# LAWS FOR REVELATION. THE COVERING LAW ACCOUNT OF EXPLANATION AND THE REVELATION PROBLEM FOR PANPSYCHISM\*

# LEIS DA REVELAÇÃO. O MODELO DA COBERTURA POR LEIS E O PROBLEMA DA REVELAÇÃO PARA O PANPSIQUISMO

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**ABSTRACT** This research argues that if panpsychism adopts the so-called laws of metaphysics, then it will be better equipped to confront one of its most pressing challenges: the revelation problem. By appealing to the laws of metaphysics, it becomes possible to illuminate the problematic nature of the very assumptions underlying the revelation problem, thereby mitigating the urgency it poses for panpsychism.

**Keywords**: Phenomenal Consciousness. Panpsychism. The Revelation Problem. Explanation. Laws of Metaphysics.

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**RESUMO** Esta pesquisa defende que, se o panpsiquismo adotar as chamadas leis da metafísica, estará melhor preparado para enfrentar um de seus desafios mais urgentes: o problema da revelação. Ao recorrer a essas leis, torna-se possível esclarecer a natureza problemática das próprias pressuposições que sustentam o problema da revelação, mitigando, assim, a urgência que esse problema representa para o panpsiquismo.

**Palavras-chave**: Consciência Fenomenal. Panpsiquismo. Problema da Revelação. Explicação. Leis da Metafísica.

# 1. Introduction

This research argues that if panpsychism adopts the so-called laws of metaphysics, then it will be better equipped to address one of its most pressing challenges—the revelation problem. By appealing to the laws of metaphysics, it becomes possible to clarify the problematic nature of the very assumptions underlying the revelation problem, thereby mitigating the urgency it poses for panpsychism.

To pursue this objective, the research begins by offering a definition of panpsychism, emphasizing its central claim that subjects of experience, along with their experiences, are fundamental, ubiquitous, and intrinsic features of reality (section 2). The discussion then turns to the intrinsic nature of consciousness. The next section addresses the question: What initial reasons do we have to regard experience as an intrinsic property? A compelling reason is that, through our own experiences, we are positively and directly acquainted not only with the essential features of experience. This claim is known as *the revelation thesis* (section3). The research will argue that once the intrinsic nature of experience is secured by the revelation thesis, this very thesis also furnishes a strong basis for considering its negative implications for panpsychism—thereby leading to the formulation of *the revelation argument against panpsychism* (section 4).

This research offers reasons why panpsychism—given its explanatory presuppositions—ought to adopt the covering law account of explanation. For a panpsychist theory to succeed, it must offer an explanation of dependent subjects of experience grounded in the fundamental subjects of experience, thereby fixing them into a tree-like explanatory structure of fundamentality. However, achieving this explanatory goal requires meeting several specific criteria and conditions. The appeal to the notion of metaphysical law provides

the most compelling framework for understanding why a successful explanation of dependent subjects of experience satisfies these requisite criteria (section 5).

In contrast to strategies that attempt to address the revelation problem by modifying the thesis—often by introducing opacity into consciousness and thereby undermining the spirit of panpsychism—this research argues that adopting the covering law account of explanation enables panpsychism to preserve a standard, unqualified version of the revelation thesis. In doing so, it avoids the aforementioned difficulty while situating the thesis within a specific metaphysical framework of explanation. As a result, panpsychism is well-positioned to address the revelation problem (section 6).

Finally, this research briefly discusses a couple of issues that arise from panpsychism's adoption of the covering law account of explanation (section 7).

# 2. What is panpsychism?

Panpsychism is the view that mentality is both fundamental and ubiquitous within concrete reality (Alter & Nagasawa 2015; Blamauer 2011; Brüntrup & Jaskolla 2017; Seager 2020; Skrbina 2009). Within this framework, mentality refers to a highly specific notion closely associated with the domain of experience or phenomenal consciousness (Nagel 1974). An entity is said to be phenomenally conscious when it has a subjective experience—when there is something it is like to be that entity from the inside. Such an entity is referred to as a subject of experience. In other words, to be a subject of experience is to possess an inner mental life. A subject of experience would be "essentially for it to be for itself, in the familiar sense of this phrase according to which for a being to be 'for itself' is for there to be something it is like to be it, experientially". (Strawson, 2017, p. 80).

More specifically, panpsychism regards the *mental as fundamental*.<sup>2</sup> It holds that subjects of experience, along with their experiences, constitute a fundamental feature of concrete reality—commonly referred to as *fundamental subjects of experience*.<sup>3</sup>

<sup>1</sup> In contrast to panprotopsychism, the view according to which proto-mentality or proto-consciousness is both fundamental and ubiquitous within concrete reality.

<sup>2</sup> Here, and throughout this research, I use the term fundamental in accordance with its standard usage in contemporary analytic metaphysics. The idea is that an entity x is fundamental if and only if nothing grounds x—that is, x is ontologically independent. Additionally, x is fundamental if and only if nothing explains x (Tahko 2015).

<sup>3</sup> Depending on how the fundamental subject of experience is characterized, panpsychism may be understood either as micropsychism, which holds that elementary particles constitute the fundamental subjects of experience, or as cosmopsychism, which maintains that the universe as a whole is the fundamental subject of experience.

Panpsychism also holds that phenomenal consciousness is *ubiquitous*—a consequence that follows from its fundamental status (Blamauer, 2012). At the fundamental level of concrete reality, mentality is pervasive. Panpsychism is not at odds with the view that physical properties may constitute an additional set of fundamental features of concrete reality, coexisting alongside mental properties. Indeed, physics has identified instances of ontological independence among the properties of elementary particles—such as mass, spin, and charge. Every physical entity in the universe supervenes on these properties, rendering them ubiquitous. By the same principle, if mental properties are fundamental, they too must be widely instantiated.<sup>4</sup>

In addition, panpsychism acknowledges the strong correlation—identified by neurophysiology in conjunction with physics—between electrical activity and mentality in both human and non-human animal brains. Mental activity and electrical activity are deeply interconnected. However, within a panpsychist metaphysical framework, this connection is understood in a remarkably specific way: "The heart of experience, perhaps, is electromagnetism in some or all its forms; electromagnetism being just one expression of some single force whose being is intrinsically experiential, whatever else it is or is not." (Strawson, 2006b, p. 27). Mental activity and electrical activity are thus profoundly intertwined, in the sense that the former is regarded as the *intrinsic property* of the latter.<sup>5</sup>

4 In the case of ordinary objects—such as tables, computers, and rocks—it is not necessary that they instantiate mental properties; rather, they are composed of entities that do. If this were the case, it would not contradict the truth of panpsychism. Nevertheless, for the sake of simplicity, it is preferable to treat such objects as lacking mentality. But if mentality is truly ubiquitous, does this imply that every non-fundamental concrete entity instantiates mental properties? We have just recommended, for reasons of simplicity, that ordinary objects be regarded as lacking mentality. Is this a contradiction? In light of Seager's remarks, I do not believe it is:

The nature of the aggregation of consciousness may be very complex. It is part of the general problem of consciousness that we have no idea of how it might work. It certainly does not follow that all physical complexes will be conscious— that will depend on the details of how the elementary features of consciousness come together to form more complex states of consciousness. A simple analogy is electric charge: although the basic constituents, quarks and electrons more or less, are all possessed of electric charge it does not follow that all physical objects have an electric charge, simply because positive and negative charge can cancel each other out. (2010, p. 175).

By appealing to an analogy with electric charge, it becomes possible to dispel any apparent contradiction between, on the one hand, the claim that mentality is both fundamental and ubiquitous, and on the other, the fact that not all entities instantiate mental properties. The analogy does not appear to be strained, given that both electric charge and mentality are posited as fundamental and ubiquitous features of reality. It should therefore not be problematic if they exhibit a remarkably similar pattern of distribution and manifestation.

5 According to Denby (2006), some of our properties are purely inherent in us, solely based on the way we are (e.g., our mass, according to Newtonian physics). On the other hand, some properties arise from our interactions with the world (e.g., our weight). The formers are known as intrinsic properties, while the latter are referred to as extrinsic properties.

Taking all of the above into account, panpsychism is best understood as the view that subjects of experience, along with their experiences, are fundamental, ubiquitous, and intrinsic aspects of concrete reality.<sup>6</sup>

# 3. Intrinsic nature and revelation

Given the significance of this topic for the development of the present research, I now turn to examine—and place particular emphasis on—the third characteristic outlined above. What initial reasons do we have to regard experience as an intrinsic property?

Descartes, according to Seager, is the pioneering philosopher who advocated for the thesis that experience is an intrinsic property:

His skeptical worry that it was impossible to tell whether or not he was alone in the universe on the basis of the contents of his consciousness clearly suggests that my duplicates—even if the only thing in the world—would share all my states of consciousness. The philosophical problem of the external world and the coherence of solipsism entail that consciousness is an intrinsic property of things. (2006, p. 136).

Conceivable and logically consistent scenarios of solipsism suggest that experience could exist independently of any external factors or conditions. This entails that consciousness is an intrinsic property of things.

Mørch (2019) suggests that the inverted spectrum thought experiment can be used to show that color phenomenology extends beyond the relationships between colors and the physical properties they represent, or their similarities or differences to other colors in the spectrum. If the greenness of green persists even when all its relational properties are changed, as the inverted spectrum

- 6 Operating at a more fine-grained level, my sympathies incline, in the first place, toward panpsychism rather than panprotopsychism. Secondly, I favor a micropsychist version over a cosmopsychist version. Also, I prefer a constitutive version —whereby the relation between fundamental subjects of experience and dependent subjects of experience is established through a form of metaphysical determination— over an emergentist version —which construes such a relation in causal terms— of panpsychism (for more precise definitions, see the references provided in the corresponding section).
  - In spite of the foregoing, the purpose of the preceding exposition has been to preserve the greatest possible generality. In this respect, there would be no difficulty in allowing the various formulations of panpsychism present in the specialized literature to share, to a considerable extent, the developments set out in the previous section. This would include even panprotopsychism.

It is evident that each theory found in the literature presents both advantages and disadvantages. Nevertheless, for reasons of space as well as by methodological decision, I have chosen to concentrate specifically on panpsychism, since it is the problems of this theory that particularly command my attention. Despite its difficulties, I regard it as a theory better positioned than either physicalism or panprotopsychism. Even so, in the conclusion I shall devote some considerations to these, with the aim of interrogating their scope in light of the framework here defended.

thought experiment seeks to demonstrate, then greenness cannot be considered solely a relational property.

Undoubtedly, the existence of experience constitutes the most certain aspect of reality—more certain even than the existence of the external world. It is the only unquestionably real feature of concrete reality. My existence as a subject of experience is the sole certainty I possess. Consider any experience: whether it occurs in a dream or within the Matrix, it may fail to correspond to external reality. Yet this does not alter the fact that I am aware of undergoing an experience. In the Matrix, machines may deceive us about many things, but they cannot make us believe we are conscious when we are not.

The foregoing implies that experience cannot be illusory. To claim that experience is an illusion is, in fact, self-defeating. For instance, if one appears to feel pain, that very appearance is indistinguishable from actual pain. In such cases, it becomes impossible to draw a meaningful distinction between what *is* and what merely *seems*—between appearance and reality—because what seems *is* what is. Consequently, we may conclude that phenomenal consciousness is intrinsic, in virtue of the way in which various conscious experiences are directly given to us.

Another, particularly compelling reason for regarding experience as an intrinsic property is that, through our own experience, we are positively and directly acquainted with fundamental attributes of the mental essence of concrete reality in a manner that lacks a counterpart in the case of non-mental attributes of concrete reality. We possess not only a precise understanding of particular kinds of experience, in terms of what they are like for us—*i.e.*, their qualitative character—but also a general grasp of experience as such: every possible experience, by virtue of being experience, belongs to the same fundamental kind of stuff.

The foregoing points to a tremendously important question concerning experience: the having is the knowing (Strawson, 2013). This is also known as the revelation thesis (Johnston, 1992). According to this thesis, undergoing an experience, places us in an outstanding epistemic position, leaving only non-essential truths about the experience to be discovered, since the essence of the experience is revealed in the experience itself. The core idea is that if one has an experience, then one thereby knows the essence of that experience.

# 4. The revelation argument against panpsychism

The revelation thesis holds significant importance for the plausibility of panpsychism. On the one hand, it supports the validity of panpsychism: once

the intrinsic nature of experience is secured, this provides strong grounds for affirming its fundamentality and ubiquity (Eddington, 1928, pp. 258-260).<sup>7</sup> On the other hand, the thesis serves as the basis for the revelation argument against physicalism, thereby challenging the coherence of one of panpsychism's principal rivals. Accordingly, acknowledging the failure of physicalism lends further support to the plausibility of panpsychism.

The core of the revelation argument against physicalism can be stated as follows. On the one hand, if physicalism is true, then experience must have a physical essence (Lewis, 1995). On the other hand, according to the revelation thesis, undergoing an experience provides knowledge of its essence. Therefore, if experiences do in fact possess a physical essence, such an essence should be revealed to us in the very act of experiencing. Consider pain, a color, or a taste: merely by having these experiences, we should be in an outstanding epistemic position to grasp the complex and intricate story regarding the essence of the neurophysiological properties with which they are identified. But this is not the case. Once again, consider pain, a color, or a taste: we are directly and positively acquainted only with their intrinsic experiential essence. No physical essences are revealed to us. Experiences do not present themselves as having a physical essence. It follows, then, that physicalism is false. But what does all of this have to do with panpsychism?

7 The knowledge that physics provides about fundamental entities is abstract, purely formal, and structural. It informs us only about the purely extrinsic structure of concrete reality. This means it characterizes fundamental entities solely relationally (i.e., extrinsically), in terms of their causal relations to other entities. However, this picture does not provide any information about the intrinsic properties of the entities, if they exist, which are interconnected within this causal network. Ultimately, the picture of concrete reality that emerges is that of a vast causal network devoid of entities to relate.

Could concrete reality consist solely of relations without any entities involved in those relations? Is it nothing but structure? This would lead to a strangely insubstantial perspective of concrete reality, containing nothing more than structure and (causal and nomic) relations between empty placeholders. In other words, concrete reality collapses into an abstract reality (Briceño & Mumford, 2016).

A more attractive assumption, avoiding the aforementioned collapse, posits the existence of entities—*relatas*—that instantiate the structure, possessing their own inherent internal nature, namely, intrinsic properties. Therefore, relationships hold by virtue of something intrinsic about the *relatas*. But what is that intrinsic property? At this point, panpsychism presents a thought-provoking idea: considering that mental properties are the only type of intrinsic property with which we have any positive direct acquaintance, it is quite reasonable to speculate that there may be a profound connection between the unspecified intrinsic properties of physical entities and the recognizable mental properties. Our positive direct acquaintance with our mental states provides a reason to consider, rather than exclude, the possibility that the intrinsic properties of the physical are mental in nature (Russell, 1956, p. 153; Lockwood, 1996, p. 159).

Panpsychism postulates that experience occupies a fundamental position in concrete reality because it serves as the intrinsic property whose role is to be the ultimate basis for the vast causal network described by physics. Consequently, a significant connection exists between the fundamentality and intrinsicness of experience. Experience is fundamental due to its intrinsicness. Previously, it was shown that a significant connection exists between the ubiquity and fundamentality of experience. Experience is widespread due to its fundamentality. In this way, the three previously discussed characteristics of experience and their relationships become clear.

8 It goes without saying that there is an abundant body of literature that discusses in depth the multiple shifts and countershifts between physicalism and the revelation thesis. For reasons of scope and purpose, it is not

It is evident that certain non-fundamental, derivative entities instantiate mental properties. These entities are referred to as *dependent subjects of experience*. If panpsychism is true, it cannot disregard the instantiation of mental properties in, for example, humans, non-human animals, and maybe even plants (Segundo-Ortín & Calvo, 2023). Panpsychism must be able to account for such phenomena. Accordingly, the primary objective of panpsychism—and arguably the criterion by which its success should be measured—is to explain how experiential properties are instantiated in these entities.<sup>9</sup> A successful panpsychist theory will offer an explanation of dependent subjects of experience grounded in fundamental subjects of experience.<sup>10</sup>

Specifically, to (metaphysically) explain a thing is to explain the thing as such-and-such (Glazier, 2020). It's about explaining it in terms of some truths concerning its features in a manner that they shed light on its essence. In other words, explaining a thing is rendering it intelligible to reason by unfolding the thing's essence. This essence is folded out by citing some kind of network of internal explanatory relationships between that thing and the truths concerning its features, getting between the thing and its features in order to see the thing in terms of those truths. Additionally, in some cases, this essence is folded out by citing some kind of network of external explanatory relationships between that thing and other things. An explanation is fundamentally tied to citing and placing a thing within some kind of network of relations (Della Rocca, 2012). By doing so, a particular kind of non-causal priority is being addressed. The explanation I am referring to can also be approached as playing a role in the metaphysical project of making it intelligible how certain phenomena are 'brought to' from more fundamental phenomena by sorting them into an explanatory tree-like structure of fundamentality. This metaphysical project assumes that reality has a hierarchical structure ordered from the more fundamental to the dependent (Raven, 2015).11

possible for me to account for all the nuances of a debate that continues to unfold. Nevertheless, I refer to a series of works by Liu (2020; 2021) in which these issues are addressed, even showing how the revelation thesis continues to exert significant pressure on the most recent developments within physicalism (*grounding physicalism*). It is important to bear this in mind, given the central role that the revelation argument plays both in the critique and subsequent rejection of physicalism, as well as in the acceptance of panpsychism.

- 9 Within the context of panpsychism, the evaluation of the proposed explanation's suitability is often referred as the *combination problem* (James, 1989).
- 10 In that sense, it doesn't seem incorrect to me to consider panpsychism as a *constructional ontology* insofar as it serves to construct complexes from simples (Fine, 1991).
- 11 The above imposes certain constraints on the logic of explanation. Explanation is (1) *irreflexive* because it consists of supplying new information. Also, nothing explains itself. Explanation is (2) *transitive* because the explanation of the explanation of a phenomenon also explains the phenomenon. Circular explanations are prohibited because they are void, *i.e.*, explanation is (3) asymmetric. Asymmetry entails irreflexivity and is entailed by irreflexivity together with transitivity. Explanation is (4) *non-monotonic* because only what is relevant

In light of the foregoing, I aim to explore the implications of the type of explanation proposed in relation to the revelation thesis. More specifically, my focus lies on the consequences that arise—within the framework of the revelation thesis—from offering an explanation of a dependent subject of experience. To this end, let us consider the following passage from Goff (2006, pp. 57-59):

Consider a physical ultimate that feels slightly pained, call it LITTLE PAIN 1. Consider ten such slightly pained ultimates, LITTLE PAIN 1, LITTLE PAIN 2, etc., coming together to constitute a severely pained macroscopic thing, call it BIG PAIN. The pained-ness of each of the ultimates comes together to constitute the pained-ness of BIG PAIN: an entity that feels ten times the pain of each LITTLE PAIN. The severe pained-ness of BIG PAIN is wholly constituted by the slight pained-ness of all the LITTLE PAINS.

The type of explanation proposed entails that the pain experienced—as a phenomenally conscious mental state—by a dependent subject of experience is wholly constituted by the pains of a set of fundamental subjects of experience. This means that:

[...] what it feels like to be BIG PAIN is wholly constituted by what it feels like to be all the LITTLE PAINS [...] must be to suppose that BIG PAIN feels how all the LITTLE PAINS feel and feels nothing else.

In other words, if the pain experienced by a dependent subject of experience is wholly constituted by the pains of a set of fundamental subjects of experience, then the essence of the pain experienced by a dependent subject of experience is nothing more than the feeling of how all the fundamental subjects of experience feel their pain. Whatever constitutes a subject of experience is part of its essence. In this scenario, as the continuation of the quote demonstrates, there is no substantial difference:

If my experiential being were constituted by the experiential being of billions of experience-involving ultimates, then what it is like to be each of those ultimates would be part of what it is like to be me. I would literally feel how each of those ultimates feels, somehow all at the same time. Assuming that my experiential being is *wholly* constituted by the experiential being of a billion experience-involving ultimates, then what it is like to be me can be nothing other than what it is like to be each of those billion ultimates (somehow experienced all at the same time).

However, a discrepancy is noted. Our experiences reveal to us an essence that is entirely different from what it is supposed to be if we consider everything previously developed to be true. Namely, it has nothing to do with the truth of panpsychism and the merits of its explanation. Let's reconsider the case of pain and the subsequent generalization made:

BIG PAIN feels a certain way that all the LITTLE PAINS do not: that is, severely pained. But this surely cannot be right. My experience is of a three dimensional world of people, cars, buildings, etc. The phenomenal character of my experience is surely very different from the phenomenal character of something that feels as a billion ultimates feel.

The essence of all phenomenally conscious mental states of dependent subjects of experience is something totally distinct from the set of fundamental subjects of experience that wholly constitutes it. What is truly revealed, from the dependent subject of experience perspective, is a *unified* and *smooth* mental state associated with a *single* subjective phenomenal point of view, *their* point of view, and not any other, instantiating some specific concretely occurring experiential qualitative character. Therefore, its essence is this.

What is all of this about? It is, word for word, exactly the same revelation argument against physicalism. But now it takes the form of the revelation argument against panpsychism:

- a) The essence of a subject of experience is revealed to us in experience and introspection.
- b) If panpsychism is true, a dependent subject of experience is wholly constituted by a set of fundamental subjects of experience.
- c) Whatever constitutes a subject of experience is part of its essence.
- d) A set of fundamental subjects of experience is not revealed to us in experience and introspection.
- e) A set of fundamental subjects of experience is not part of the essence of a dependent subject of experience.
- f) A dependent subject of experience is not wholly constituted by a set of fundamental subjects of experience.
- g) Panpsychism is false.12

On one hand, given the truth of panpsychism, dependent subjects of experience should possess a composite essence. On the other hand, according to the revelation thesis, when one undergoes an experience, one gains knowledge of the essence of that experience. Then, by having an experience, one should be able to see through the experience to their composite essence. Consider

<sup>12</sup> This argument is a slightly modified version of the arguments presented by Chalmers (2017b) and Roelofs (2020).

pain, a color, or a taste; simply by having these experiences, we should be in an outstanding epistemic position to grasp the complicated and intricate story regarding how the set of the fundamental subjects of experience feels their respective mental states which constitutes the composite essence of our experience. However, this is not the case. Again, considering pain, a color, or a taste; we only have a positive direct acquaintance with its unified and smooth intrinsic experiential essence. So, from the perspective of dependent subjects of experience, the set of fundamental subjects of experience that constitutes them is not revealed, and hence, is not part of their essence. If is not part of their essence, then it does not constitute them. From the outstanding epistemic position that the revelation thesis implies, there is nothing compelling a dependent subject of experience to think that it is wholly constituted by a set of fundamental subjects of experience. There are no composite essences to be revealed. Dependent subjects of experience don't have composite essences. Therefore, panpsychism is false.

The dialectical context in which the discussion of the revelation thesis and the panpsychist theory is framed unequivocally demonstrates that the latter commits itself to the former. Consequently, there appears to be no impediment to doing the same with panpsychism: to apply the revelation argument against it, as has already been done. The revelation thesis is a double-edged sword. It is used both to demonstrate the truth of panpsychism (and to weaken its theoretical opponents) and to challenge its validity by showing its falsehood. This makes the revelation argument against panpsychism a particularly strong challenge to the theory. Given this situation, what is to be done?

# 5. The covering law account of explanation

Let's remember that in this research, I propose to argue in favor of the following claim: if panpsychism adopts the laws of metaphysics, then it will be well-equipped to address the revelation problem. But what are the reasons for panpsychism to adopt the covering law account of explanation? What are the laws of metaphysics?

At this point, if we consider what has been exposed, it is clear that panpsychism is an explanatory thesis. Even the revelation problem, to a certain extent, is nothing more than a problem derived from the viewpoint of the revelation thesis of the type of explanation that panpsychism presupposes to account for dependent subjects of experience.

To succeed, a panpsychist theory must provide an explanation of dependent subjects of experience grounded in the fundamental subjects of experience, fixing

them into an explanatory tree-like structure of fundamentality. Nevertheless, achieving this goal requires the explanation to fulfill several characteristics and requirements.

Explanation is closely tied to unification and manipulation (Schaffer, 2018). Explanation serves to reveal patterns and unify phenomena. Its role in unification consists of subsuming a particular case under a more general pattern by establishing generalizations. It is essential for these generalizations to be counterfactually robust; that is, they are non-accidental generalizations because they cannot merely happen to hold in our world. As for manipulation, explanation, by providing a handle on the phenomena, is related to answering 'what if things had been different' type of questions and a certain form of counterfactual intervention. The idea is that counterfactually modifying the value of one variable produces systematic changes in the value of another. This entails understanding how a phenomenon relates to a network of possibilities that include connections across both actual and counterfactual worlds, through which one can calculate the impact of both actual and counterfactual interventions.

Explanation exhibits general patterns associated with a specific modal import. The former follows from its insensitivity to the identities of the individuals involved (Wilsch, 2020). Consider the explanation: 'The broccoli B is colored *because* the broccoli B is green.' This explanation implies that the truth expressed by a sentence of the form 'x is green' *explains* the corresponding truth expressed by a sentence of the form 'x is colored.' To illustrate the modal import, consider again the explanation. It follows from this explanation that B's greenness entails, with the force of *metaphysical necessity*, B being colored. This generalization holds: if the truths expressed by a set of sentences sufficiently explain a fact, then those truths *metaphysically necessitate* the fact.<sup>13</sup>

Suggesting an association with the notion of *metaphysical law* is the best way to explain why explanation exhibits general patterns associated with a specific modal import. This is known as *the covering law account of explanation* (Wilsch, 2020).

Metaphysical laws can be thought of as universally quantified material conditionals.<sup>14</sup> Some examples of statements expressing metaphysical laws

<sup>13</sup> Typically, metaphysical modality has frequently been described as the widest, strongest, least constrained, or ultimate form of modality. The core idea is that metaphysical modality transcends the constraints of natural laws and is more substantive than logical-conceptual modality (Kment, 2014).

<sup>14</sup> Other descriptions exist for metaphysical laws, including being considered as an operator (Glazier, 2016). Regardless of the chosen characterization, the point I want to establish in this section of the research remains the same.

are ' $(\forall x)$  if x is green, then x is colored,' or ' $(\forall x)$  if x exists, then  $(\exists y)$  y is x's singleton,' and so on.<sup>15</sup>

Laws of metaphysics support generalization in the sense that if F(a) explains G(a), a metaphysical law determines G(a) because of F(a). But since laws have the form of a universally quantified material conditional, they do not mention a in particular. Specifically, they do not mention any particular. Laws are inherently general. Therefore, a metaphysical law determines any truth of the form G(x) because of the corresponding truth F(x). The particular instance of F(a) explaining G(a) occurs in virtue of the general instance of F(x) explaining F(x). It is the general instance that helps explain the particular instance. Consequently, it is sustained that  $\forall x (F(x) \supset G(x))$ , which is the form of the law. So, it becomes quite clear that generalization is supported by a metaphysical law that allows subsuming particular explanations under a more general pattern of explanation.

Once the generalization is established, it is easier to understand the metaphysical necessity imposed by the law. Once subsumed into a general pattern, because it is not an accidental generalization, if a property explains something, the explanation does not differ among the various instances of that property. The idea that an explanation does not differ among the various instances of a property is contained in the corresponding metaphysical law. The form of the law  $\forall x(F(x) \supset G(x))$  suggests that each particular instance will necessarily obtain with the specific modal force determined by the metaphysical law.

Because they are linked with metaphysical necessity, metaphysical laws determine identical outcomes under identical conditions across all metaphysically conceivable worlds. Hence, if a metaphysical law determines G(a) because of F(a), it does so across all metaphysically conceivable worlds. Consequently, in any conceivable world where F(a) together with a metaphysical law exist, G(a) will obtain.

We know that to avoid circular explanations, they must be asymmetric. And the notion of metaphysical law is the best way to explain why the explanation is asymmetric. This is because metaphysical laws have a direction built into them (Grajner, 2021). Their direction is determined by the specific form that the instance of the law takes. Their direction is due to expressing in their antecedents more fundamental truths than in their consequents.

<sup>15</sup> Since it is an analytical statement, the metaphysical law referred to in the color case does not seem to be a particularly good example; nevertheless, it is counted among the paradigmatic examples in the specialized literature (Grainer, 2021, p. 7; Wilsch, 2020, p. 427).

On one possible interpretation, the covering law account of explanation establishes that explanation is very similar to a deductive entailment. F(a) together with a law of metaphysics deductively entail G(a). Given that F(a) obtains and given a law of metaphysics L which accounts for the connection between F(a) and G(a), then F(a) together with L will deductively entail that G(a) obtains.

However, beyond those details, it's important to emphasize that the account leaves us with a tripartite structure of explanation. Indeed, explanations have the general tripartite structure of sources, links, results (Schaffer, 2016). Just as in the case of causation, the laws of metaphysics serve essentially the same function as natural laws in causation: metaphysically more fundamental facts typically produce less fundamental ones in accordance with the metaphysical laws, just as deterministic causes bring about their effects in accordance with the laws of nature. In these scenarios, the non-fundamental facts are explained by their grounds together with certain facts about the metaphysical laws (Kment, 2015). This structure will be crucial for what I intend to defend in this research.

It is beyond the scope of this research to argue each of these points in detail. However, what I am interested in highlighting is that panpsychism, by adopting the covering law account of explanation, will indeed provide a satisfactory explanation of dependent subjects of experience, as it meets all the characteristics and requirements for the type of explanation it aims to offer to be successful. The covering law account of explanation is justified for the case of panpsychism.

# ${\bf 6. \ The \ covering \ law \ account \ of \ explanation \ and \ the \ revelation \ problem}$ for panpsychism

First, let's consider that there are various approaches to address the challenge posed by the revelation argument. A response that I'm interested in considering, but whose details I will develop by contrasting it with my proposal, is to think about the differences that the revelation thesis can have in its application, which translate into distinct versions that supposedly undermine arguments against panpsychism while supporting arguments against

<sup>16</sup> Other responses could be to question one of the premises of the revelation argument against panpsychism, as has been done with premise c) (Goff, 2017). Or emphasize the limitations of the informational structure of experience. As individual events at the microscopic level are informationally inaccessible, they are experienced in a confused and blended manner. Each event makes a subtle difference to the quality of some element of the overall experience, but they do not stand out as single elements of it (Roelofs, 2019). All the responses are very interesting, but their issues are beyond the scope of this research; therefore, they cannot be addressed.

physicalism (Strawson, 2006a). So far, I have only assumed a rather standard and unqualified version of the revelation thesis.

Among other versions, the following can be stipulated:

The Partial Revelation Thesis

in the case of any particular experience, I am acquainted with the essential nature of the experience in certain respects, at least, just in having it. (Strawson, 2006a, p. 252).<sup>17</sup>

It is possible to consider the following solution to the revelation problem from this recently stipulated version:

It seems, then, that I can as a [...] panpsychist who endorses [the partial revelation thesis] suppose that one of the hidden facts about the nature of my experience—whose essential nature is partly revealed to me simply in my having it—is that it is somehow constituted—composed—of many other experiences. Nothing exists other than experience, on this panpsychist view, and in having an experience I am *ipso facto* acquainted with the essential nature of my experience; but it does not follow, on this view, that I know the whole experiential nature of the event that occurs when I have that experience. Acquaintance with something need not involve exhaustive knowledge of its nature, any more than direct contact with something need involve direct contact with all of it. (Strawson, 2006a, pp. 252-253).

The aforementioned words suggest that by adjusting the thesis of revelation to accept partial revelation, panpsychism can be safeguarded from the argument of revelation. This adjustment allows for the preservation of the truth of panpsychism while also acknowledging the existence of unknown facts concerning experience, particularly those related to its composition. However, this argumentative maneuver proves problematic for panpsychism.

Indeed, it may be counterproductive for the very panpsychist theory it seeks to protect, making it unstable. Let's consider the following: if we are acquainted with the essential nature of any particular experience in certain respects, at least, just in having it, then there are other respects of which we are not acquainted. From the transparency of a vivid experience, we now introduce certain characteristics of opacity into it.

17 The other versions are (Strawson, 2006a, pp. 251-252):

The General Revelation Thesis

I am acquainted with the essential nature of experience generally considered — i.e. with whatever all possible experiences have in common just insofar as they are indeed experiences — just in having experience.

The Local Revelation Thesis

In the case of any particular experience, I am acquainted with the essential nature of that particular experience just in having it.

The Full Revelation Thesis

In the case of any particular experience, I am acquainted with the whole essential nature of the experience just in having it.

Numerous uncertainties arise on this matter. Can we access these respects through means other than experience and revelation? Are they forever inaccessible to us? Are these respects experiential in nature? It is plausible and does not seem to contradict the proposed revelation thesis that this arises from the innate and enduring capacities of the human condition. This is related to the cognitive and neurological processes involved in experience. Therefore, it is not an unreasonable assumption to suggest that humans are not acquainted with these respects of experience precisely because they are cognitively closed to them, rendering them unable to develop any positive understanding (McGinn, 1989). Much like how a pig is ill-equipped to grasp Russian literature, humans are similarly unequipped to acquaint themselves with this respect of experience.

Below, I will show, among other things, how the previously mentioned problems do not arise if panpsychism adopts the covering law account of explanation. To accomplish this, two issues need to be considered: first, as mentioned earlier, the tripartite structure inherited by this approach, and secondly, the unilateral nature of the revelation thesis, and thus, the revelation argument.

The tripartite structure inherent in the covering law approach enables me to delineate the following distinction between *full* and *partial* explanation. The distinction hinges on the role played by the elements constituting the explanation of a phenomenon. Depending on this role, we may have either a full or partial explanation. More specifically, the difference lies in the metaphysical contribution of each element to the explanation. When we affirm that  $\Delta$ , as a set of facts, collectively explains [p], we mean that only  $\Delta$  explains [p]. If this is the case, then we possess a complete explanation. In other words, if nothing further is required, if nothing beyond  $\Delta$  needs to be added to account for [p], then a complete explanation is at hand. Any subset of  $\Delta$  serves merely as a partial explanation of [p] if it contributes to its elucidation. A partial explanation is one that lacks at least one element to provide a full explanation of the phenomenon.<sup>18</sup>

Consider the following example: the fact that the set {Spinoza, Leibniz} exists is explained by the fact that Spinoza exists. But given that it is metaphysically possible that Spinoza exists without Leibniz, and hence without {Spinoza, Leibniz}, it is not metaphysically necessary that {Spinoza, Leibniz} obtains if Spinoza does. It is not metaphysically necessary that {Spinoza, Leibniz} obtains if Spinoza does because the fact that Spinoza exists is a partial

<sup>18</sup> Generally, partial explanation is defined in terms of full explanation: [q] partially explains [p] if and only if [q] and other independent facts fully explain [p].

explanation of the fact that the set {Spinoza, Leibniz} exists. This is not the case when it is metaphysically necessary that {Spinoza, Leibniz} obtains if both Spinoza and Leibniz do because the fact that Spinoza exists and the fact that Leibniz exists are a full explanation of the fact that the set {Spinoza, Leibniz} exists. The recent example focuses on the role played by the elements constituting the explanation of a phenomenon, that's why in one case (full explanation) nothing further is required, whereas in the other case (partial explanation), it does. This is why, in the case of a full explanation, no further elements are required, while in the case of a partial explanation, additional elements are required.<sup>19</sup>

With the distinction in mind, how does the tripartite structure of explanation fit into the context of panpsychism and revelation? The type of explanation envisioned by panpsychism concerning dependent subjects of experience is a full explanation. However, paradoxically, if panpsychism adopts the laws of metaphysics as it does here, then the set of fundamental subjects serves only as a partial explanation. Only a set of fundamental subjects of experience fails to explain a dependent subject of experience. In the absence of a metaphysical law, there's no link between the two, they are simply two disconnected things. It is in the presence of laws that fundamental subjects of experience connect and thus explain a dependent subject of experience. The linkage between them is backed by a metaphysical law, acting as mediators or facilitators. In other words, a full explanation requires a law. This also implies that a law by itself isn't sufficient for a full explanation.

The full explanation for a dependent subject of experience is provided by the conjunction of the set of fundamental subjects of experience with the corresponding metaphysical law. Let  $\Delta$  represent this conjunction. Therefore, when we claim that  $\Delta$  fully explains the dependent subject of experience, we mean that  $\Delta$  fully explains it. Nothing further is required, nothing beyond  $\Delta$  needs to be added to account a dependent subject of experience.

The revelation thesis postulates that the essence of experience is given by experiences. Consequently, we understand consciousness to be an intrinsic property. Because consciousness is an intrinsic property, it cannot be solely considered a relational property, as it could exist regardless of external factors or conditions, even if all its relational properties are changed. In other words, the revelation thesis focuses solely on the phenomenal aspects of reality, disregarding any non-phenomenal relations or structures that fundamental

<sup>19</sup> One can observe the close connection between metaphysical modality and full explanation, unlike in the case of partial explanation.

subjects of experience may instantiate. This is the sense of the unilateral nature of the thesis.

Considering how both the metaphysical law and the subjects of experience contribute metaphysically to the explanation, and given the unilateral nature of the revelation thesis, I can postulate that there's no need to stipulate another version of the revelation thesis. Now, all that is required is to consider it within the explanatory framework we presented. This is crucial because it immediately delimits, without constraining, the scope of revelation. In other words, it fully acknowledges its realm of application while ensuring it remains within those bounds. After all, revelation is solely concerned with the phenomenal aspects of reality, avoiding the introduction of other elements. This allows me to circumvent the previously mentioned problem.

What I'm trying to express here is that there's no necessity to introduce opacity into consciousness by *downgrading* the revelation thesis in response to the revelation argument against panpsychism. There is no opacity within experience that explains its composite essence. While the revelation thesis cannot account for the metaphysical law because it is beyond its scope, fundamental subjects of experience are merely a partial contribution to the full explanation of dependent subjects of experience, a distinction that the revelation thesis fails to address. Let's explore this further in detail.

We may ask ourselves the following question: What reasons do we have to consider metaphysical law in this context as a phenomenological aspect of reality? If there were compelling reasons to do so, if metaphysical law inherently belonged to the phenomenal realm, then it would seem plausible to consider it accessible through revelation, as if it were an integral part of our experiences. Conversely, it would also make sense to regard it as an opaque aspect of experience, which is inaccessible. However, there is no evidence to suggest that metaphysical law possesses a phenomenological nature. In that case, regardless of how we conceptualize the law, it makes no sense to assume it could be revealed or treated as an opaque fact of experience. It simply does not belong to the realm of experience. Revelation deals with a specifically phenomenological realm unrelated to metaphysical law. Thus, there is no contradiction in acknowledging that the law is not revealed through revelation. There is no need to modify the thesis or accept its adverse implications. Accordingly, it is entirely justifiable to affirm revelation as it stands while preserving the law. By neglecting the realm of metaphysical law, which is part of the full explanation of dependent subjects of experiences, it becomes evident that the composite essence of these subjects will not appear through revelation.

In the case of fundamental subjects of experience, I want to illustrate my point with the following scenario:

a double-slit experiment in which repeated firings of a laser cause an interference pattern to appear on a screen. This is a quantum effect which cannot be understood from a classical perspective. My claim is that information about the causes (the firings of the laser) is not enough to understand *why there was an interference pattern*. For that one also needs information about the laws (the quantum dynamics governing light), to reveal how the causes and the effect are connected. (Schaffer, 2018, p. 11).

I believe the scenarios share similarities because, just as information about the causes is not enough to understand why there is a pattern, requiring information about the laws to reveal how the causes and the effect are connected; similarly, phenomenal information from the revelation thesis concerning a set of fundamental subjects of experience is not enough to understand why there is an explanation, requiring information about the laws of metaphysics to reveal how fundamental subjects of experience and dependent subjects of experience are connected. In this scenario, the revelation thesis holds a similar relationship to the explanation of dependent subjects of experience as the classical perspective does to the quantum effect.

Due to the unilateral nature of the revelation thesis, it fails to recognize the tripartite structure inherent in the covering law approach. Consequently, it does not facilitate a more fine-grained understanding of the metaphysical contribution made by fundamental subjects of experience to the explanation of dependent subjects of experience. One cannot distinguish between a full and a partial explanation. This impedes the proper consideration of the precise role these subjects play in a full explanation. In light of this, the conclusion of the revelation argument against panpsychism is obvious. It is evident that the argument will show that the set of fundamental subjects of experience does not explain a dependent subject of experience. However, this conclusion arises not from a necessity to introduce opacity into consciousness by downgrading the revelation thesis, but rather from what has been recently indicated.

# 7. Conclusive Remarks

To conclude, I would like to comment on a couple of issues. I mentioned that one approach to address the problem is to stipulate other versions of the thesis undermining arguments against panpsychism. However, this would entail introducing opacity into consciousness, which is entirely contradictory to the spirit of panpsychism and the thesis in question. Nonetheless, if panpsychism adopts the covering law account of explanation, it enables me to uphold a

rather standard and unqualified version of the revelation thesis, thus avoiding the previously mentioned problem while being contextualized within a specific metaphysical structure of explanation. Consequently, panpsychism is wellequipped to address the revelation problem.

Albeit seemingly paradoxical, the proposed panpsychism effectively aligns with what is established by the revelation argument. That's why I mentioned the obviousness of the results in both cases (both in the set of fundamental subjects of experience and in metaphysical law). However, the fact that the revelation thesis shows that dependent subjects of experience do not possess a composite essence does not necessarily imply that these subjects do not possess it. It is important to recall that the thesis is circumscribed to a specific realm of reality, which does not allow it to consider certain nuances. Therefore, where the argument believes it finds a flaw in panpsychism, rendering it false, we now know that this is only an appearance. There is no need to introduce opacity to consciousness. Thus, we have at our disposal a version of panpsychism unaffected by the argument; instead, it elucidates the conclusions of an argument that was intended to refute it. This mitigates the urgency of an argument that initially seemed to be a major obstacle for panpsychism.

I can also reflect on the argument itself, making its assumptions explicit. At first glance, the argument in question makes sense because it presupposes a specific metaphysical contribution in explaining dependent subjects of experience by fundamental subjects of experience. It is previously assumed that the set of fundamental subjects of experience fully explains the dependent subject of experience, and subsequently the argument proceeds. It is under this presumption that the argument concludes that dependent subjects of experience lack a composite essence, demonstrating the falsity of panpsychism. However, once the assumption supporting the argument is explicitly stated, it loses much of its argumentative strength, regressing. Now we understand that only half of the story is revealed, but this is because the phenomenal represents only a partial aspect of reality. This means that there is nothing in the foundations of panpsychism that commits it to the claim that dependent subjects of experience are fully explained only by fundamental ones.

Finally, I will briefly address the following question.<sup>20</sup> We have seen that the revelation problem directly affects physicalism. There is no difficulty

<sup>20</sup> This point to be addressed was brought to my attention by the anonymous refereeing of the journal, to which I am deeply grateful, since its comments have only contributed to significantly improving the quality of this research. Nevertheless, I must caution, precisely for that reason, that the reflection presented here is rather tentative, for the core of the issue under consideration far exceeds—although it is closely related to—the purpose of the present research.

in considering that it might also extend to neighboring theories such as panprotopsychism. That is to say, by having experiences we should be in an outstanding epistemic position to grasp the complex and intricate story regarding the essence of the proto-phenomenal entities with which they are identified. But this is not the case, which renders panprotopsychism false.

Now then, one may ask: could the explanatory framework outlined in this research also be adopted by these theories? And, if so, what position would panpsychism occupy as a result?

At the outset, I do not discern a negative answer to the first question. I see no contradiction in both physicalism and panprotopsychism adopting the covering law account of explanation and thereby achieving a deeper understanding of the metaphysical contribution made by fundamental entities to the explanation of dependent subjects of experience. Thus, all the advantages identified throughout this research that panpsychism gained by adopting the explanatory framework in question are likewise transferred to physicalism and panprotopsychism. Both theories, in this way, would be better equipped to confront the revelation problem, thereby eliminating all the force of this problem against them. One might say, then, that a kind of stalemate arises between the theories in question, which would thereby answer the second question. This could lead proponents of these theories to believe that what is proposed in this research, as in the case of panpsychism, mitigates the urgency of an argument that initially seemed to be one of the major obstacles for physicalism and panprotopsychism.

However, I wish to argue briefly that, even if physicalism and panprotopsychism were to adopt the explanatory framework outlined here, this would not undermine the force of the revelation problem against them, since the problem they face lies at the base. This is due to the fact that a conflict arises with the other aspect of the argument developed in this research: the absence of any need to downgrade the revelation thesis.

By not downgrading the revelation thesis, what is revealed remains of a phenomenal nature. This means that in each episode of experience something essential about those episodes is revealed to us—something of a phenomenal nature. And this comes into tension with the fact that both physicalism and panprotopsychism are committed to the thesis that fundamental entities are, ultimately, wholly and essentially non-experiential phenomena.<sup>21</sup> This is the

<sup>21</sup> In the case of physicalism, the previously stated observation appears as something practically constitutive of its very definition. By contrast, with respect to panprotopsychism, the matter is not so immediate, and certain doubts may arise in this regard; to clarify them, it is worth considering the following: "[...] protophenomenal properties are special properties that are *not phenomenal* (there is nothing it is like to have a single protophenomenal property) [...]". (Chalmers, 2017a, p. 31). Emphasis mine.

problem they face at the base. Neither of these theories can account for the fact that in conscious mental states something essentially phenomenal is revealed to us. And this occurs precisely because they lack the ontological foundation required to explain it. It is more intuitive to think that something essentially phenomenal appears to us, insofar as its constituents are themselves phenomenal, as panpsychism maintains.

The framework inherited from this research is not sufficiently favorable to either of the two theories in question because, upon closer reflection, it does not change the fact that what still remains to be explained is precisely the same difficulty that has constituted the problem from the very beginning for those theories that postulate a breach in reality between wholly experiential and wholly non-experiential portions of it: namely, closing the gap between them. How could a wholly non-experiential source, and a link of that kind, result in something entirely phenomenal? This seems to indicate that no genuine progress has been achieved on the matter. In this respect, the circumstances that initially motivated the adoption of panpsychism remain fully in force. Therefore, the supposed stalemate does not hold. Physicalism and panprotopsychism do not occupy the same position as panpsychism; the latter still retains an advantage.

# Declaración de disponibilidad de datos:

Todos los datos generados o analizados se incluyen en este artículo publicado.

### Conflictos de intereses:

El autor declara no tener ningún conflicto de intereses.

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