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REFLECTION ARTICLE

The real and the apparent in reality: a hermeneutic approach to the dialectical development of order and uncertainty

Lo real y lo aparente en la realidad: una aproximación hermenéutica al desenvolvimiento dialéctico del orden y la incertidumbre

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Abstract For hermeneutics, truth is not defined solely by the conformity between a statement and reality but by the openness in which this correspondence can be verified. This openness is not a fixed transcendental structure but is historical and finite. Hermeneutics has been interpreted as science, art, paradigm, method, and philosophy. The hermeneutic analysis of complex knowledge and everyday reality allows for a better understanding of what is being researched, facilitating the contextualization and interpretation of human facts. Knowledge and language are closely related, as knowledge generates thought, and language enriches this thought. Both maintain a dynamic and mutual relationship. Hermeneutics questions the idea that knowledge derived from science is entirely objective and free from anthropocentric influences. Although reality is not arbitrary, it requires interpretation, even in empirical knowledge. The understanding of reality depends on the context, the goals of knowledge, the method, and the object of study. This work aimed to analyze the interactions between the real and the apparent in reality from a hermeneutic perspective.

Keywords hermeneutics, reality, uncertainty, complex knowledge, dialectical development.

Resumen Para la hermenéutica, la verdad no se define únicamente por la conformidad entre el enunciado y la realidad, sino por la apertura en la que se puede verificar dicha correspondencia. Esta apertura no es una estructura trascendental fija, sino que es histórica y finita. La hermenéutica ha sido interpretada a lo largo del tiempo como ciencia, arte, paradigma, método y filosofía. El análisis hermenéutico del conocimiento complejo y la realidad cotidiana permite una mejor comprensión de lo que se investiga, facilitando la contextualización e interpretación de los hechos humanos. El conocimiento y el lenguaje están estrechamente relacionados, ya que el conocimiento genera el pensamiento, y el lenguaje enriquece este pensamiento. Ambos mantienen una relación dinámica y mutua. La hermenéutica cuestiona la idea de que el conocimiento derivado de la ciencia sea completamente objetivo y libre de influencias antropocéntricas. Aunque la realidad no es arbitraria, requiere interpretación, incluso en el conocimiento empírico. La comprensión de la realidad depende del contexto, los objetivos de conocimiento, el método y el objeto de estudio. El objetivo del presente trabajo fue analizar las interacciones entre lo real y lo aparente en la realidad desde una perspectiva hermenéutica,

Palabras clave hermenéutica, realidad, incertidumbre, conocimiento complejo, desarrollo dialéctico.

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PUBLIS EDITORIAL

Introduction

Reality is a philosophical concept that arises when we observe the world around us— the glass, the table with fruits, the tree in front of us, and our sensations of thirst, hunger, cold, or heat (Blair, 2006). Greek philosophers believed that everything was ordered and that the Universe was a cosmos in which things changed, transitioned from one being to another, transformed, became, were organized, and disorganized. However, it was assumed that reality concealed an eternal being directed by something, someone, or forces, the struggle of opposites (Rodríguez et al., 2008).

There was a suspicion that the world and its phenomena could deceive us, appearing as something they are not (Rodríguez et al., 2008). If things change, there must be a reason or "cause," it was attempted to explain this in various ways: mythically at first, then rationally, or by a mixture of both. Those early thinkers could not imagine that the real, whether macro or micro-physical, could be a mix of chance and necessity (Naranjo, 2013; Monod, 2016).

Centuries later, scientific and philosophical advances debunked the claim of knowing the ultimate being of reality: microphysics revealed that matter is more enigmatic, endowed with its automorphy, uncertain, marked by uncertainty, and the order arising from entropy. The most science can do is create highly functional ideal models to represent this complexity (Montoya et al., 2023). Such models or symbols appear efficient, but they are still crude tools for probing the being of the world and the Universe. It is up to Hermeneutics to confront this spiritual crisis of our time.

This article addresses reality's inherent complexity, considering the relationships between the tangible and the symbolic and the role of hermeneutics in interpreting contemporary phenomena. Exploring the dynamic between order and uncertainty analyzes how these categories shape our perception of the world and challenge traditional knowledge paradigms. This approach allows for critical reflection on the limits of our understanding and the need to construct new theoretical tools to face the epistemological challenges of our time.

Critical analysis

Reality: change or movement

To define reality, we will use Burk et al.'s (1972) basic classification, which, for didactic reasons, is divided into real reality and ideal reality. It is an easy or difficult definition, depending on who asks: the common person, a scientist, or a philosopher.

Real reality

Traditional political campaigns have been transformed by the In this case, it refers to physically present and perceptible things through sight, hearing, touch, smell, taste, or kinesthetic and synesthetic sensations. It forms part of the "objective" world and includes Nature and artifacts, instruments, rockets, microelectronics, buildings, or others invented by humans. Real reality is our macroscopic world, our only and eternal human reality: the same for everyone due to functional and structural factors of Perception. However, these are things with physically and chemically changing properties, subject to space-time dimensions, and therefore can be measured or transformed (Burk et al., 1972).

Another derivation of real reality is what we feel as inherent to our somatic realm (cold, heat, hunger, pain, desires, longings). It arises from the psycho-somatism of the subject, from its physiology, situations, and interactions with others (Burk et al., 1972). In short, it is the role of Physics to tell us what the real reality of the matter is; Biology tells us what the living or organic world is, and Psychology explains why we all (unless we are under the influence of drugs or anesthesia) perceive the same thing. Lately, there has been talk of objects or realities not subjected to time, such as the transmission of thought waves and morphic resonance, of which we know little (Martínez, 1999).

The micro-physical level is also part of real reality: atoms, electrons, neutrons, protons, waves, and particles. Nothing there is static, and it responds to the internal structure of matter, which human science can manipulate to a certain extent. These realities have various forms of qualitative, quantitative, and local movement (López & Aboites, 2017). Neither the macro nor the micro-physical ever remains at rest.

At the macroscopic level, rest is never absolute but relative, as a stationary object moves with the Earth, the Earth with the Sun, and the Milky Way with everything else (López & Aboites, 2017). Real realities impose their truth on us, but they do not present themselves directly to our perception without the intervention of our structural and functional perceptual factors. Reality and the perceiving subject intervene together to form it with the help of language or symbols (ideal reality). Through Logic, we conceptualize everything around us, classify it, and believe we know it more or less well.

The real world responds to our ideal symbols, but we will never know if the isomorphism is absolute or relative. We often see that our symbols also fail to grasp reality. The brain has limitations in attending to so many details presented by

the surrounding world.

Ideal reality

According to Burk et al. (1972), ideality is a second mode of reality, which encompasses all kinds of symbols, codes, equations, mathematics, and logic. It refers to the world of ideas of "things" that are purely mental or subjective, which the normal senses cannot perceive as they lack physical consistency (in the way tangible things do). However, they serve to coordinate real reality, technically control it, and describe its occurrences even though we do not know its inner essence. If this is the case, we can see why using ideality to separate real reality from ideal reality is paradoxical.

Thus, logic and mathematics are the ideal (mental) tools that science employs to understand the real reality of the world and create theories that describe it. In the social or human sciences, especially words or ideas (and also statistics) are used as constructs aimed at understanding (rather than explaining) human behavior, including emotions, fears, and joys (Martínez, 1999). Our world is filled with symbols (words, numbers, symbols, codes, signs, etc.), and we live amidst them without escaping (Savater, 2007).

As we stated, ideal reality has no mass, weight, density, boiling point, or anything similar; its objects do not move or transform. The most important thing that can change is the ink or paper on which they are written. Ideal reality only creates theoretical models, mental molds, or maps of certain aspects of macro or micro-physical reality. Its topographical location is the brain of those who use it, including libraries and computers. We can then say that reality (real) is the material phenomenon imposed by the portion of energy, light, or electromagnetic wave coming from things, objects, or processes, impacting first our retina and passing to our consciousness (Burk et al., 1972).

Each person does the rest, as Martínez (1999) expresses, interpreting according to their personal experiences and what their culture has taught them. There is no exterior or interior reality but rather a structural interaction influenced by energy, neural processes, configurations, and more. Of course, it is presumed that if we see, hear, or touch aspects of physical reality, some part of its energy structure stimulates or impacts our brain and causes us to respond.

There must be some conjugation between the perceiving subject and the world around them since we are the product of that configurational energy of Nature. We do not know what this conjugation is like, whether it responds to a teleonomic project, whether it is a copy of something pre-existing, created by an intelligence or cosmic system, or another process. Living beings have a specific type of vital programming: they are born, grow, and die. However, it is possible to imagine, as Monod (2016) believes, that all living beings are the result of the chaotic ordering or self-organizing potential of matter that, after millions of years, generated a formidable brain attached to a multifunctional body (Burk et al., 1972; Morín, 1992).

Becoming and the apparent

Becoming is synonymous with change, movement, and displacement from one state to another of matter about a theoretically stable reference (López & Aboites, 2017). We mentioned earlier that the ancient Greeks realized everything changes, transforms, moves from one state to another, and eventually decays or perishes. Of course, it does not disappear but becomes something else or "nothing" colloquially. In this sense, the first philosophers were surprised by the changes they saw in Nature and tried to explain them in various ways: by the action of water, air, fire, or another element. According to Plato (2006), there had to be an ultimate explanation for everything that moved. The Supreme Good is often described as the prime mover that initiated all motion without itself being moved by anything else.

In contrast, Parmenides (Padilla, 2015) denied movement and thought it was only appearance, a deception of the senses, and mere opinion. What is visible is apparent. It is never true. He believes that being is, and non-being is not. Being and thinking are the same. Parmenides (Padilla, 2015) proposed that there are only two possible ways of investigation. The first is the affirmation that being exists and that it is impossible for it not to exist; this is the way of persuasion, as it is accompanied by truth. The second is that non-being does not exist and must not exist; this, I assure you, is an entirely indecipherable way, as you cannot know what does not exist, much less express it.

From this point of view, being does not change or become. It is like a sphere where everything is equidistant from the center. Zeno of Elea, Parmenides' disciple, would ridicule those who opposed his teacher, using the famous paradox of Achilles and the tortoise: the runner never overtakes the tortoise because it always has at least a tiny advantage every time (Rodríguez et al., 2008). Essentially, Parmenides (Padilla, 2015) confused logic with ontology: only at the level of thought are things identical and static, but not in the real world.

Neither Plato (2006), Parmenides (Padilla, 2015), nor Aristotle (Mié, 2009) denied the existence of reality and movement, but they had different explanations for it. Plato

believed that the real reality was the world of ideas, where things are indestructible and eternal: the word "man," for example, is firmer than any real subject. It is difficult for someone to hurt it, blind it, or destroy it. The "other world", the world of everyday life, is a mere copy of that one, a kind of reminiscence already imprinted in the brain of all. To recall its model or find the truth, the teacher would ask the student questions (Socratic maieutics) to lead them to anamnesis or recollection. If something moves that copy of reality, it is only the first unmoving motor.

Only Aristotle (Mié, 2009) believes that what is real is not an illusion but the true world. If it moves, it is because it thinks and maintains a first motor or ultimate force in motion. It had no beginning and will have no end. It is eternal. He does not believe, as his teacher Plato did, that living in this everyday world, seemingly real, is like being locked in a cave, facing backward and chained, looking at a wall where only a "super production" of shadows of the real is seen without any true certainty.

Today, the venerable Greek would be an extraordinary producer of horror films. Plato (2006) also does not believe that books can help find the truth because they are like "dead teachers" who, when asked something, never respond. How can we then return to the world of ideas where we were before being born? Simple, after death, as in Socrates, people can return home to the "true" world, the world of ideas (Burk et al., 1972; Rodríguez et al., 2008). No wonder Plato was the reference of the father of Spiritualism, Alan Kardec.

As for Aristotle's position (Mié, 2009), he acknowledges that things become and change, but this can only happen about something that remains: substance. Change is nothing more than the set of accidents suffered by the potentiality of things. The first unmoving motor is the cause of the rest of the movements (Ross, 2007). It will be Heraclitus (1985) who maintains that things change through the struggle or dialectic of opposites (polemos), and against Parmenides, he argues the example of a river in which it is impossible to bathe twice.

We see in the real world that the seed becomes a plant, the worm becomes a butterfly, the child becomes an adult, and so on. We currently do not know whether there is something that remains essentially amidst all the changes behind what appears (or is apparent in the phenomenon). Science prefers to study how phenomena occur. It fractures or separates being from what appears. It studies the appearance and disappearance of things without delving into whether they have any eternal being. If it is called matter in physics, it is for methodological and, ultimately, didactic reasons. However, matter is understood in an interactive, mobile way through wave and particle theories.

Now, men of this century are closer to Heraclitus, Democritus atomism, and the becoming of reality than to Parmenides of Elea's statism. We no longer trust entirely in the appearances of phenomena but seek to investigate how they occur from subatomic or molecular levels. We are more methodological skeptics than before: we no longer believe that Nature and the Universe are simple structures (Morín, 1992).

We also do not believe that real reality is written in hidden numbers as Galileo or Newton believed (Moore, 2009). No one knows or will know its ultimate being or why it appears to our perception in the way it does. Such a belief indeed served to discover things, and without such a supposition, they would not have been found. However, today, we are not so naïve that it is easy to unveil the real world in its ultimate sense.

Things change ontologically at a given moment and then (sooner or later) pass to another mode of being. Only within the realm of classical logical thinking do identities, statism, and immobility rule: it is difficult to think that the Sun is not the Sun, that a dress is not such, or that a tree is not a plant. It is absurd to believe that one is not the same (Morín, 1992). Nevertheless, on another plane, that of real things, the matter is more complex: our cells change, the Sun wears out, the North Pole is melting, the Universe does not appear the same as it did millions of years ago, and we are not the same "self" we were 30 years ago (perhaps Hume (2003) would say that it is a habit that makes us believe we are the same). Appearances deceive; who would have thought that even the light of stars that reaches us from the depths of space is nothing but the flash they emitted when they exploded millions of light-years ago?

The world of uncertainties

The issue is not very different in the realm of living beings: beings are born, grow, and then die (Camacho et al., 2007). Nature presents a kind of balance or teleonomy that prevents the overpopulation of flies, rats, and humans (Reynolds, 2019). People make use of medicine, potions, makeup, cryogenic methods, transplants, prayers, charms, and others to avoid change and thus cheat death. Initially, the issue of life was posed like this: organic matter seemed to follow a teleonomic program leading to specific goals.

Sometimes, there is talk of cosmic intelligence (watchmaker, architect, designer) that creates an intelligent design

(Aleman, 2008) based on a model or project analogous to what is done before building a house or a car. Even the death of living beings seems to be programmed by Nature to prevent imbalance (if no one died, as in Saramago's novel (n/d), we would be overrun with flies, rats, and inhabitants). Darwin (1963), then Monod (2016), and many others needed to explain the usefulness of uncertainties in generating order-chaos-order (Prigogine, 1997). Matter has the potential to generate structures (physicochemical) capable of automorphy or organization, which then lead to specific functions. No metaphysical watchmaker or architect is required.

The word uncertainty is common in the field of microphysics. It is challenging to know where the boundaries between the subject and the observed lie later. Uncertainty is a state of doubt, perplexity, indecision, and insecurity that characterizes open, nonlinear systems.

Prigogine (1997), the father of the theory of dissipative structures or chaos theory, believes that it also encompasses the social realm. It is related to the butterfly effect or Dreyfus effect and the thesis of chance and necessity by Monod (2016), but also to Morín's (1992) complexity, which asserts that order can arise from chaos because self-organizing structures are involved. According to them, it seems that entropic disorder plays an important role in the creation of both micro and macro physical realities, even though, for convenience in Classical Physics, macro physics, and Biology, among other disciplines, the idea of determinism and the "causal laws of Nature" (Camacho et al., 2007) is maintained.

Hume (2003) said changing from cause to effect is a mental habit. Kant (1952) argued that it is a priori demand of the mind's categories. Contemporary Science prefers to evade the problem by abandoning the concept of "cause" (relegated to other disciplines like Biology (Camacho et al., 2007) due to its metaphysical connotations). It prefers to speak of variables, factors, motives, or active impulses. Of course, accepting what Hume says is as tricky as completely refuting it. There are some investigative approaches to dethrone causal theses once and for all, but that is still ongoing (Martínez, 1999).

Ultimately, the idea of "cause" and the laws of Nature are nothing more than an ideal human reality; prediction rules, of course, are created with the help of measurements, observations, logical operations, and laboratory tests. They constitute a philosophy of belief, a form of faith in axioms agreed upon by the scientific community, which considers them helpful in making technology. It is convenient to adopt them for now, or phenomena or experiential situations could not be predicted. Still, Popper (1967) does not believe that science must verify or prove anything through causality; rather, it must falsify its assertions.

Ultimately, nothing is verifiable because there is no way to align words or symbols with reality. Symbols, numbers, words, or equations may allude to or point to the real, but they are not tangible reality. They are more like maps or idealities and should not be confused. Ultimately, symbols only align with other maps, texts, or theories. Contemporary scientific pragmatism will give its final verdict based on the plausibility of theories until better ones emerge to dethrone them.

Science recognizes and employs both factors of indeterminacy or uncertainty and the determination of specific properties of the structure of matter (Prigogine, 1997). Chaos has other kinds of laws or determinations of which we are unaware.

The hermeneutic understanding

Man is, by Nature, an interpreter of his world, a hermeneutist. The current changes in natural science, social science, philosophy, computer science, cybernetics, microbiology, and many others take him aback. Never before has he been forced to take a stance on various so-called "emerging" phenomena, such as the transmission of thought and morphic resonance, which, according to Martínez (1999), deserve to be approached with a logic different from the traditional one. Instead, it is a dialectic (De Gortari, 1970) that goes from the whole to the parts and vice versa. In this way, the idea of linear, unidirectional causes is evaded, and knowledge is acquired that goes beyond the merely perceptual or intuitive. In this regard, Martínez (1999) states:

> Based on all of the above, it is easy to understand that the natural process of human knowing is hermeneutical: it seeks the meaning of phenomena through a dialectical interaction or movement of thought that goes from the whole to the parts and from these to the whole. (…) Dilthey's hermeneutic circle, that is, the interpretive process, the movement from the whole to the parts and from the parts to the whole trying to make sense of it, is, however, more than a circle, a spiral, which, as a spiral staircase, changing direction with each step and always returning to the same position, but rising in level: with each turn the richness of the description, the level of penetration and the depth of understanding of the structure studied increases. and its meaning. The process consists of an alternation of analysis and synthesis (...).(pp.114-115)

The crisis into which positivist science, society, and traditional paradigms (Kuhn, 1981) have entered has sparked

the idea that it is necessary to interpret our time, its scientific-technological developments, the new image of the Universe, and qualitative approaches. It is necessary to examine semiological or linguistic aspects as part of the hermeneutic understanding of contemporary thought. In this sense, Napolitano (1985) states that seeking the mediate or immediate, immanent, or transcendent meaning of the vital is necessary to place oneself before reality, the lived world, texts, and human language, with a fresh perspective to interpret them.

Why interpret in these times?

According to everything argued so far, in our time, it is necessary to review the paradigms of rational knowledge that have served to interpret reality. Now, seeing to what extent they reveal the processes, movements, or unfolding of what is real is a matter. Hermeneutics requires examining the resistances to new qualitative paradigms, the integration of the sciences, the need for a new isomorphic logic with the real, and the possibility of educating to form a different contemporary mindset, one more attentive to uncertainty and the movement of things or phenomena (Colom & Mélich, 1994). The art of interpretation must seek the origin of contemporary disenchantment, the crisis of values, and the relativism of truth in postmodernism.

Conclusions

Reality is more complex than our ancestors believed. Microphysics, unexpected psychic phenomena, the digital world, and changes in the values of the contemporary subject have dispelled the idea that classical rationality was sufficient to understand the world. Aristotelian logic and especially developments in mathematics provided us with unexpected and unprecedented discoveries in all areas of human knowledge and digital or computer technologies capable of performing previously unimaginable functions. Science, technology, becoming, uncertainty, and interpretation are key concepts that wander through our everyday and academic worlds; they deserve to be philosophically addressed through critical Hermeneutics to dissipate the epistemological confusions we find ourselves. In recent decades, we have seen this convergence of ideas calling for a new science, somewhat different from the classical, conventional, "objective" one, which for a long time neglected the subject's presence in the process of knowledge.

References

Mié, F. (2009). Dialéctica y ciencia en Aristóteles. *Sig*nos Filosóficos, *XI*(21), 9-42. https://www.scielo.org.mx/pdf/signosf/v11n21/v11n21a1.pdf

Reynolds, S. (2019). Cooking up the perfect insect: Aristotle's transformational idea about the complete metamorphosis of insects. Philosophical Transactions of the Royal Society of London, *374*(1783), 20190074. https://doi.org/10.1098/rstb.2019.0074

Aleman, R.A. (2008). Evolución y Diseño Inteligente: una perspectiva lógica. *Revista Colombiana de Filosofía de la Ciencia*, *IX*(18-19), 87-106. https://www.redalyc.org/pdf/414/41411852005.pdf

Camacho, H., Fontaines, T., Finol, M., & Medina, J. (2007). Los informes de investigaciones: una experiencia didáctica para promover la enseñanza en metodología de investigación. *Revista de Artes y Humanidades UNICA*, *8*(19), 309-328. https://www.redalyc.org/pdf/1701/170118451016.pdf

Blair, D. (2006). Wittgenstein's Philosophy of Language and Mind. In: Wittgenstein, language and information. *Information Science and Knowledge Management*, vol. 10. Springer, Dordrecht. https://doi.org/10.1007/1-4020-4583-2_2

Ross, A. (2007). La causalidad del Primer Motor en Metafísica XII. *Diánoia*, *52*(59), 3-26. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-24502007000200001&lng=es&tlng=es

Burk, I., Díaz, L., & Quintanilla, F. (1972). *Filosofía. Una Introducción Actualizada*. Caracas: Insula.

Colom, A., & Mélich, J, (1994). *Después de la Modernidad: Nuevas filosofías de la Educación*. Barcelona: Paidós.

Darwin, Ch. (1963). *El Origen de las Especies*. Madrid: Iberia.

De Gortari, E. (1970). *El método dialéctico*. México: Grijalbo.

Heráclito (1985). *Fragmentos. En Napolitano: El Problema del Ser. Filosofía. 5to. Año de Humanidades*. Caracas: Biósfera.

Hume, D. (2003). *Investigación sobre el entendimiento humano* (Joseph Club, Trad.). Madrid. Mestas ediciones.

Montoya, J.F., Zuluaga, C.G., & Garcés, L.F. (2023). Entropía y tiempo: gestores de la realidad. *Revista Lasallista de Investigación*, *20*(2), 254-264. https://doi.org/10.22507/rli.v20n2a13

Kant, E. (1952). *Crítica de la Razón Pura*. Buenos Aires: Sopena

Kuhn, T. (1981). *La estructura de las revoluciones científicas*. México: FCE.

López, J.A., & Aboites, V. (2017). La filosofía frente al objeto

cuántico. *Revista mexicana de física E*, *63*(2), 107-122. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1870-35422017000200107&lng=es&tlng=es

Martínez, M. (1999). *La Nueva Ciencia. Su desafío, su Lógica y Método*. México: Trillas.

Monod, J. (2016). *El azar y la necesidad. Trad. Francisco Ferrer*. Barcelona: Tusquets.

Moore, P. (2009). *Pequeñas grandes ideas: Ciencia: Galileo. Newton. Werner Heisenberg* (Cristina García, Trad.) España: Oniro.

Morín, E. (1992). *Nuevos Paradigmas, cultura y subjetividad*. En Fried Schnitman. Buenos Aires: Paidós.

Napolitano, A. (1985). *El Planteamiento Metafísico del Ser. Platón, Heráclito. Filosofía. 5to. Año de Humanidades*. Caracas: Biósfera.

Naranjo, S. (2013). El azar y la necesidad en Jacques Monod. Hacia el encuentro de los opuestos. *Revista Venezolana de Análisis de Coyuntura*, *XIX*(2), 243-259. https://www.redalyc.org/pdf/364/36430103014.pdf

Padilla, J. (2015). *Sobre la Naturaleza. Desarrollo de una gramática metafísica*. Ápeiron Ediciones.

Platón (2006). *Diálogos: Crátilo, Teeteto, Timeo*. Madrid: Gredos.

Popper, K.R. (1967). *La lógica de la investigación científica*. Buenos Aires: Paidós.

Prigogine, I. (1997). *End of Certainty*. The Free Press.

Rodríguez, A., Jiménez, A., Serrano, F., Galindo, L., & Gómez, V. (2008*). La Realidad. Filosofía 1. Educación Media, Diversificada y Profesional*. Caracas: Santillama.

Savater, F. (2007). *El animal simbólico. Las Preguntas de la vida*. Barcelona: Ariel.

Conflicts of interest

The authors declare that they have no conflicts of interest.

Author contributions

José R. Abreu: Conceptualization, research, writing the original draft, writing, review and editing.

Data availability statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Statement on the use of AI

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