

# The explanatory gap: the pragmatic deconstruction of a myth

*A lacuna explicativa: a desconstrução pragmática de um mito*

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**Abstract:** This paper presents the proposal to address the problem of an explanatory gap in the philosophy of mind. As an alternative to traditional approaches, I analyze the meaning of the explanatory gap according to James's pragmatism in consonance with the perspective of ordinary language philosophy of Ryle, Austin, and Wittgenstein. As a strategy for developing the paper proposal, I try to show that the explanatory gap results from a misunderstanding on the uses of the psychological terms. The result is an obsessive insistence in entifying the meaning of 'mind' and the belief that some psychological terms mean a type of entity existing beyond their uses. Such belief takes the form of a foundationalist view understanding of the mental. What I try to show finally, and also in consonance with recent enactivist perspectives, is that the meaning of the psychological terms has nothing to do with the existence of (non-physical or physical) entities. The belief in such entities as a condition for meaning the psychological terms reveals a philosophical myth derived from the acceptance of the explanatory gap. The proposal of the paper is the philosophical demystification of the explanatory gap.

**Keywords:** Deconstruction. Explanatory gap. Myth. Pragmatism.

**Resumo:** *Este artigo apresenta a proposta de abordar o problema da lacuna explicativa na filosofia da mente. De modo alternativo às abordagens tradicionais, analiso o significado da lacuna explicativa segundo o pragmatismo de James em consonância com a perspectiva da filosofia da linguagem comum de Ryle, Austin e Wittgenstein. Como estratégia de desenvolvimento da proposta do artigo, procuro mostrar que a lacuna explicativa resulta de uma má compreensão dos usos dos termos psicológicos. O resultado é uma obsessiva insistência em entificar o significado de 'mente' e a crença de que alguns termos psicológicos significam um tipo de entidade existindo além dos nossos usos dos termos psicológicos. Tal crença assume a forma de uma compreensão da visão fundacionalista do mental. O que procuro mostrar finalmente, e também em consonância com as recentes perspectivas enativistas, é que o significado dos termos psicológicos nada tem a ver com a existência de entidades (não-físicas ou físicas). A crença em tais entidades, como condição de significação dos termos psicológicos, revela um mito filosófico derivado da aceitação da lacuna explicativa. A proposta do artigo é a desmitificação filosófica da lacuna explicativa.*

**Palavras-chave:** *Desconstrução. Lacuna explicativa. Mito. Pragmatismo.*

## 1 Introduction

In the last five years, I have changed my relationship with the philosophy of mind. From a naturalistic view, I have adopted a social perspective on the meaning of mind. As a pioneering field, it is important to note that the philosophy of mind represents the development matrix of the contemporary non-continental philosophy that has been mostly built around the ontological problem: what is the nature of the mind, and what is its relationship with the brain? The attempts to answer the ontological problem have traditionally varied among physicalist forms of psychophysical identity theories.

The problem is that the determination of possible psychophysical identities would not explain the distinctive feature of phenomenological experiences. The problem was called “explanatory gap” by Joseph Levine (1983). In its simplified form, the explanatory gap consists in the difficulty of explaining mental contents, and, particularly, conscious contents, in terms of psychophysical identities. Those who hold the explanatory gap do not necessarily take as a consequence an ontological gap between mind and brain.

As the first move, I will introduce the meaning of the explanatory gap. Next, I will analyze what William James understands by ‘pragmatism’ and how it can be applied to the analysis of the explanatory gap. Although the philosophy of mind is an effort to show that the notion of mind does not mean a separate kind of entity, many philosophical tendencies attempt to explain such a notion according to the belief in the solution of the ontological problem. Following James’s pragmatism, however, understanding the notion of mind can be dissociated from this foundationalist belief and dispel the explanatory gap.

In the intermediate stage of this argument, I will also try to highlight that some elements of the so-called “ordinary language philosophy,” represented by Ryle, Austin, and the later Wittgenstein, seem to echo to me ideas particular to James’s Pragmatism. From the point of view of such a philosophical perspective, the term ‘mind’ and its cognates do not mean the occurrence of internal events (non-physical or physical ones). In fact, the study of mind comes to be the explanation of meanings and uses of the psychological terms.<sup>1</sup> Insofar as the actual difference on the uses of the psychological terms is made explicit, the problem of the explanatory gap would be a vain metaphysical dispute. Moreover, one must not lose sight of the critiques to Psychologism by different contemporary philosophers such as Brentano, Husserl, Frege, Peirce, James, Ryle, Austin or Wittgenstein. In this sense, the meaning of the psychological terms is conceptual or propositional and it has nothing to do with a supposed extension to psychological contents or physical properties of the brain.

Accordingly, I intend to put forward a criticism of the epistemological foundationalism regarding the meaning of ‘mind’ as an entity from which one can have a non-inferential knowledge. Assuming the notion of meaning as conceptual or propositional, the term ‘mind’ presupposes the mediation of language and consequently, it has a social character. Following the enactivist perspective opened

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1 By psychological terms, it is to be understood here our everyday psychological vocabulary such as using “pain.”

by Francisco Varela (1993), and more recently by the sense-make approach (Di PAOLO et al., 2014), I understand that the meaning of ‘mind,’ and its cognates can be established regarding external relations and a plurality of contexts and not in terms of internal entities—there is no meaning of mind as non-relational. That is to say: the term ‘mind’ and its cognates mean linguistic (and not internal) entities determined by social practices.

Finally, according to James’s pragmatism, it is also my aim to point out that the explanatory gap is a philosophical myth. Indeed, a myth that has fed the imagination of many philosophers by confusion on the uses of the psychological terms. As a consequence, the philosophy of mind has mostly developed around the explanatory gap as an obsessive attempt to entify the mental: the belief that there must be something else in the pain experience that the phrase ‘pain is the firing of the C-fibers’ cannot translate. What is intended here is the deconstruction of such a belief insofar as it reveals a myth. And as such, the explanatory gap requires a demystifying philosophical therapy.

## 2 The explanatory gap: the construction of a myth

A myth is a type of explanatory structure of facts and phenomena of the world. As a narrative or form of language, a myth is also a vehicle of knowledge that presents a worldview (BARTHES, 1982, p. 131). But, since myth’s explanatory structure breaks the principle of continuity, it induces discontinuity into the causal network of events in the world. What I want to show here is that the explanatory gap is an epistemological myth.<sup>2</sup> Joseph Levine (1983) coins the expression “explanatory gap” in his seminal article *Materialism and Qualia: the explanatory gap*. According to Levine, although the explanatory gap does not represent a discontinuity in nature, not exactly the relation with the mind, but the relationship between consciousness and brain is the problem. For Levine, the “explanatory gap” means that there is something unexplained when one tries to understand the mental concerning psychophysical identities.

For Levine (1983, p. 354 and 357), nothing is explained as from the qualitative properties of the pain experience (i.e., *qualia*) in affirming the psychophysical identity “pain is the firing of the C-fibers.”<sup>3</sup> One part of the concept of pain explains

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2 “A myth is, of course, not a fairy story. It is the presentation of facts belonging to one category in the idioms appropriate to another. To explode a myth is accordingly not to deny the facts but to re-allocate them. And this is what I am trying to do” (RYLE, [1949] 2009, p. lx). From an anthropological point of view, it can also be identified the epistemological discontinuity in the myth’s structure: “Mythology confronts the student with a situation which at first sight could be looked upon as contradictory [...] it would seem that in the course of a myth anything is likely to happen. There is no logic, no continuity” (LÉVI-STRAUSS, 1955, p. 429).

3 Clarence I. Lewis, a former student of William James, defines precisely the meaning of *qualia* (singular, *quale*): [*qualia*] “must be distinguished from the properties of objects. Confusion of these two is characteristic of many historical conceptions, as well as of current essence-theories. The quale is directly intuited, given, and is not the subject of any possible error because it is purely subjective [...] The real roundness of the real penny is seen as all degrees of elliptical appearance [...] But, the givenness of the

our experiences and relationship with the world, and it does not mean “the firing of the C-fibers.” As consequence of this conceptual disjunction, the result is an “explanatory gap” as epistemological discontinuity between conscious mental content and brain properties. Thus, Levine concludes (1983, p. 360), while psychophysical identity is metaphysically factual, it is epistemologically implausible:

[...] I think it supports a closely related epistemological thesis—namely, that psycho-physical identity statements leave a significant *explanatory gap*, and, as corollary, that we don't have any way of determining exactly which psycho-physical identity statement are true (LEVINE, 1983, p. 354).

The philosophical meaning of the explanatory gap is not much original.<sup>4</sup> What stands out in the controversy surrounding the explanatory gap is its acceptance by most of the philosophers who viewed it as defense of the foundationalism in philosophy of mind. However, the philosophical quarrels have become endless around the explanatory gap and nothing has added to the impasse that oscillates between two types of foundationalism: reductionism and non-reductionism. From the reductionist side, one sustains the type-identity between mental and physical states. From the non-reductionist side, one argues that the token-identity describes only one particular physical state. The difference is that the token-identity is weakest and consequently it attenuates the ontological commitment. In this sense, the token-identity is compatible with the traditional forms of functionalism that have attracted many philosophers of mind.

One cannot deny the asymmetry of meaning between the uses of the psychological term “pain” in first and third perspectives. Nevertheless, what cannot be accepted is that such asymmetry is a matrix of the explanatory gap as an epistemological discontinuity. Indeed, the problem of the explanatory gap seems to result from the confusion on the uses of psychological terms. In addition, since the psychological terms do not have a uniform meaning, many philosophers believe there is an explanatory gap between the meaning of mental contents and the description of the brain properties. The problem of the explanatory gap lies in the fact that while the qualitative property of the mental seems to have a first perspective

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appearance is not the givenness of objective roundness [...] the same quale may be, for correct interpretation, the sign of different objective properties and different qualia may be the sign for the *same* objective property [...] Qualia are subjective; they have no name in ordinary discourse but are indicated by some circumlocution such as ‘look like;’ they are ineffable” (LEWIS, [1929] 1990, p. 121-2; 124).

4 In *Psychology in Physical Language* (1932), Rudolf Carnap presents a hard form of materialism that would tend to eliminate the explanatory gap. For him (CARNAP, 1932, p. 39): every psychological statement can be translated into statements of a physical language that are about someone's physical states. If, comparatively, X is a psychological concept (for instance, ‘pain’), and Y is physical concept (for instance, “the firing of the C-fibers”), that can translate the first concept, one can verify the epistemological meaning of X. Carnap's Materialism, whose ontological implication between psychological and physical statements is evident, would eliminate the epistemological discontinuity derived from the explanatory gap: the physical statements that translate psychological statements would be intersubjective—for Carnap (1932, p. 39), this is the thesis of Physicalism.

meaning, our knowledge is limited to a physical or functional description of the brain properties in the third perspective. Indeed, according to David Chalmers (1996), the explanatory gap introduces the “hard problem” of consciousness and the relation mind-brain would remain mysterious. For me, such a mystery is a consequence of a foundationalist view of mind derived from the explanatory gap.

In what does the foundationalism derived from the explanatory gap consist? In broad sense, the foundationalism is the belief that all knowledge rests ultimately on a foundation of non-inferential knowledge. Most of philosophers of mind accept that the psychological terms mean physical and non-physical entities (i.e., private objects or contents like “pain”). Regarding such a metaphysical distinction, one believes that there is a type of non-physical entities that are the referents of the psychological terms whose knowledge is independent from previous knowledge. Interestingly, the alleged non-physical entities have no correspondence in the language that describes the psychophysical identities in third perspective. So, trying to justify the non-physical entities epistemologically, many philosophers of mind have looked for reasons why some psychological terms are to be meaningfully true. Nevertheless, as consequence of Levine’s thesis, if something remains unexplained on the qualitative properties of phenomenological experiences, when ones affirms that ‘pain is the firing of the C-fibers’, the result is the belief that has fed and increased the basis of the traditional foundationalism in philosophy of mind as an obsessive insistence in entifying the meaning of ‘mind’ and its cognates: either it means something physical or something non-physical.

Reminding Levine’s conclusion on the explanatory gap, since psychophysical identity is metaphysically factual and epistemologically implausible, one can claim that the meaning of the non-physical entities rests on a non-inferential background of knowledge: the belief that there are types of entities from which one has a direct knowledge in first person perspective. The idea is that psychological terms such as “pain” mean psychological objects or entities and that psychological propositions describe mental states (HACKER, 2001, p. 82).<sup>5</sup>

Admittedly, the third person use of a psychological term does not coincide with the meaning in the first person. The asymmetry between the uses of the psychological terms in first and third persons is however fundamental in the activities of language. It indicates to us different levels of meaning of the psychological terms. But, the asymmetry does not mean an epistemological gap according to the uses of the psychological terms between first and third perspectives. A type of philosophical mythology seems to motivate the idea of explanatory gap when one believes that it represents an epistemological discontinuity from a non-inferential background of knowledge in first perspective.<sup>6</sup>

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5 In *Philosophy of Mind and Empiricism* ([1956] 1997), as part of his critique of the myth of the given, Wilfrid Sellars rejects the foundationalism in philosophy of mind. For him, we must abandon the idea that the use of a psychological term [“pain”] involves an antecedent mental entity [“painless”].

6 In fact, David Chalmers (1996) is a typical example of the philosophical mythology. On the one hand, he advocates the impossibility of the third person access to the mental contents of first-person experience; on the other hand, he oddly accepts the functional explanation of the cognitive activity.

But why is the explanatory gap a philosophical myth? “Myth” means here what Gilbert Ryle develops in the first chapter of *The Concept of Mind* ([1949] 2009) under the label “official doctrine” or “ghost in the machine.” For him, the official doctrine of the mind descends from the Cartesian tradition. But, unlike Descartes, most philosophers of mind do not accept the metaphysical distinction between mind and brain. And although they accept the explanatory gap, as remarked by Ryle, the mistake here is to suppose that the mind is a type of entity from which one may have a special knowledge. Considering the explanatory gap, it seems clear that it is a ghost or avatar of Descartes’s metaphysical distinction on the non-physical and the physical: the distinction reflects on the entities that must be epistemologically justified—this is the case of the alleged entities that are the referents of the psychological terms (for instance, the term ‘pain’). The explanatory gap arises because one does not understand the meaning of the mental except from a dualistic perspective and the belief that there must be something else existing beyond our uses of the psychological terms.

Although philosophy of mind has mostly developed from the acceptance of the explanatory gap, it is a myth. It is a myth in so far as it is granted to be the foundation of the belief that there is a gap when, in fact, what exists is an unawareness of the uses of psychological terms. An additional belief is also the acceptance that the philosophy of mind gravitates around the ontological problem and that to such a problem it is granted the status of investigation on a type of entity to be known.

### **3 Philosophy of ordinary language: uses and meanings of the psychological terms**

An important philosophical movement known as “ordinary-language philosophy” comes from Oxford between the mid-1940s and the early 1960s and was inspired by the works of Ryle, Austin and the later Wittgenstein. As common trait, the ordinary language philosophers understand that the meaning of philosophical concepts, and including psychological terms, is fixed by linguistic practice (HEIL, 1995, p. 551). Accordingly, it must be stressed the idea that there is no infallible foundation of meaning which is not determined by the uses of words in ordinary language. Thus, considering the meaning of psychological terms, mind and language are joined with two characteristics points from ordinary language philosophy:

- 1) criticism of the meaning of mind as entity;
- 2) the explanation of “mind” and its cognates has to do with the uses and contexts of the psychological terms.

Accordingly, the term “mind” has a metaphysical neutral meaning and therefore would not mean a non-physical or physical entity. The explanation of mind and its cognates do not suppose the existence of any type entity as condition of their meanings. In consequence of such an understanding of mind, the ontological problem tends to be dissolved. In fact, the dissolution discredits the traditional acceptance of identity theories and mind-brain relation.

Although Gilbert Ryle was the first philosopher to systematize the domain and problems of philosophy of mind, he is not recognized as such. Incidentally,

about the nature and place of the mind, Ryle is not recognized as having coined the expression “mind-body problem” in *The Concept of Mind* (1949). For him, for instance, the issue is not *what it is*, but rather what “being conscious” means since the notion of “conscious experience” does not seem to correspond to the property of an entity from which we can have some kind of knowledge: “being conscious” of red means the reference to the property of something we observe and say is red, and not on what the experience of red is. According to Ryle, attributing the properties of an entity to an experience is to commit a “categorical mistake:” it cannot be said that the meaning of an experience is red if this means that it is the property of an entity. The mistake here is to believe that the experience is a type of entity and to draw parallels with the physical properties of the brain.

From *The Concept of Mind*, it is important to contextualize here Ryle’s metaphor of the “ghost in the machine” (RYLE, [1949] 2009, p. 9). Also called the myth of Descartes, the ghost in the machine can be excoriated if one understands that the term “mind” and its cognates are meaningful according to their uses in ordinary language. However, the uses of these terms do not mean that one can have knowledge of the mind as a type of entity. Claiming the explanatory gap amounts to nothing more than believing that the mind exists and that from it one can have a type of special knowledge. Just like the ghost in the machine, the explanatory gap is a philosophical myth derived from a grammatical parallel: if the body is an entity, the mind must also be.

According to Ryle’s idea of categorical mistake, “the mind” does not mean the internal and private properties of an entity located in the material body:

As thus represented, minds are not merely ghosts harnessed to machines, they are themselves just spectral machines. Though the human body is an engine, it is not quite an ordinary engine, since some of its workings are governed by another engine inside it this interior governor-engine being one of a very special sort. It is invisible, inaudible and it has no size or weight (RYLE, [1949] 2009, p. 9).

And,

It is being maintained throughout this book that when we characterize people by mental predicates, we are not making untestable inferences to any ghostly processes occurring in streams of consciousness which we are debarred from visiting; we are describing the ways in which those people conduct parts of their predominantly public behavior’ (RYLE, [1949] 2009, p. 39).

Like his criticism of the ghost in the machine, it is opportune to point out here a short essay by Ryle dedicated to the analysis of “perception” (RYLE, [1953] 1964, p. 93). From a traditional point of view, perception corresponds to the occurrence of internal physiological or psychological events. Alternatively, Ryle undertakes an analysis of perception and seeks to show that perceiving corresponds to signifying and not to being a representation of anything—depending on what concepts one has, many different things can be perceived.

Thus, for instance, verbs like “to see” and “to hear” have a similar function as to winning a game. They represent dispositions of meaning and do not correspond to physiological or psychological correlates of perceiving. Like the “categorical mistake,” the source of error consists in assuming that one can discover internal physiological or psychological processes “behind the eyelids” corresponding to perceiving something:

What I do hope to do is to show that there is something which is drastically wrong with the whole programme of trying to schedule my seeing a tree either as a physiological or as a psychological end-stage of processes. It is not a question of my seeing the tree evading observation and experiment, but of its not being the sort of thing that can be found or missed in either the one place or the other. It is not an intractably shy phenomenon, even an introspective phenomenon, because it is not a phenomenon at all. Neither the physiologist nor the psychologist nor I myself can catch me in the act of seeing a tree—for seeing a tree is not the sort of thing in which I can be caught. When I report, perhaps to an oculist, that at a certain moment I saw something, what I report does not qualify to be the filling of any statement of the pattern ‘The needle gave me a twinge of pain’ or ‘His haemorrhage caused him to faint’. To put the point much too crudely, seeing a tree is not an effect—but this is not because it is an eccentric sort of state or process which happens to be exempt from causal explanations but because it is not a state or process at all (RYLE, [1953] 1964, p. 101-2).

For Ryle, the cure for such category mistakes is to face up to the philosophical dilemmas of perception and to point to the dissolution of the ontological problems according to use and contexts of psychological terms in ordinary language.

Following a similar way of thinking, John L. Austin has also contributed to deflation of the metaphysical meaning of “mind” in his essay *Other Minds* (1961). From Austin’s philosophical perspective, an in-depth analysis of ordinary language would show that the metaphysical implications of the term “mind” could be dissipated. For him, when one uses the verb “to know,” one does not describe a type of entity (mental or physical). In Austin’s sense, when one uses the verb “to know,” one tries to mean and not describe something. He points out that language has not only a descriptive function. It has equally a communicative function. To suppose that “I know” is a descriptive term is an example of “descriptive fallacy:”

To suppose that ‘I know’ is a descriptive phrase, is only one example of the *descriptive fallacy*, so common in philosophy. Even if some language is now purely descriptive, language was not in origin so, and much of It is still not so (AUSTIN, 1961, p. 71).

Knowing the “mind” (or “other mind”) means part of saying or communicating something: saying that “I know that he or she feels pain” does not mean that I

know “other mind” in the sense that I know someone else’s mental or physical reality. For Austin, when we use the verb “to know,” we mean and do not describe something. In the case of “I know that he or she feels pain,” the verb “to know” indicates that someone understands the meaning of “pain” and yet it does not translate epistemological discontinuity or explanatory gap between the statement and the reality of someone else’s pain.

Austin shifts the focus on the meaning of psychological terms from the ontological domain to the linguistic one. Like Ryle, he undertakes the analysis of psychological terms according to use and context in ordinary language. And similar to Ryle’s categorial mistake, in Austin’s sense, the problem is *not* what it is, but what “other minds” means. Using “mind” is part of saying or communicating something and it does not correspond to a non-physical or physical entity.

Similar to Quine’s perspective in *Word and Object* (1960), Austin presents an alternative to the mentalist semantics in which each expression of a language would correspond to an extra-linguistic entity that would be its meaning. At the beginning of *The Meaning of a word*, Austin (1961, p. 24) points out that the question “the meaning of a word” is almost always non-sense: as if the meaning of a word could be an extra-linguistic entity. For him, the meaning of a word is not the representation of an entity and it can only be understood as part of the different functions of language. The aim of Austin’s critique is the philosophical tendency to entify the meaning of words. It is not hard to see that the question of the meaning of words becomes very often the object of metaphysical pseudo-questions when one seeks to identify an entity as the reality of meaning:

I can only answer a question of the form ‘What is the meaning of “x”?’ if “x” is some particular word you are asking about. This supposed general question is really just a spurious question of a type which commonly arises in philosophy. We may call it the fallacy of asking about ‘Nothings-particular’ which is a practice decried by the plain man, but by the philosopher called ‘generalizing’ and regarded with some complacency (AUSTIN, 1961, p. 26).

And,

What is the meaning of “x”?’ if “x” is some particular word you are asking about [...] At once a crowd of traditional and reassuring answers present themselves: ‘a concept’, ‘an idea’, ‘an image’, ‘a class of similar sensa’, &. All of which are equally spurious answers to a pseudo-question (AUSTIN, 1961, p. 26-7).

The meaning of a word is not therefore the representation of a concept, idea or image and much less it would be the description of some entity that would be the meaning itself—in this sense, we can also include the meaning of mind.<sup>7</sup> Austin refuses an essentialist view of meaning. If words are used and mean something,

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7 See Wittgenstein (PI, 116): When philosophers use a word—“knowledge”, “being”, “object”, “I”, “proposition”, “name”—and try to grasp the essence of the thing, one must always ask oneself: is the word ever actually used in this way in the language-game which is its original home?—What we do is to bring words back from their metaphysical to their everyday use.

what gives meaning to them is not an extra-linguistic essence or reality. For him, considering the meaning of a word does not imply admitting any type of extra-linguistic entity, but rather is to understand the activities of semiosis in which the word is concretely employed: “[what] is wrong is that people think of ‘a meaning’ as a kind of entity which can be described wholly without reference to the total activity of ‘semiosis’” (AUSTIN, 1961, p. 29).

Additionally, according to Austin, when one considers the meaning of a word as a representation of an ideal entity, a fallacy is committed. As if one could identify the meaning of words with Platonic ideas:

[...] every sign has a designatum, which is not a particular thing but a kind of object or class of object. Now this is quite as fictitious an entity as any ‘Platonic idea’: and is due to precisely the same fallacy of looking for ‘the meaning (or designation) of a word’ (AUSTIN, 1961, p. 29).

Accordingly, what gives meaning to the word ‘mind’ is not an entity that is supposed to be associated to it. Like words in general, the meaning of mind has to do with the activities of semiosis in language. Austin denies the existence of extra-linguistic entities as condition of meaning the psychological terms. In effect, he writes an important philosophical chapter that demystifies the notion of meaning as extra-linguistic entity.

As one of the main ideas of the first part of *Philosophical Investigations*, Wittgenstein states that “the meaning of a word is its use in the language” (1986, p. 43). As Daniel Whiting points out (2010, p. 114-5), Wittgenstein’s statement has two ways of interpretation: on the one hand, the meaning of an expression is connected with the sense of use as ‘practice’ according to rules (or rulism); and, on the other hand, the use of an expression is in conformity with certain external circumstances or contexts (or externalism—see WITTGENSTEIN, 1986, p. 117). From the debate between rulists and contextualists on Wittgenstein’s idea of meaning as use, it shows here an alternative to deal with the problem of the explanatory gap. Since the meaning of the term “mind” and its cognates can be understood according to practices and social contexts, it is meaningless to affirm the explanatory gap as an epistemological problem: there is nothing but the contexts and uses of the word ‘pain’ which reveals the meaning of two types of knowledge and consequently an epistemological discontinuity between mind and brain.

As illustration, it is interesting to highlight here Wittgenstein’s thought experiment known as “beetle in the box.” If a psychological term is meaningful, such as “pain,” it supposes public criteria that govern its use in language—then, the word “pain” does not mean the content of an internal and private entity:

If I say of myself that it is only from my own case that I know what the word “pain” means—must I not say the same of other people too? And how can I generalize the one case so irresponsibly?

Now someone tells me that he knows what pain is only from his own case!—Suppose everyone had a box with something in it: we call it a ‘beetle’. No one can look into anyone else’s box, and

everyone says he knows what a beetle is only by looking at his beetle.—Here it would be quite possible for everyone to have something different in his box. One might even imagine such a thing constantly changing.—But suppose the word “beetle” had a use in these people’s language?—If so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all; not even as a something: for the box might even be empty.—No, one can ‘divide through’ by the thing in the box; it cancels out, whatever it is.

That is to say: if we construe the grammar of the expression of sensation on the model of ‘object and designation,’ the object drops out of consideration as irrelevant (WITTGENSTEIN, 1986, p. 293).

It is important to identify the roles of each term involved in Wittgenstein’s thought experiment:

“Box:” “mind.”

“Beetle in the box:” “mental content.”

The word “beetle:” it belongs to a language game.<sup>8</sup>

The meaning ‘beetle’ is not in the box! That is to say: the meaning of ‘pain’ is not a type of entity inside the mind. What happens eventually is an asymmetry on the uses of the psychological terms in first and third persons (CHILD, 2013, p. 160). The difference between “I feel pain” and “she feels pain” focuses on the persons in question and both mean the same thing in two distinct levels of language. In fact, Wittgenstein insists that the “philosophy of psychology” should make explicit the linguistic meaning of the psychological terms. Thus, the explanation of meaning of the folk psychology verbs (to believe, to desire, to intend, etc.) replaces the traditional description of psychological entities. Alike Austin’s descriptive fallacy about the verb “to know” and Ryle’s categorial mistake, the asymmetry between two levels of language does not mean that the uses of psychological terms reveal an explanatory gap: following Wittgenstein, when the word “pain” is used in the phrase “pain is the firing of C-fibers,” its meaning corresponds to an exchange of one expression for another and it is not an explanation (WITTGENSTEIN, 1986, p. 303). According to Wittgenstein, I think, the problem is that one construes the grammar of sensation on the model of object and designation as an attempt of grasping the ghost in the machine.

Summing up the perspectives of Ryle, Austin and Wittgenstein, the notion of “mind” means the use of words and statements in ordinary language referring to psychological terms. If noted the due limits between the perspectives of the three philosophers on meaning and mind, they show many elements that coincidence with William James’s pragmatism. Additionally, taking into account the comparison with ordinary language philosophy, it is interesting to note here that from the

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8 I will not analyze here Wittgenstein’s so-called private language argument.” What is important is to emphasize that Wittgenstein deflates the meaning of from a possible relation with a mental entity.

enactivist perspective opened by Francisco Varela and colleagues (1993), enactivists have rejected the ghost in the machine and as result the explanatory gap is to be taken as epistemologically senseless.<sup>9</sup> He (VARELA et al., 1999, p. 18) also proposes the integration between the phenomenological data of experience (for example, *qualia*) and the description of cognitive processes. The result is the circulation between experience and description that would fill the epistemological deficit of the explanatory gap. Such a cognitive perspective also has much in common with James's epistemological anti-foundationalism—that is, enactivists and James sustain the thesis on the continuity of mind with previous knowledge of external facts and concrete contexts of experience. Accordingly, the thesis of continuity renounces the metaphysical commitment to the existence of non-physical or physical entities as a foundation for the meaning of psychological terms.

Since cognition is much more action or enaction of the world than representation or correlation with a physical basis of realization (brain or machine), the goal of cognition is rather *world-making* than *world-mirroring* (ENGEL, 2010, p. 222-3). The idea of *world-making* evokes a form of *practice* that overlaps the representational character of cognition. As practice, cognition does not mean something that happens *inside* the organism as a ghost in the machine—as Maturana (1985) says, 'the mind is not in the head'. From an enactivist perspective, what is not part of coupling between organism and an environmental context can cognitively mean anything insofar as such a coupling reveals a practice of the organism in the world. As consequence, meanings result much more from the organism's practices of interpreting (or *meaning-making*) than from representing the world to which can also be included the meaning of psychological terms.

The idea of meaning associated with a practice dispels the reference to internal entities as condition of significance of the psychological terms. Interestingly, revisiting the notion of Maturana's "languaging," Di Paolo and colleagues (2014, p. 4) understand the importance of this notion as adaptive social sense-making (and not as theory of mind) for self-produced identities and communication between cognitive agents. As such, languaging constitutes dynamic forms of life in that "meaning" is dependent on a social existence. If an entivist conception of cognition dispenses representational mediation, it is hard to see how the practice of signification in ordinary language is dependent on non-physical or physical entities. Thus, comparatively, the meaning of the psychological term "pain" depends on a relation or a context in which it can be

9 As noted by Hutto (2013, p. 298): "The enactivist movement was originally inspired by phenomenology, and Merleau-Ponty's work in particular. Varela, Thompson, and Rosch (1991) were moved to develop a radically new approach to the mind and cognition because they observed that, at the time, "cognitive science has had virtually nothing to say about what it means to be human in everyday, lived situations" (p. xv). They pressed for a fundamental reform in thinking and practice, one requiring acknowledgment of the double-sense of embodiment, making room for an understanding of the body both as the-body-as-object and the-body-as-lived-subjectivity [...] In emphasizing the essential link between mentality and embodied and embedded activity, the express aim of the original version of enactivism was to oppose and serve as an antidote to those approaches to mind that "take representation as their central notion" (VARELA et al., 1991, p. 172).

concretely used and understood.

From a philosophical point of view, and considering the explanatory gap, the moral of the enactivist story here is the criticism of epistemological foundationalism on the meaning of the mental as belief in its dependence on the existence of non-physical or physical entities. This criticism is in tune with James's pragmatism in that he asserts a conception of knowledge as a web of relations. In this sense, the knowledge of the mental is inseparable from a social and contextually situated practice.

#### 4 The pragmatic deconstruction of a myth

As part of a pragmatic conception of the meaning of "mind" and its cognates, I present here a review of the problem of the explanatory gap. In its broad sense, shortly, the explanatory gap supposes an epistemological (and not ontological) premise in which the qualitative characteristic of the mental cannot be explained in terms of psychophysical identities. What alternative would we have to deal with the explanatory gap in the face of the epistemological impasse on the distinctive meaning of the mental?

Perhaps the first step is simply the dissolution of the explanatory gap. A first step of such dissolution would have been latently outlined by William James in his conception of pragmatism. In fact, a pragmatic conception of the mind tends to dissolve the explanatory gap by breaking with the theories of psychophysical identity. Although language is not a first concern of James, for him, pragmatism consists in a "method" of clarifying the meaning of conceptions (JAMES [1907] 1977, p. 377; [1907] 2000, p. 25). Incidentally, it is a perspective from Wittgenstein's *Philosophical Investigations* that philosophy is understood as a "therapy" of thought: "There is not a philosophical method, though there are indeed methods, like different therapies" (WITTGENSTEIN, 1986, p. 133). In addition, as pragmatic criterion, James insists on the notion of meaning as practical effect. In *What Pragmatism means* and *The Varieties of Religious Experience*, he recognizes the decisive influence of Peirce on his conception of pragmatism and he extends Peirce's idea of meaning as practical effect:

The pragmatic method is primarily a method of setting metaphysical disputes that otherwise might be interminable (JAMES [1907] 1977, p. 377).

The pragmatic method [...] is to try to interpret each notion by tracing its respective practical consequences. [...] what pragmatism means [...] was first introduced into philosophy by Charles Peirce in 1878 [*How to make clear our ideas*] To develop a thought's meaning we need therefore only determine what conduct it is fitted to produce; that conduct is for us its sole significance; and the tangible fact at the root of all our thought-distinctions is that there is no one of them so fine as to consist in anything but a possible difference of practice (JAMES [1907] 2000, p. 25).

Our conception of these practical consequences is for us the whole of our conception of the object, so far as that conception has positive significance at all. This is the principle of Peirce, the principle of pragmatism (JAMES, 1902, p. 295).

In *What pragmatism means*, James ([1907] 2000, p. 24) tells the following story: on one side of a tree-trunk, clinging to it, is a squirrel; while over against the tree's opposite side, is a person. No matter how fast the person tries to reach the squirrel, it always moves faster, and the tree is always between them. Two groups enliven a warm discussion: while a group claims that the person has gone round the squirrel, the rival group claims that the person has not. So, the disputing groups ask James for an opinion that could resolve the quarrel. And he responds: "Which party is right [...] depends on what you practically mean by 'going round' the squirrel" ([1907] 2000, p. 24). If the person has gone round the tree and passed through the four cardinal points, surely, she has gone round the squirrel; but, if "going round the squirrel" means to be in front, next to and behind the squirrel, obviously, the person has not gone around the squirrel. Would there be an explanatory gap on the meaning and the uses of the expression "going round the squirrel?"

For James ([1907] 1977, p. 377), as application of the pragmatic method, making clear the meaning of the words, we would not have occasion for new metaphysical quarrels. When the two groups dispute the meaning of "going round the squirrel," they do not realize that both claims mean the same thing.<sup>10</sup> So, comparatively, if the psychological term "pain" means "it is the firing of the C-fibers" and, as rival hypothesis, the statement is denied, and, then, "pain" does not mean "it is the firing of the C-fibers," do the uses of "pain" represent an explanatory gap between two types of knowledge? Hardly! And what is the practical consequence of uttering that "pain is the firing of C-fibers?" According to James ([1909] 2000, p. 143), it is our ability to utter all sorts of propositions which do not contradict that one and that they are true.

Although the explanatory gap supposes an epistemological premise, it seems better placed as a metaphysical problem in that its own meaning represents an object of verbal dispute. Therefore, if there is a dispute between two hypotheses on "pain is the firing of C-fibers," and if they are not shown to have a practical difference, they are just different names of a false problem. In fact, just like Ryle ([1949] 2009, p. 12), James dissipates the contrast between mind and matter. They agree that the alternative is not Idealism or Materialism: either "pain" means something non-physical or physical. This is very clear in *Some Metaphysical Problems Pragmatically Considered* ([1907] 2000) in that James applies the pragmatic method to traditional problems in philosophy such as the meaning of substance, matter or life and one could easily add "mind:" is it non-physical or physical? If one uses a psychological term, for instance "pain," it can mean two logical types and yet it does not mean two different types of knowledge. The core of the explanatory gap can be summarized as a misunderstanding of the different logical types.

In what sense can we say that the use of the term "mind" and its cognates imply the explanatory gap? Just as the term "mind" and its cognates do not mean distinction of the nature of mind, whether non-physical or physical, the explanatory gap also does not mean an epistemological distinction on he uses of psychological terms (for instance, 'pain'). The meaning of a word will be understood as a practical

10 That illustrates what James (1916, p. 60) calls 'pragmatic rule': "If two concepts lead you to infer the same particular consequence, then you may assume that they embody the same meaning under different names".

consequence of its use and it does not correspond to an entification of a reality from which two types of knowledge are supposed to exist. If there is a distinction of the meaning of mind, for James, it is certainly functional, and does not imply an ontological commitment to materialism or idealism:

The attributes 'subject' and 'object', 'represented' and 'representative', 'thing' and 'thought' mean, then, a practical distinction of the utmost importance, but a distinction which is of a FUNCTIONAL order only, and not at all ontological as understood by classical dualism (JAMES, [1904] 1977, p. 194).

In *Varieties of Religious Experience*, James also applies the pragmatic method to the meaning of the religious terms. As noted by Russell Goodman (1994, p. 341), it is interesting to see that Wittgenstein's notion of "family resemblances" (WITTGENSTEIN, 1986, p. 66 and 67) was anticipated by James on uses and meanings of the religious terms:

Most books on the philosophy of religion try to begin with a precise definition of what its essence consists of. Some of these would-be definitions may possibly come before us in later portions of this course, and I shall not be pedantic enough to enumerate any of them to you now. Meanwhile the very fact that they are so many and so different from one another is enough to prove that the word 'religion' cannot stand for any single principle or essence, but is rather a collective name (JAMES, 1902, p. 34).

As collective name, the term "religion" means a family resemblance in terms of its uses. Accordingly, James converts the question of essence into a linguistic point of view (GOODMAN, 1994, p. 342). Such a conversion indicates James's non-essentialism. In this sense, the term 'mind' means nothing but words in use (GOODMAN, 1994, p. 347). Just like Wittgenstein, James advances the dissolution of traditional view of mind into the everyday language and experience (GOODMAN, 1994, p. 349). That is to say that the meaning of mind is socially constituted.

Again, if what constitutes the linguistic meaning of the words does not seem to be a primary concern of James's pragmatism, one can point out here that James's analysis of meaning as a practical effect shows a clear affinity with the criterion of meaning as use according to Wittgenstein (HUTCHINSON and READ, 2013, p. 164):

For a large class of cases—though not for all—in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language (WITTGENSTEIN, 1986, p. 43).

Every sign by itself seems dead. What gives it life?—In use it is alive. Is life breathed into it there?—Or is the use its life? (WITTGENSTEIN, 1986, p. 432).

But if you follow the pragmatic method, you cannot look on any such word as closing your quest. You must bring out of

each word its practical cash-value, set it at work within the stream of your experience (JAMES, [1907] 2000, p. 29).

The pragmatic rule is that the meaning of a concept may always be found, if not in some sensible particular which it directly designates, then in some particular difference in the course of human experience which its being true will make (JAMES, [1910] 2000, p. xvii).

Just as the meaning of the term “religion,” for James, “mind” is also a collective term and does not mean an entity existing beyond our thoughts and experiences. Moreover, in comparison with Wittgenstein, for James, it can be claimed that “mind” means a “family resemblance” and therefore it does not have a uniform meaning in its various uses. The meaning of “mind” will be understood as the practical consequence of its uses and not as entification of a reality from which one supposes to have a special knowledge.

As illustrated by James’s squirrel story, the use of a term does not solve the issue between competing views (Materialism or Idealism). According to James’s pragmatic method, we must always look for the practical meaning of our words or thoughts. Thus, what the term “mind” means depends on its practical effect. However, the uses of “mind” institute a distinction on different levels of language rather than an explanatory gap in the knowledge of a special entity. What the use of the psychological terms allows us is only to establish domains of meaning. In using a psychological term (for instance, “pain”), one is not trying to grasp an entity. According to James’s pragmatism, the meaning of the words has to do with their practical consequences and the distinctions that they produce do not indicate a metaphysical commitment to the existence of some type of (non-physical or physical) entity.

Since James rejects a dualistic view of human being, he draws a holistic picture of mind (MALACHOWSKI, 2013, p. 40). First published in 1885 and reprinted as the first chapter of *The Meaning of Truth, The Function of Cognition* illustrates clearly the idea of the continuous structure formed by mind and world in experience. James does not understand experience as a static series of takes of reality that the mind orders in representations. What Eisendrath (1971, p. 43) designates “unifying moment” represents James’s conception of experience and continuity that dissolves the traditional forms of dualism. Indeed, James overcomes a dualistic view of mind as a type of container or discrete entity which is separate from the world. Against the dualistic view of mind, James evokes the holistic picture of the mosaic.<sup>11</sup> In this sense, although sensations are eventually referenceless, they are interlinked and form a “web” in the experience (JAMES, [1905] 1977, p. 191). Interestingly, the idea of ‘web’ equally evokes Quine’s holistic description of knowledge as a ‘web of belief’ (Quine, 1978).

Following James’s holistic picture of mind, even though *qualia* are subjective and referenceless, one can say that they are also part of the continuity of the

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11 “My description of things, accordingly, starts with the parts and makes of the whole a being of second order. It is essentially a mosaic philosophy, a philosophy of plural facts” (JAMES, [1904] 1977, p. 195).

experience—incidentally, James denies the idea of a simple location of *qualia*.<sup>12</sup> So, the meaning of *qualia* is much more the practical consequence of our using the psychological terms (i.e., “pain”) in a definite context than the supposed epistemological gap between mind and world in asserting that “pain is the firing of the C-fibers.” Assuming that the meaning of a term is not anything but “a possible difference of practice” (JAMES, [1885] 1977, p. 152; [1907] 1978, p. 29), the meaning of the psychological terms results from their practical uses. In accordance with ordinary language philosophy, one can assert that meaning is inseparable from practice and context. In this sense, one can claim a pragmatic conception of mind as an alternative to the traditional philosophical views that assume it to be either a non-physical or physical entity.<sup>13</sup>

In embracing holism, James puts forward a pragmatic alternative to deal with traditional foundationalism. For him, additionally, one important epistemological question is: how can we accommodate the knowledge of our everyday feelings insofar as they are supposed to be eventually referenceless in the world? Indeed, one of the key epistemological virtues of James’s pragmatism is that it discredits foundationalism. Although many of our everyday experiences seem to be referenceless and speechless (JAMES, [1909] 1977, p. 141), such as *qualia*, they are not separate from relation with external facts. Differently from the Humean atomistic picture of mind, James does not embrace the idea of sensation as takes of reality corresponding to discrete entities in the mind. For James, our sensations are in relation with the world as part of the *continuum* of experience. Even though a particular sensation is referenceless and speechless (such as “painless”), we can know it as part of someone’s experience within a definite context in the world.<sup>14</sup>

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12 In the Chapter *The Perception of Space* of *Principles of Psychology*, ([1890] 1952, p. 553), James points out: “No single **quale** of sensation can, by itself, amount to a consciousness of position [...] a feeling of place cannot possibly form an immanent element in any single isolated sensation.” Additionally, it is interesting here to compare what Jesper Hoffmeyer calls ‘holistic control’ and its relation with *qualia*: Holistic control [...] is needed in order to track the finality of brain processes in accordance with an organism’s ever shifting current needs and intentions [...] As a tool for such holistic control, the body has at its disposal first its emotional equipment—as when young birds duck their heads at the sight of big-winged objects moving above the nest [...] Here we are talking about a kind of correlation—or *calibration*—that is the unique to the individual’s life history and cannot, for that reason, be encoded in the “innate manual” of the genome [...] The experiential component of life, *qualia*, is thus seen as an integral aspect of life [...] that has had its own evolutionary history from its most primitive forms in prokaryotic life to the sophisticated kind of Umwelts that we find in big-brained animals (HOFFMEYER, 2008, p. 180-1).

13 In *Does “consciousness” exist?* ([1909] 1977, p. 169), incidentally, James puts forward a pragmatic conception of mind as reality of experience and not as a type of entity.

14 “[...] we know of no things that are not given to somebody’s experience. When I see the white thing before my eyes, the nature of the thing and the nature of my sensation are one. Even if with science we supposed a molecular architecture beneath the smooth whiteness of the paper, that architecture itself could only be defined as the stuff of a farther possible experience [...] A thing may be my phenomenon or someone else’s” (JAMES, [1985] 1977, p. 154).

Hereupon, James ([1895] 1977, p. 152) develops the anti-foundationalist thesis of “the knowing the things together:” accordingly, there is no knowledge of the mental which is no-relational or non-inferential—all our knowing is continuous with previous knowledge of external facts (and including *qualia*).<sup>15</sup> In this sense, the knowledge of the mental is part of a web in terms of external relations and plurality of contexts. In order to learn the meaning of ‘pain’, one need not suppose an antecedent and discontinuous episode of the awareness of “painness”. So, taking into account James’s pragmatism, one way of dealing with the explanatory gap is to claim the knowledge of mind in continuity with the world and the knowledge of world in continuity with mind. Such an idea of continuity eliminates the alleged “epistemological gulf” between mind and world derived from the explanatory gap.

Last, but not least, prior to the lectures on pragmatism, in *The Principles of Psychology* ([1890] 1952), Chapter VII (*The methods and snares of psychology*), James identifies what kind of conceptual snare the psychologist is victim of. For him, the psychologist assumes that: “Mind [...] is only a class of name for *minds*” (JAMES, [1980] 1952, p. 120). For the psychologist, the term “mind” means an abstraction of the concrete existence of the individual minds and it describes indistinctly subjective and objective facts. James summarizes the snare of the psychologist as follows:

The “Psychologist’s Fallacy”. The great snare of the psychologist is the *confusion of his own standpoint with that of the mental fact* about which he is making his report (JAMES, [1890] 1952, p. 128).

For the psychologist, therefore, the term “mind” means an objective reality of study and she or he also includes her or his own mind; then, the term “mind” means the reality of an object.<sup>16</sup> Using the vocabulary of philosophy of mind, it seems that the psychologist assumes that her or his third perspective encompasses the meaning of the first one. Thus, similar to the problem of the explanatory gap, the psychologist’s fallacy stems from the difficulty of understanding the different uses of the term “mind” and from the fact that the terms of the language ordinary are not only descriptive as shown by Austin’s descriptive fallacy. In this context, it is inevitable to draw a parallel between the explanatory gap and the psychologist’s fallacy: on the one hand, the psychologist confuses her or his point of view with the one who is reporting an experience and then she or he understands the term “mind” as an

15 In this sense, interestingly, Peirce (CP 5.313) says: “the content of consciousness, the entire phenomenal manifestation of mind, is a sign resulting from inference. Upon our principle, therefore, that the incognizable does not exist [...] we must conclude that the mind is a sign developing according to the laws of inference.”

16 It is surprisingly curious that in his own way the Estonian naturalist Jakob von Uexküll describes the fallacy of psychologist: The life of each subject develops within a special scenario and not precisely within ours [...] Psychologists try to avoid this fundamental biological law by coming into contact with the visible animals on their special human scenario. In doing so, the human scenario acquires for them an absolute character that does not correspond to reality (UEXKÜLL, [1930] 1944, p. 132)—the English version is mine.

abstraction of individual minds; on the other hand, from the asymmetry of meaning in third and first perspectives, the explanatory gap results from the confusion on the uses of psychological terms.

When James identifies the source of the psychologist's fallacy, here it may be the matrix of the problem taken up by Clarence Lewis (see here note 3) from his former teacher: the problem is that we use indifferently the same vocabulary for *qualia* and object properties—for example, “roundness” is property of the coin and at the same time if we look at the coin directly, it *looks like* it is round in our visual experience. In James's words:

The elementary qualities of sensation, bright, loud, red, blue, hot, cold, are, it is true, susceptible of being used in both an objective and a subjective sense. They stand for outer qualities and for the feelings which these arouse [...] This absence of a special vocabulary for subjective facts hinders the study of all but the very coarsest of them [...] the lack of a word quite as often leads to directly opposite error (JAMES, [1890] 1952, p. 127-8).

If the word “*qualia*” fills the absence of a term in our everyday language for meaning a type of subjective property, one cannot take for granted that it means the existence of something else beyond our experiences. Again, in James's words:

Whenever we have made a word [...] to denote a certain group of phenomena, we are prone to suppose a substantive entity existing beyond the phenomena, of which the word shall be the name (JAMES, [1809] 1952, p. 128).

The problem of the explanatory gap is that it promotes the belief that there must be something else in the pain experience that the phrase “pain is the firing of the C-fibers” cannot translate. Why? That is the problem! What one believes that “pain” means (as a type of non-physical entity) does not mean anything beyond the practical consequences of our uses of the term “pain.” For me, this is the lesson that we can take from James's pragmatism that deconstructs the philosophical myth of the explanatory gap: to discredit the belief that there must be something else existing and corresponding to the meaning of psychological terms.

## 5 Final remarks

The article seeks to explore the problem of the explanatory gap as an important theme that motivated a significant part of the debates in philosophy of mind about the epistemological consistency of psychophysical identities: if these identities are sufficient as an explanation of the mental. As developed by the notion of explanatory gap by Levine (1983), the psychophysical identities are not a sufficient explanation, and something remains unexplained on the qualitative properties of phenomenological experiences (or *qualia*). For Levine, although the psychophysical identity is metaphysically factual, it is epistemologically implausible, and this is the matrix of the explanatory gap.

However, starting from James's pragmatism in consonance with the perspective of the ordinary language philosophy of Ryle, Austin and Wittgenstein, I try to show that the explanatory gap is much more the reflection of a foundationalist view of mind as a type of (non-physical or physical) entity. I also try to show that the meaning of mind and its cognates is determined by their uses in definite social contexts as sense-make activity according to recent enactivists. In this sense, the meaning of the psychological terms (for instance, 'pain') has nothing to do with the existence of (non-physical or physical) entities. Indeed, the meaning of the psychological terms is inseparable from social practices. Such a perspective dispels the foundationalist belief in that 'mind' means a type of entity and consequently that there must be something else existing beyond the uses of the psychological terms. In short, this perspective dispels the explanatory gap as philosophical myth derived from the misunderstanding of the uses of psychological terms whose meaning results from our social practices contextually situated.

## References

- AUSTIN, J. L. *Philosophical papers*. Oxford: Oxford University Press, 1961.
- BARTHES, Roland. *Mitologias*. Tradução de Rita Buongiorno e Pedro de Souza. São Paulo: DIFEL, 1982.
- CARNAP, Rudolf. *Psychology in physical language*. In: *Erkenntnis*. Berlin, n. 3, p. 39-44, 1932.
- CHALMERS, David. *The conscious mind*. Oxford: Oxford University Press, 1996.
- CHILD, W. *Wittgenstein*. Tradução de Roberto H. Pich. São Paulo: Penso Editora, 2013.
- EISENDRATH, C. *The unifying moment: the psychological philosophy of William James and Alfred N. Whitehead*. Cambridge: Harvard University Press, 1971.
- ENGEL, Andreas K. Direct minds: how dynamics shapes cognition. In: STEWART, John. *Enaction: toward a new paradigm for cognitive science*. Cambridge: The MIT Books, 2010.
- DANIEL, W. *The later Wittgenstein on language*. London: Palgrave MacMillan, 2010.
- DI PAOLO, E. et al. From participatory sense-making to language: there and back again. In: *Phenomenology and the Cognitive Sciences*. v. 14, n. 4, p. 1089-1125, 2015.
- GOODMAN, R. B. What Wittgenstein Learned from William James. In: *History of Philosophy Quarterly*, v. 11, n. 3, p. 339-354, 1994.
- HACKER, P. M. Ludwig Wittgenstein. In: *A Companion to Analytic Philosophy*. Edited by MARTINICH, A. P. and SOSA, D. Massachusetts: Blackwell Publishers, 2001. p. 68-93.

HEIL, J. Ordinary Language Philosophy. In: R. Audi, general editor. *The Cambridge Dictionary of Philosophy*. Cambridge: Cambridge University Press, 1995.

HOFFMEYER, J. *Biosemiotics: signs of life and life of signs*. Scranton and London: University of Scranto Press, 2008.

HUTCHINSON, P., and READ, R. Practing pragmatist-Wittgensteinianism. In: *Cambridge Companion to Wittgenstein*. Cambridge: Cambridge University Press, 2013. p.159-189.

JAMES, W. *Pragmatism and the meaning of truth*. Cambridge: Harvard University Press, 1978.

\_\_\_\_\_. *The principles of psychology*. Chicago: The Great Books/Chicago University, 1952.

\_\_\_\_\_. *The writings of William James: a comprehensive edition*. Edited by McDERMOTT, John J. Chicago: Chicago University Press, 1977.

\_\_\_\_\_. *Pluralistic universe*. New York: Longmans, Green, and Co., 1909.

\_\_\_\_\_. *The varieties of religious experience: a study in human nature*. New York: Longmans, Green, and Co., 1902.

LEWIS, C. I. *Mind and the world order*. New York: Charles Scribner's Sons, 1990.

LEVINE, J. Materialism and qualia: the explanatory gap. In: *Pacific Philosophical Quarterly*, 64, p. 354-361, 1983.

LÉVI-STRAUSS, C. The structural study of myth. In: *The Journal of American Folklore*, v. 68, n. 270, Myth: A Symposium (Oct. – Dec.), p. 428-444, 1955.

MALACHOWSKI, A. James's Holism: the human continuum. In: *The Cambridge Companion to Pragmatism*. Edited by MALACHOWSKI, Alan. Cambridge: Cambridge University Press, 2013. p. 36-54.

MATURANA, H. R. Comment by Humberto R. Maturana: The mind is not in the head. In: *Journal of Social and Biological. Structures* 8(4): p. 308-311, 1985.

PEIRCE, C. S. *The Collected Papers of Charles Sanders Peirce*, volumes 1-6 edited by Charles Hartshorne and Paul Weiss, volumes 7 & 8 by Arthur W. Burks. Cambridge, MA: Belknap Press of Harvard University Press. 1931-1958. [Cited as CP followed by the volume number and paragraph number].

QUINE, W. V. and ULLIAN, J. S. *The web of belief*. New York: MacGraw-Hill Higher Education, 1978.

RYLE, G. *The concept of mind*. Oxford: Oxford University Press, 2009.

\_\_\_\_\_. *Dilemmas*. Cambridge: Cambridge University Press, 1964.

SELLARS, W. *Empiricism and the philosophy of mind*. Cambridge: Harvard University Press, 1997.

UEXKÜLL, J. von. *Teoria de la vida*. Madrid: Editorial SVMMA, 1944.

VARELA, F. J., THOMPSON, E. and ROSCH, E. *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge (MA): MIT Press, 1991.

VARELA, F. et al. *L'inscription corporelle de l'esprit: sciences cognitives*. Paris: Seuil, 1993.

\_\_\_\_\_, et al. *Naturaliser la Phénoménologie: Essais sur la phénoménologie contemporaine et les sciences cognitives*. Paris: CNRS Éditions, 1999.

WITTGENSTEIN, L. *Philosophical Investigation*. Translated by G. E. M. Anscombe. Oxford: Basil Blackwell, 1986.

\_\_\_\_\_. *Philosophical Remarks*. Edited by G. E. M. Anscombe and Heikki Nyman. Oxford: Basil Blackwell, 1998.