as a Science of Subject and Comportment, beyond the Mind and Behavior. *Integrative psychological and behavioral science*, 52, 25-51. <https://doi.org/10.1007/s12124-017-9408-4>
- Pérez-Álvarez, M. (2019). La psicoterapia como ciencia humana, más que tecnológica [Psychotherapy as a human science, more than a technological one]. *Papeles del Psicólogo*, 40(1), 1-14. <https://doi.org/10.23923/pap.psicol2019.2877>
- Pérez-Álvarez, M. (2021a). *Ciencia y Pseudociencia en Psicología y Psiquiatría* [Science and pseudoscience in psychology and psychiatry]. Alianza Editorial.
- Pérez-Álvarez, M. (2021b). The Structure of Behavior as Unity of Psychology According to Mariano Yela. *Psicothema*, 33(3), 372-377. <https://doi.org/10.7334/psicothema2021.29>

- Ricoeur, P. (2019). Ética y moral [Ethics and Morals]. In C. Gómez (Ed.), *Ética. Doce textos fundamentales del siglo XX [Ethics. Twelve Fundamental Texts of the 20th Century]* (pp. 289-307). Alianza Editorial.
- Sánchez, J. C. (2009a). Los límites del constructivismo [The limits of constructivism]. In J. C. Loredó Narciandi, T. Sánchez Criado & D. López Gómez (Eds.), *¿Dónde reside la acción? Agencia, Constructivismo y Psicología [Where does action reside? Agency, Constructivism, and Psychology]* (pp. 291-326). UNED.
- Sánchez, J. C. (2009b). Función y génesis. La idea de función en psicología y la especificidad del constructivismo [Function and genesis. The idea of function in psychology and the specificity of constructivism]. *Estudios de Psicología*, 30(2), 131-149. <https://doi.org/10.1174/021093909788347073>
- Sánchez, J. C. & Loredó, J. C. (2007). Para una crítica de los constructivismos contemporáneos [Towards a critique of contemporary constructivism]. *Revista de Historia de la Psicología [Journal of the History of Psychology]*, 28(2-3), 35-41. Retrieved from https://www.researchgate.net/publication/254560346_Para_una_critica_de_los_constructivismos_contemporaneos
- Sánchez, J. C. (2025). Psychogenesis in evolution and History. In J. Pérez-Jara & Í. Ongay (Eds.), *Beyond nature and nurture. Perspectives on human multidimensionality* (pp. 109-128). Springer.
- Skinner, B. F. (1994). *Sobre el conductismo [On behaviorism]*. Planeta-De Agostini.
- Spinoza, B. (2011). *Ética [Ethics]*. Alianza Editorial.
- Watson, R. I. (1971). Prescriptions as operative in the history of psychology. *Journal of the History of the Behavioral Sciences*, 7(4), 311-322. [https://doi.org/10.1002/1520-6696\(197110\)7:4%3C311::AID-JHBS2300070402%3E3.0.CO;2-I](https://doi.org/10.1002/1520-6696(197110)7:4%3C311::AID-JHBS2300070402%3E3.0.CO;2-I)
- Yela, M. (1996). La estructura de la conducta. Estímulo, situación y conciencia [The structure of behavior. Stimulus, situation, and consciousness]. *Psicothema*, 8(Supl.), 89-147. Retrieved from <https://www.redalyc.org/pdf/727/72780406.pdf> [6/04/2025].
- Zagaría, A., Ando, A., & Zennaro, A. (2020). Psychology: A Giant with Feet of Clay. *Integrative Psychology and Behavioral Science*, 54, 521-562. <https://doi.org/10.1007/s12124-020-09524-5>