How to Understand Russellian Panpsychism

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Abstract

Russellian Panpsychism or Panpsychist Russellian Monism (PRM) presents a new perspective on the ontological status of phenomenal consciousness, acknowledging its reality at the fundamental level of existence. Diverging from physicalism, PRM upholds the existence of phenomenal consciousness without disrupting the uniformity of nature, a departure from dualism. PRM posits a symbiotic relationship between mental and physical entities, asserting that the former provides intrinsic foundations for the latter, which are structural. This raises a pivotal inquiry: how does PRM reconcile these distinct realms? Is it a form of property dualism, recognizing two fundamental entity categories, or does it propose the primacy of mental properties with physical reducibility? Examining prevalent interpretations of PRM as dualistic or idealistic, this paper contends that neither aligns with PRM's criteria for ontological monism, where only one fundamental entity type exists. Instead, it advocates for a dual-aspect monism framework, portraying the mental and physical as two authentic facets of a singular entity or property. Through a thorough analysis, the paper demonstrates how this dual-aspect interpretation harmonizes with PRM's foundational principles, providing a robust resolution to the mental-physical dichotomy while upholding ontological monism. The conclusion explores the implications and contributions of this framework to the metaphysical discourse on consciousness.

1. Introduction

The existence of phenomenal consciousness is undeniably evident. In the words of Galen Strawson (2006b: 3), "nothing in life is more certain than" our mental states like our phenomenal experiences such as seeing colors, feeling pain, hearing music, and tasting flavors. etc. Yet, a perplexing question arises: how do such mental states appear in the physical world, a realm distinct from the domain of phenomenal reality? A very recent effort to tackle this question and a prospective theory that has garnered significant attention is Panpsychist Russellian Monism or Russellian panpsychism, PRM henceforward. This theory, as the name indicates, is a panpsychist version of Russellian Monism. Panpsychism is a view according to which, phenomenal consciousness or experience is, ontologically speaking, fundamental and ubiquitous.² This

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² See: Goff, Seager, and Allen-Hermanson (2022).

implies that all the fundamental building blocks of reality, entities like quarks and leptons, have experiential dimensions, signifying that there is, for example, "something that it is like" to be a quark. It is worth noting that the category of fundamental concrete entities typically encompasses at least the ultimate particles or fields discovered in physics while excluding most everyday objects such as tables, chairs, and rocks. Therefore, panpsychism doesn't necessarily extend mentality to ordinary objects like tables and chairs etc. (Strawson 2006b: 26).³

Russellian Monism, inspired by Bertrand Russell (1927/2023), particularly his book *The Analysis of Matter*, accepts that physics provides a detailed account of the relational and extrinsic behaviors of entities but not their intrinsic nature, highlighting the need for categorical properties⁴ underlying physical relations. Hence, refuting pure physicalism,⁵ Russellian Monists contend that the natural world can't be entirely captured by physics alone. Instead, they assert that fundamental reality goes beyond nomico-mathematical concepts and distinguishes between pure physical properties defined by physics and the hidden categorical characteristics underpinning these properties. These categorical elements, call them 'inscrutables,'⁶ serve as the foundation for the relational properties described by physics (Alter and Nagasawa 2015: 425). Russellian monists, however, differ in their views on the most suitable candidates for

³ Attributing experiences to fundamental particles like quarks may be considered problematic. One might inquire how we can comprehend such experiences if they do indeed exist. However, it's important to recognize that this question does not pose a significant challenge to panpsychism. Consider Nagel's (1974) classic inquiry regarding "what it's like to be a bat." This query centers on the notion that we can reasonably contemplate the existence of a subjective experience associated with being a bat, even if we lack a precise understanding of the exact nature of that experience. It is plausible for one to argue that we implicitly possess some degree of insight into what it's like to be a bat in a broad sense, suggesting that bats may possess desires, beliefs, or even experience pain, for instance. Our limitation primarily stems from not having a comprehensive grasp of the specific qualia associated with their sonar navigation.

⁴ Russellian monism is built upon a dichotomy between structural/relational properties and inscrutables, which serve as the non-relational foundations of these structural properties. However, among Russellian monists, there is disagreement regarding the interpretation of this distinction. (See Alter and Nagasawa 2012: 72). Some (see Pereboom 2011, 2013, 2015) advocate for framing Russellian monism in terms of the intrinsic versus extrinsic dichotomy, while others (Chalmers 2015, Goff 2017) argue that differentiating between categorical and dispositional factors elucidates the central dichotomy more effectively. Although these two interpretations are technically different and may steer Russellian monism in different directions, the difference does not affect the goal pursued in this paper. Therefore, I use them interchangeably: 'intrinsic' and 'categorical' refer to the non-structural parts, while 'extrinsic' and 'dispositional' refer to the relational and structural ones.

⁵ Pure physicalism, a term borrowed from Philip Goff (2017: 4), posits that the complete nature of fundamental reality can, in principle, be fully described using the vocabulary of the physical sciences.

⁶ This term coined in (Montero 2010) refers to conceivable features of the world that underlie the intrinsic/categorical foundation for the physical structure and relationships elucidated in the field of physics. "To be sure, inscrutables, as I have defined them, are inscrutable, as it were, to physics. But they are inscrutable to a physics that tells us about only the purely structural features of the world" (Montero 2010:79).

inscrutables. Some,⁷ aligning with physicalist doctrine within Russellian Monism, argue that inscrutables should be seen as a unique class of physical property. Others⁸ believe that inscrutables are neutral properties, distinct from both the physical and mental realms, yet forming the foundation for both. Additionally, some⁹ propose that inscrutables are protophenomenal properties, which themselves lack phenomenality but, when combined, give rise to phenomenal properties.

According to PRM, inscrutables are entities with a phenomenal nature. From this perspective, the fundamental building blocks of the concrete universe possess phenomenal consciousness or experiential qualities, forming the bases for and metaphysically explaining the experiences observed in humans and animals. Here I assume that PRM is more defensible than other forms of Russellian Monism. However, delving into the detailed reasons for this preference lies outside the purview of this paper.¹⁰ In short, I would note that within the framework of PRM, inscrutables are not enigmatic or mysterious; rather, they are, in some way, experiential and phenomenal properties that we have some sort of familiarity with.¹¹

Additionally, in the philosophy of mind and metaphysics of consciousness, PRM provides a unique solution to the mind-body problem by integrating consciousness within the physical realm (Alter and Nagasawa 2015: 422). This makes PRM more favorable than physicalism and dualism. Physicalists believe everything is grounded in the physical domain, meaning mental properties are either reducible to or realized by physical brain states.¹² Dualists, in contrast, argue that mental and physical states belong to distinct ontological categories, asserting the irreducibility of mental entities.¹³ However, as has been widely discussed in the last decades, both perspectives face significant challenges. Dualism struggles with the interaction problem, questioning how mental entities can influence physical actions without violating the causal closure of the physical realm.¹⁴ This issue undermines the causal efficacy of mental entity, questioning how mental states can influence actions that appear purely physical. Moreover, a

⁷ See: Stoljar (2006, 2014), Pereboom (2011, 2014), Montero (2010, 2015).

⁸ See: Holman (2008), and Coleman (2014, 2017).

⁹ See: Chalmers (2015).

¹⁰ See: Mørch (2014, Chapter 1).

¹¹ See: Alter and Coleman (2019).

¹² See: Poland (1994:18).

¹³ See: Robinson (2023).

¹⁴ See: Papineau (2001).

form of dualism that restricts the attribution of mentality to certain complex animals, such as humans, runs afoul of the principle of uniformity in nature. It seems unintelligible how something mental can emerge from something physical, given that they are fundamentally distinct in nature and its mysterious how they can interact.¹⁵ Physicalists, in contrast, disregarding our common-sense intuition about the reality of phenomenal realm,¹⁶ face the 'explanatory gap' between physical and mental states, as it is conceivable that a physically identical world could lack phenomenal consciousness.¹⁷ This gap seriously challenges the idea that the mental can be explained in terms of merely physical, requiring an explanation from physicalists.

PRM, unlike dualism, aligns well with the causal closure of the physical realm and rejects the brute emergence of mental entities. Furthermore, unlike physicalism, PRM does not face the explanatory gap because it does not need to explain the mental in terms of the physical. In this way, it combines the strengths of physicalism and dualism, addressing their weaknesses, and maintains a coherent stance preferable to both.¹⁸ The explanatory power of PRM pivots on the idea that a purely physical description of the universe falls short of completeness. Instead, it is the combination of the physical and the mental that can comprehensively encompass the foundational basis for nomico-mathematical/relational/dispositional structure, thereby shedding light on how complex-level phenomenal properties appear within the physical realm.

¹⁵ See: Strawson (2006a, p. 18).

¹⁶ The existence of phenomenal consciousness is undeniable. To support this, Strawson invokes Cartesian certainty, asserting that the presence of the phenomenal is more certain than any other fact (Strawson 2006b: 3). Likewise, John Searle has contended that rejecting the phenomenal as a mere illusory appearance is self-defeating, as "where consciousness is concerned, the existence of the appearance is the reality" (Searle 1997: 112).

¹⁷ Chalmers introduces the conceivability argument, which he and Kripke (1980) have presented in various forms. These arguments, along with Jackson's knowledge argument (1986) and the explanatory argument, rooted in either the explanatory gap as described by Levine (1983) or the hard problem as proposed by Chalmers (1996), are widely regarded as the primary anti-physicalist arguments. Chalmers contends that these arguments share a common theme: they underscore an epistemic gap between the mental and the physical. They assert that this epistemic gap is inherently insurmountable – no amount of physical information can make zombies inconceivable or resolve the explanatory gap or the hard problem. Consequently, these arguments suggest that epistemic gaps, resistant to closure in principle, necessitate an explanation involving an ontological gap, implying that the properties or entities in question are indeed distinct. See Chalmers (2006).

¹⁸ Chalmers argues that this argument can be framed as a Hegelian synthesis between the thesis of physicalism and the antithesis of dualism, with panpsychism emerging as the synthesis. Alternatively, at the argumentative level, the thesis corresponds to the causal argument for physicalism (and against dualism), the antithesis aligns with the conceivability argument for dualism (and against materialism), and the synthesis takes the form of the Hegelian argument for panpsychism. Essentially, this argument presents the two most robust cases for and against physicalism and dualism while advocating for a form of panpsychism that incorporates the merits of both positions and avoids their shortcomings (See: Chalmers 2015).

Given the conceptual distinction between the mental and physical realms and PRM's emphasis on these two distinct facets of reality, a crucial question arises: How does PRM integrate these two distinct realms? Should we consider PRM as a form of property dualism, positing the existence of two fundamental categories of entities? Alternatively, is there only one fundamental property, with the other being metaphysically reducible to it? Or do the mental and the physical represent distinct facets of a single entity with two aspects? Each of these interpretations can potentially steer PRM in different metaphysical directions. Consequently, it becomes imperative to delve into how the physical realms within the PRM metaphysical framework stands as a pivotal subject. Despite its significance, it has received limited serious examination. In the following sections of this paper, I undertake the task of addressing this question to ascertain whether PRM can offer a distinctive approach to reconciling the mental and the physical within a monistic framework. While considering various potential answers, I argue why each of them falls short of meeting the criteria for PRM as a form of ontological sense.

Before delving further, it is essential to establish two key desiderata concerning the metaphysical nature of PRM: First, PRM should be acknowledged as a version of ontological monism or kind monism, signifying the presence of uniformity in the world with only one category of entities.¹⁹ Secondly, PRM should distinguish itself from the main traditional theories, namely physicalism, dualism, and idealism, to maintain its theoretical novelty.

2. PRM: Dualism in Disguise

Alter and Nagasawa (2015) define PRM as a view in which "the phenomenal and the physical are deeply intertwined—more so, at least, than traditional interactionist dualism allows. But there is no attempt to reduce the phenomenal to the physical, at least not in the manner of traditional versions of physicalism (or materialism)" (Alter and Nagasawa, 2015: 421). Similarly, Chalmers (2010) acknowledges that PRM may be viewed as a form of property dualism in disguise

¹⁹ Type Monism can be distinguished from both Token Monism and Priority Monism. Token Monism posits that, from an ontological perspective, only a single object exists in the world. For example, Terence Horgan and Matjaž Potrč (2009) advocate for Token Monism, which asserts the existence of a sole concrete object they refer to as "the blobject." Kind Monism also differs from Priority Monism, as advocated by Jonathan Schaffer (2010). Priority Monism posits that there is only one fundamental entity in the world, which is the entire cosmos, while all other existing entities are considered non-fundamental and dependent on the whole cosmos.

because, akin to property dualism, PRM posits a distinction between physics and phenomenal experience, wherein phenomenal experience encompasses properties, aspects, or natures that extend beyond the structural and functional dynamics of physics (Chalmers 2010: 135). This implies the existence of phenomenal properties that are not merely reducible to the structural and functional properties of physics, aligning with a broad definition of property dualism: Fundamental property dualism which regards conscious mental properties as basic constituents of reality on a par with fundamental physical properties such as electromagnetic charge (Van Gulick, 2004). Correspondingly, it seems logically possible that everything has both fundamentally mental and fundamentally physical properties.²⁰ This version of property dualism²¹ posits the existence of two fundamentally distinct types of properties in the world. According to this perspective, there exist, from an ontological standpoint, two categories of entities: phenomenal properties and physical properties.²²

²⁰ In Chalmers' terminology, PRM is categorized as a form of Type-F monism, which he defines as a perspective where "consciousness is constituted by the intrinsic properties of fundamental physical entities, specifically the categorical bases of fundamental physical dispositions" (Chalmers, 2010, p. 133).

²¹ This view is different from emergent property dualism, criticized earlier, which holds that phenomenal properties only emerges in certain complex systems like human brain to be the physical area that exhibits both physical and mental properties (Zimmerman 2010: 120). As opposed to emergent version of property dualism, property dualist interpretation of PRM does not suffer from the unintelligibility of mental emergence in a physical universe, as both mental and physical properties are fundamental and ubiquitous.

²² In this dualist interpretation of PRM, it is assumed that phenomenal properties and physical properties are both fundamental, and one cannot be reduced to the other. However, a concern arises: as a version of Russellian monism, PRM posits that phenomenal properties serve as the categorical bases for physical properties, which are themselves relational or dispositional. This might suggest that categorical properties are more fundamental than physical properties, thus challenging the idea that they are equally fundamental. Metaphysical fundamentality is typically associated with the concept of grounding or ontological dependence, where non-fundamental entities, metaphysically speaking, are nothing over and above the fundamental ones (see McKenzie, 2022). Although some, like Alter and Nagasawa (2015), define Russellian monism as a view in which relational properties (i.e., physical ones) have categorical grounds, they do not always clarify this relationship in a strong metaphysical sense, where the former is entirely grounded in the latter. Acknowledging a grounding relation in a metaphysical sense between mental and physical properties could imply that Russellian monism veers towards idealism, as discussed in the third part of this paper. However, this is not a necessary conclusion. One can still maintain that both physical and mental properties (or inscrutables, if not adopting a panpsychist view) are fundamental. It is plausible to argue for different levels of fundamental properties, where one level is more fundamental than another. Those who wish to defend this position must acknowledge a specific ontology and theory of fundamentality where reality and fundamentality can admit degrees within a hierarchical framework-where some fundamental properties are more fundamental than others (see: McDaniel 2013, Aleksiev 2024, among others). Alternatively, that multiple levels of fundamental properties coexist in the same level without one being subordinate to the other. Put it differently, in this view, even if one type of property provides a categorical basis for the other, the concrete world still requires both physical and mental properties together, encompassing both relata and relations at the fundamental level. In this sense, a Russellian monist can coherently hold that both categorical and dispositional properties are fundamental, even if one serves as the categorical bases for the other.

Considering PRM as a robust form of property dualism may indeed align with its primary motivations, which aim to address the ontological status of phenomenal consciousness and provide an intrinsic/categorical basis for physical properties. However, several concerns diminish the attractiveness of this interpretation. The foremost concern is that this viewpoint directly contradicts the earlier-established desiderata. PRM is expected to represent a novel and unique theory while maintaining the advantage of ontological monism. Ontological monism is theoretically more favorable than any form of ontological dualism due to its inherent parsimony and theoretical simplicity.

Furthermore, given that everything possesses both mental and physical properties, and these two are fundamentally distinct in ontology, the connection between mental and physical properties is either contingent or necessary. The contingency thesis implies that while mental and physical properties are intertwined in the actual world, there exist possible worlds where physical properties have different intrinsic qualities that are not mental. This contingency perfectly explains the explanatory gap between mental and the physical realms. Nonetheless, the issue may cause a challenge for the causal efficacy of mental-qua-mental for PRM. In this framework, if a brain state causes a physical behavior in terms of its physical features, then the very physical state is intertwined with a phenomenal state. Therefore, the phenomenal state is inherently involved in the causal relation. However, as noted by Howell (2015), the dualist nature of PRM, aligned with the thesis of contingency, may lead to epiphenomenal outcomes, making mentalqua-mental causally inefficacious. The objection, briefly, goes as follows: imagine M₁ is a mental property that is intertwined with P_1 a physical property in the actual world (W_1). Given that P_1 is contingently intertwined with M_1 , it is possible to have an alternative world (W_2) in which the very same physical properties P_1 is intertwined with a different mental property M_2 . These two worlds are physically and causally indiscernible, consequently M_1 qua-mental is epiphenomenal. If it is conceivable and possible that the phenomenal base of P_1 , i.e., M_1 , could be replaced with M₂, while the causal profile of P₁, specifically the physical cause, remains unaltered, why should one believe that M_1 has causal efficacy in W_1 when it is possible to have a physically indiscernible World W₂? (Howell 2015: 26).

The alternative option is to assert that mental and physical properties are necessarily interconnected, thereby ruling out the mentioned possibility. Then dualist PRM can explain the

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efficacy of the mental qua-mental. However, this necessary tie eliminates the true conceivability and ultimately the possibility of zombie-world scenarios (Ibid, 37). This poses a problem for PRM because zombie-world scenarios have been used to reject physicalism and support PRM. If PRM excludes the possibility of zombie worlds, it still has to explain the seemingly true intuition behind its conceivability.

Facing these challenges, some proponents of PRM may find the alternative interpretation, i.e., idealism more defensible. In the next part, exploring ways idealist PRM can be formulated, I'll finally argue that this alternative is also unsatisfactory.

3. PRM: Idealism in Disguise

One approach to maintain PRM's monistic advantage is to interpret it as a form of pure panpsychism²³ or a version of idealism.²⁴ Within this framework, given that mental properties serve as the foundational grounds and realizers, they take, metaphysically speaking, precedence over what they ground or actualize. It is often posited that relata precede relations; particularly for certain types of relations, they are not just subsequent to but are ontologically nothing over and above their relata. As a result, this perspective implies that the fundamental essence of existence lies in the mental realm, and what is commonly referred to as 'physical' will ultimately find its explanation rooted in its mental foundation.

Idealist panpsychism proposes that fundamental reality consists entirely of consciousness, where everything ultimately reduces to or is realized by fundamentally conscious entities. Like other versions of panpsychism, idealist panpsychism holds substantial explanatory power, promising a comprehensive account of human consciousness through fundamental

²³ Strawson defines pure panpsychism as the perspective that "all being is experiential being" (Strawson 2006a: 222) which implies that there is no existence in the sense of non-experiential being. Pure-Pansychism, as articulated by Strawson, designates the panpsychist iteration of idealism, setting it apart from conventional idealism. He refrains from employing the term "idealism" due to its association with the belief that reality is exclusively comprised of ideas or experiences. This traditional idealism often implies that the physical world merely constitutes a collection of mental content or ideas, a perspective reminiscent of Berkeleyan thought. Moreover, it presupposes that the subject of experience possesses an ontological superiority over its experiences and is not itself a mere idea (Strawson 2006a: 229, footnote 95). In line with Strawson's perspective, the form of idealism elucidated here diverges from the standard conception of idealism. It also diverges from the anti-realist idealism, which posits that only the experiences of humans and similar minds hold existence. Much like all variations of panpsychism, the idealist PRM (Pure-Pansychism) advocates for an objective reality that exists metaphysically prior to and independently of human and other derivative experiences. For further elucidation of these terms, please refer to Chalmers (2021).
²⁴ Panpsychists who defend or are sympathetic to idealist panpsychism include Chalmers (1996, 2015, 2020), Strawson (2006b, 2006a, 2015, 2020), Goff (2017, 2019), Kastrup (2018), and Roelofs (2019), among others.

consciousness. However, what sets idealist panpsychism apart and makes it particularly appealing is that, unlike other varieties of panpsychism, it matches reductive physicalism in terms of ontological simplicity and elegance. In this interpretation of PRM, the physical structure of the world never holds fundamental status; rather, it derives from fundamental experiences, which maintain metaphysical and explanatory precedence. Furthermore, if this perspective proves successful, it appears to possess significant explanatory prowess, as fundamental experiences offer a reductive explanation for both physical structure and higher-order experiences.²⁵

The idealist interpretation of PRM can effectively fulfill one of the initially stated desiderata, making PRM as parsimonious as any other form of monism. However, this interpretation clearly falls short of meeting the second desideratum. Under this perspective, PRM aligns with a version of idealism, losing its distinctiveness as a proposal concerning the ontological status of phenomenal consciousness. While this concern may not be considered problematic for some, another significant and potentially insurmountable challenge confronts idealist panpsychists, particularly in the context of explaining the nature of spacetime structure. This challenge, that is discussed in detail by Aleksiev (2023) centers on the formidable task of elucidating how fundamental experiences serve as the metaphysical ground for physical structure given that these two are radically different in nature. The issue, coined the "missing entities" problem by Aleksiev (2021, 2023), shows that that idealist PRM encounters a parallel explanatory gap when it comes to explaining the physical part of the world, akin to the challenge that physicalism faces when explaining the mental part of the world. This issue represents the inverse of the hard problem of consciousness—a mirrored version of the challenge faced by idealist panpsychism (Aleksiev 2021: 195).²⁶

²⁵ See Goff (2021: 313) for further details.

²⁶ One may compare this problem to the combination of problem that is challenging for any versions of panpsychism including PRM. Assuming that building blocks of reality are conscious, the combination problem, roughly speaking, is that how such individual discrete units of consciousness attributed to fundamental particles or entities can come together to form a unified, coherent, and integrated conscious experience in complex organisms like humans. It raises questions about the nature of the interaction or integration between these elementary conscious elements and how they give rise to the rich and holistic subjective experiences we observe. See: Chalmers (2017). Similarly, one may argue that physical structures are somehow, in a way that is yet unknow to us, grounded in the micro phenomenal entities. Indeed, the combination problem is challenging for all panpsychists; nonetheless, idealists proponents of PRM should wrestle with more challenging difficulty given that physical reality is radically different from the mental constituents.

To solve the missing entities problem, the idealist panpsychist must demonstrate that there are no explanatory gaps between the fundamental experiences and physical structure. Otherwise, some physical entities would lack a metaphysical explanation and, thus, appear to go missing from our account of reality. Controversy exists over understanding physical reality in this context. If physical properties are seen as purely mathematical or abstract, bridging the gap is less problematic. However, many view physical science as committed to an irreducibly concrete spatiotemporal structure. If space-time is concrete, it's not clear that it can be reduced to or grounded in mental experiences.²⁷ Idealist panpsychists have not yet provided a comprehensive explanation for how spacetime could fundamentally be experiential. As Aleksiev (2023) extensively discusses the challenges and intricacies involved in conceiving physical spacetime as experiential. This includes the formidable task of reconciling an experiential structure that aligns with the spacetime interval equation (Aleksiev 2023: 12). However, delving into this topic indepth is beyond the scope of the current discussion.

The other candidate²⁸ for concrete physical properties may be causal powers or dispositional properties. Some think that dispositions are not merely relations between categorical relata but are somehow irreducibly causal powers. Given that dispositional properties are concrete causal powers, one approach to the idealist PRM is the phenomenal powers view in which all microphysical dispositions and laws are grounded in the distribution of phenomenal states and the phenomenal powers that they ground. This would be a special power version of idealism according to which phenomenal states are metaphysically ground certain causal powers or dispositions. In this view, phenomenal properties are intrinsically powerful, producing effects based on their intrinsic character. H.H. Mørch (2017, 2020a, 2020b), for instance, argues that phenomenal properties are true dispositional properties with causal efficacy, as the only fundamentally dispositional properties. Pain and pleasure, for instance, have distinct dispositional effects: pain motivates avoidance, while pleasure motivates pursuit, understood as mental events (Mørch 2017: 302-3).

 ²⁷ Aleksiev (2021), Chalmers (2020, pp. 361–362, 365), Goff (2017, pp. 181–186), and Strawson (2020, p. 330) concede that grappling with the concept of spacetime may pose serious challenges for idealist panpsychists.
 ²⁸ There might be other candidates for concrete physical reality as well.

The phenomenal powers view is an intriguing version of Idealist PRM, positing that properties are primarily dispositional and do not require categorical grounds. Dispositions are seen as fundamental and irreducible, similar to non-Humean causal powers, ²⁹ but in this view, true dispositional properties are phenomenal. Thus, phenomenal states like pain and pleasure have causal powers that inherently generate associated motivations, manifesting under specific circumstances. However, the view— particularly the version of it defended by Mørch— faces significant challenges that undermine its strength. Since there is a necessary connection between a disposition and its manifestation under certain conditions, the phenomenal powers view may imply the phenomenal state without the power is metaphysically impossible and not truly conceivable, while unlike the phenomenal powers view, there is no inherent and necessary link between mental states and the motivations that are typically associated with them. One might, for instance, feel pain without being motivated to avoid it; or it is possible that one might feel pain and still try to pursue it. If such cases are possible, which intuitively seem so to be, then the phenomenal property does not inherently possess the dispositional power associated with it. The other problem for the phenomenal powers view is its vulnerability to the transparency of phenomenal states. In a critique of physicalism and identity theory, Philip Goff (2017, 2020) argues that phenomenal states, as opposed to brain states, are introspectively transparent to their subjects, their correlated brain states are not. For instance, when I feel pain, this feeling is apparently transparent to me, while the brain state correlated with this feeling at best would be known by an expert neuroscientist who can scan my brain (Goff 2017: 107). Let's assume, as the phenomenal powers view holds, phenomenal state essentially possesses a certain causal power. Given the transparency of the phenomenal states to its subject, the causal profile of such phenomenal states should be transparent to the bearer as well via introspection. Nevertheless, such dispositional powers are not transparently apparent to their bearer. In other words, introspection does not reveal the causal profile of their phenomenal states (Goff 2020: 1090).

²⁹ In philosophical discourse, dispositions are often analyzed through the lens of powers and their necessary connection to manifestation. A disposition, by definition, encompasses the inherent power to bring about a specific manifestation under certain conditions. This necessary connection implies that if an object possesses a disposition, it must exhibit corresponding behaviors or properties when the appropriate circumstances arise. For instance, a glass described as fragile must inevitably break when struck, illustrating the power inherent in its fragility. Similarly, substances like opioids induce drowsiness upon ingestion due to their inherent powers that causally contribute to this effect. This perspective contrasts with the Humean view that properties are merely passive qualities detached from the behaviors they produce (for detail see Bird, 2007, Ch. 3).

4. Dual-Aspect PRM

It seems that PRM grapples with a dilemma when it comes to comprehending the mental/physical distinction. On one hand, adopting an ontological dualist perspective within PRM seems unattractive as it undermines the doctrine of kind monism. On the other hand, the inevitable conceptual distinction between the mental and the physical appears to create an insurmountable gap, diminishing the explanatory power of any idealist version of PRM.

PRM, as introduced earlier, aims to establish a unique middle-ground position that leverages the strengths of traditional physicalism and dualism while effectively addressing and overcoming their respective weaknesses. Consequently, PRM is predicated on the mental-physical dichotomy, dispelling the notion that this distinction is purely epistemic and devoid of ontological grounding. However, it is essential to avoid reducing this distinction to a mere ontological separation, treating the mental and the physical as entirely separate entities or things. The key takeaway from our exploration thus far is that a comprehensive account of PRM must harmoniously incorporate the following principles to adequately fulfill the outlined desiderata noted at the outset: (i) the mental-physical distinction is not *merely* conceptual and linguistic but has a genuine metaphysical foundation, and (ii) this dichotomy does not necessitate the existence of two entirely distinct entities. In the following paragraphs, I endeavor to defend an alternative approach that can harmonize these two principles.

Given PRM's foundation on the mental and physical distinction, I argue that it is both possible and plausible to uphold this distinction without embracing any form of ontological dualism. The alternative framework I defend aligns with a version of dual-aspect monism, where the mental/physical distinction is interpreted as pertaining to different aspects of a singular entity or property.³⁰ According to this monistic view, there is only one type of entity that is neither exclusively physical nor exclusively mental; instead, it encompasses both mental and physical aspects. In other words, the fundamental properties/objects that constitute the world have both mental and physical aspects without being ontologically divided into two parts.

Dual-aspect monism, as a version of panpsychism, has a rich historical background within Western philosophy. As noted by Skrbina (2014), philosophers like Spinoza, Schopenhauer,

³⁰ The notion of entity may refer to any ontological object including property, events, states of affairs, or even substances.

Fechner, and possibly Whitehead, among many others, have defended a kind of dual-aspect approach to the mind-body problem. Despite its historical heritage, this view has not been meticulously discussed in contemporary literature as a serious alternative to theories like property dualism or neutral monism. For instance, Thomas Nagel often uses this terminology, but his view frequently oscillates among property dualism (Nagel, 1986), neutral monism (Nagel, 2002), or even panpsychism (Nagel, 2012).³¹ A version of this theory is also seen in Davidson's account of anomalous monism (1970), where property dualism exists only at the conceptual level, not at the ontological one. A very recent and clear defense of this view is provided by Skrbina (2009, 2014). He terms the view 'hylonoism' (ibid, p. 239), describing material reality ('hyle') as coexisting at all levels with a mental ('noetic') dimension, which is clearly a panpsychist defense of the dual-aspect view. Despite some differences, the proposal defended in this paper is sympathetic to Skrbina's account of dual-aspect monism, where aspects can maintain dualistic intuitions within the framework of ontological monism. However, what is absent in Skrbina's analysis is a philosophical illumination of what aspects really are. If they are not ontological entities, then how should we understand them? And if they are epistemic or linguistic concepts, why is the view different from neutral monism? More importantly, why is the concrete world captured by two distinct, non-reducible, and parallel aspects? These are the questions taken up seriously in this paper, and I hope the definition of aspect outlined here can consistently address these questions.

To elucidate my perspective, it is necessary to define the concept of "aspect" within this context. Let's begin by delineating what an aspect is not. The core idea here is that an aspect should not be regarded as a thing or an entity; otherwise, the multiplicity of aspects would imply a plurality in ontological categories. Therefore, whatever that may connotate the concept of a 'thing' in an ontological sense and can be reified in a distinct ontological category is not an aspect. In this manner, it is incorrect to treat an aspect as a substance, substratum, bare particular, or even assembles of properties. For the same reasons, aspects are different from properties, whether viewed as first-order or second-order. Properties are frequently described as universals, tropes, or in terms of sets. Regardless of how properties are defined, aspects cannot be equated with properties. Some philosophers, like John Heil (2021), define properties as modes of

³¹ See Skrbina (2014: 229 & 236) for details.

substances. According to Heil, properties as modes are not constituents of substances, nor are they attached to substances in any literal sense; instead, they are modifications or ways in which substances exist. Being a substance entails existing in various modes, and being a mode means being a particular way a substance exists. An electron, for instance, exists in various modes, and describing these modes describes the electron itself (Heil 2021: 25). In this view, properties (modes) and substances do not possess independent ontological status but belong to distinct categories. Consequently, aspects cannot be considered as modes in this context either. Similarly, it is incorrect to regard aspects as dependent, parasitic, derivative or non-fundamental entities. It is also wrong to identify aspects as more complicated entities like events, facts, states of affairs etc. Another important caveat to mention is that aspects should not be equated with the ways of being advocated by ontological pluralists. Ontological pluralism asserts that existence is not a single, uniform concept, but rather encompasses various modes or ways of being.³² However, having an aspect does not imply that the object enjoys a different mode of existence. There are two primary reasons for this: first, adopting the concept of aspects does not necessarily require metaphysical commitments to controversial views such as ontological pluralism. Second, and more importantly, ontological pluralism introduces new ontological categories for each way of being, which complicates the benign ontological role that aspects are supposed to fulfill.³³ Therefore, defining aspects in terms of ways of being, as ontological pluralists advocate, contrasts with the simpler metaphysical role that aspects are intended to play.

Having outlined what an aspect is not, we can now turn our attention to what an aspect actually is. I will begin by defining aspect and then proceed to clarify this definition. To do this, let's rely on a very generic concept of realism about the concrete world we live in.³⁴ Realism implies that there exist things³⁵—the real building blocks of this world, including objects, substances, properties, etc. (or whatever your ontological theory posits as the building blocks of the universe)—independent of anyone's beliefs, linguistic practices, conceptual schemes, and so on. Proponents of physicalism, dualism, panpsychism, and even idealism (as described in the previous section) assume this concept of realism about the concrete world. This realism about

³² See: Turner (2010) and McDaniel (2017).

³³ For further details, see McDaniel (2017, Chapter 4) and Hashemi & Hosseni (2023).

³⁴ See Miller (2019).

³⁵ These things may be fundamental discrete particles or continuous fields. Or perhaps 'there is' if only one thing (as token monism holds) really exists.

objects implies realism about the essence of the objects, and this essence determines how the object has to be truly conceived and described, and aspects are the true conceptions and accurate descriptions of this essence. More precisely, an aspect of an object is defined as follows:

Def: an aspect of an object is defined as a manner the essence of the very same object is genuinely conceived and accurately described.

Given the emphasis on the concept of essence in the definition of aspect advocated here, it is necessary to clarify the meaning of "essence" in this context. Let's consider that 'thing', as any sort of entity whatever. To be a thing means to have an essence, and this essence reveals what the thing is. As E. J. Lowe (2018) puts it, the essence of a thing, "in the 'proper original signification' of the word, is 'the very being of any thing, whereby it is, what it is'. In short, the essence of something, X, is what X is, or what it is to be X. In another locution, X's essence is the very identity of X - a locution that I am happy to adopt, provided that it is clearly understood that to speak of something's 'identity' in this sense is quite different from speaking of the identity relation in which it necessarily stands to itself and to no other thing" (Lowe 2018: 3).

According to this definition of essence, it is reasonable to hold that being an entity entails having an essence. However, this essence does not introduce an additional entity into one's ontology. It is wrong and incoherent to assume that an essence of a(n) thing/entity is a further thing/entity in the world. If the essence of a thing were a distinct further entity, then there would need to be a third entity as the essence of the second entity, and this issue ends up with an infinite regress that precludes the existence of anything. To exist means to have an essence; if this essence depends on the second essence for its existence, and this series goes on ad infinitum, then the existence of the very first thing also does not take place. Thus, it is wrong to assume that an essence is an entity. This issue, however, does not diminish the reality of essence. So, the essence in this picture is not merely an epistemic notion; rather it is also metaphysical, and this metaphysical essence of an object implies the reality of its aspect(s) too, i.e., how the object is truly conceived and accurately described. Since the essences are real, so are the aspect(s). The reality of the essence, nonetheless, similar to the reality of the essence, does not add a further entity to the world. The reality of an aspect means it accurately represents what the object really is.

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Although in this definition, an aspect has an epistemic and linguistic nature, it does not mean that aspects are *merely* conceptual and linguistic. If aspects are *merely* conceptual and linguistic, aspects are not epistemically reliable because they are imposed by us (due to our conceptual and/or linguistic incapacities) upon the object. Rather, in the idea defended in this paper, the converse is true: aspects are imposed by the essence of the object upon our conception and description. Recall the notion of generic realism clarified earlier: given the reality of the object, it is possible to genuinely conceive of and accurately describe it. ' By 'genuinely conceived,' I mean a conception that accurately captures the essence as it truly is, as opposed to a 'non-genuine conception,' which imposes ideas shaped by linguistic constructs or fabricated mental imaginings. So, aspects are real and epistemically reliable, this means that they represent what the objects truly are. Hence, my interpretation of an aspect contrasts with the anti-realist account, in which aspects might be seen as perspectives or lenses through which we project our conceptions onto objects.

In my view the anti-realist interpretation of aspects, as found in current literature, aligns more closely with neutral monism than with PRM. For example, an anti-realist interpretation of aspects has been recently advocated by Benovsky (2016, 2018). According to him, the physical and mental aspects represent distinct ways or perspectives through which properties become apparent to us. He argues that embracing a realist conception of aspects would lead to their reification, essentially turning the dual-aspect view into a form of property dualism (Benovsky 2018: 17). To avoid this consequence, he leans towards adopting neutral monism (Ibid, 17).³⁶

³⁶ It is worth noting that 'neutral monism' has been interpreted in various ways, and it goes beyond the scope of this paper to explore these interpretations in depth (for details, see Stubenberg and Wishon 2023). One interpretation, which I call the anti-realist account of aspects, suggests that the nature of fundamental reality (something akin to Kantian noumena) is epistemically unknown, making it neither mental nor physical. Instead, the mental and the physical aspects are conceptual guises imposed by our minds or language on this unknown entity; the true nature of reality contains none of these elements inherently. Another interpretation adopts a more realist attitude, positing that neutral monism entails an unknown third entity that gives rise to both the physical and the mental. In this view, the mental and the physical are real but non-fundamental or maybe emergent entities, while the underlying reality is neither. Both accounts of neutral monism seem flawed to me. The first view renders the nature of concrete reality enigmatic and mysterious, failing to explain why we are epistemically blind to this underlying reality. The second view lacks elegance and parsimony, disrupting the harmony of nature. How can something that is neither mental nor physical give rise to both in the non-fundamental realm of reality? It is too complex to grasp. So, it is incorrect to understand dual-aspect monism as neutral monism in either of these ways. Rather, I advocate for a version of panpsychism in which the nature of the underlying reality is both mental and physical. This perspective enables a true and accurate comprehension and description of reality while maintaining harmony in nature.

In contrast to the anti-realist perspective, this paper defends a realist interpretation of aspects. In this view, an aspect of an object represents how the essence of that very object is genuinely conceived and accurately described. Consequently, if the physical and the mental are regarded as aspects of a unified property, it implies that both of them serve as distinct ways to genuinely conceive and accurately describe the essence of that same object. So, I believe that proponents of PRM should contemplate embracing this approach to fully meet the criteria outlined earlier.

Given this definition of the aspect, an important question at hand is how a single property, possessing only one essence, is revealed through different aspects. My answer is that the duality of the aspects is rooted in nature or the essence of the property that PRM introduces. Metaphysically, the essence of property in PRM radically differs from how physicalism and idealism believe about the essence of a property. For physicalists, the essence of a property is exclusively physical, while for idealism, the essence is purely mental. However, for PRM the essence of a property is neither solely physical nor solely mental but rather physio-mental, or phental.³⁷ This implies that the property itself is something that validates two real and accurate descriptions of the property, however, each of this description is incomplete and partial, and they both together truly and accurately represent a complete description of reality.

To further illustration, let's consider the duck-rabbit example put forth by Jastrow/Wittgenstein.³⁸ In line with the dual-aspect monism proposed here, we can understand this example as involving a single object, which we'll refer to as 'duckrabbit,' that possesses two distinct aspects: the duck-wise aspect and the rabbit-wise aspect. This unique essence of the object determines two genuine conceptions and accurate descriptions of the same object. However, it's important to note that the object, in its essence, is neither solely a rabbit nor solely a duck; rather, it is a duckrabbit. This analogy may appear deficient if one views the rabbit and the duck as completely characterizing the same thing under different guises. ³⁹ To clarify, the rabbit guise represents one aspect of the object, and the duck guise represents another. Although these two guises are epistemically disconnected, each is partial and does not fully reveal the nature of the object. The object is neither solely a duck nor solely a rabbit; it is a duck-rabbit.⁴⁰

³⁷ I borrow this term from Benovsky (2016), although we have different definitions for it.

³⁸ See: (Wittgenstein 1953:194).

³⁹ I am thankful to the reviewer for this notice.

⁴⁰ A better but more technical example can be seen in (Skrbina 2014: 241) based on the concept of the space-timequalia complex within Giulio Tononi's Integrated Information Theory (IIT). The space-time-qualia complex is a

This analogy simplifies the idea but may not entirely represent dual-aspect monism. In this picture, viewing the image as a rabbit allows one to see the whole image and eventually infer the duck a priori (and vice versa). However, in the dual-aspect view defended here, there is a conceptual barrier between these two aspects, and one cannot infer one aspect from the other a priori. Similarly, within the framework of PRM, a proponent can maintain that there is a single property that is genuinely conceived and truly described both in physically and in mentally concepts and terms.

5. Main Takeaways

By embracing this dual-aspect monism, we can reconcile the physical/mental dichotomy without resorting to the postulation of distinct and separate mental and physical properties. Instead, we recognize that there is a single property with two aspects, enabling us to capture the multifaceted nature of properties and their integration within the causal network of reality. Thus, in light of the ontological framework of dual-aspect monism, PRM can satisfactorily fulfill the desiderata noted at the outset. The view is fully committed to the thesis of kind monism. In addition, PRM can offer a distinctive and novel proposal regarding the status of consciousness. The Dual-Aspect version of PRM (DPRM) is an elegant and ontologically parsimonious theory, which is preferable to the dualist PRM described earlier. Furthermore, DPRM avoids the interaction problem at any level, as this problem arises when there are two distinct entities that are radically different in nature.

Additionally, DPRM can effectively address the objections raised by Howell (2015). According to DPRM, when a property, denoted as E, causally influences another property, there exists a uniformity in the causal relationship because both entities belong to the same kind. Importantly, it is the property itself that plays the causal role, rather than its aspects. In other words, neither the physical nor the mental independently cause anything; instead, it is the property itself that is causally efficacious. Our comprehension of this causal efficacy, however, is

conceptual framework that integrates the physical and mental aspects of reality into a unified whole. It combines the physical dimensions of space-time, which include the three spatial dimensions and the temporal dimension, with qualia, the subjective, qualitative aspects of conscious experiences. This framework suggests that reality encompasses both physical aspects and conscious experiences, creating an interconnected system. By linking these dimensions, the space-time-qualia complex provides a holistic understanding of existence, aligning with theories like IIT, which posit that consciousness is fundamental aspect of reality as physical ones such as mass and energy (Ibid 241)

acquired through the aspectual descriptions available to us. Given this ability, DPRM can properly address Howell's objections. The inconsistency between the thesis of contingency and PRM arises from scenarios involving swapped-and-absence. However, for DPRM, the thesis of contingency does not entail such scenarios because aspects, by definition, are inseparable from the object. In the framework of DPRM, possessing a property implies having both aspects inherently. Consequently, DPRM can consistently embrace the thesis of contingency and maintain that the same causes may lead to different effects in different worlds, as the causes themselves do not necessitate specific effects. In other words, within DPRM, the aspects of a property are inseparable, and they do not exist independently or in isolation. This effectively addresses Howell's concerns regarding the swapped-and-absence scenarios, as DPRM posits a unified property with both aspects always present. Therefore, DPRM offers a coherent framework that accommodates the coexistence of the thesis of contingency and the integration of mentality into the causal network of reality.⁴¹

DPRM is also compatible with the thesis of necessitarianism without precluding the conceivability of zombie-world scenarios. If necessitarianism holds true, a zombie-world would be metaphysically impossible. However, within DPRM, one can still conceive coherently of a zombie-world. This is because the actual monistic world can be described in two distinct ways: physically and mentally. This is akin to the example of the duck-rabbit object, where we can conceive of the object as either entirely a rabbit or entirely a duck, even though the object can never be exclusively one or the other. The capacity to truly conceive different scenarios is rooted in the nature of the properties that compose the world. As these properties can be described using two different conceptual frameworks, we can sensibly conceive of one aspect without the other.

Now, let's compare DPRM with the idealist PRM. DPRM also stands out as a more preferable option when contrasted with the previously described idealist interpretation. To recall the primary challenge encountered by the idealist PRM: it centers on the existence of an explanatory gap between fundamental experiences and physical structure. Essentially, the "missing entities" problem mirrors the hard problem of consciousness in reverse—a flipped version of the challenge faced by idealist panpsychism. However, this challenge doesn't arise

⁴¹ For details on how DPRM can accommodate the exclusion problem, see Hashemi (2024).

within DPRM because this perspective posits a conceptual barrier between the mental and physical aspects, preventing one from being explained in terms of the other.

Moreover, DPRM successfully circumvents the challenges associated with the phenomenal powers view. In contrast to the phenomenal powers view, as mentioned earlier, DPRM aligns with the thesis of contingency, allowing it to reject any inherent connection between a property and its causal manifestations. DPRM also offers a coherent explanation for the transparency of phenomenal states. Unlike brain states, which are not introspectively transparent to their subjects, phenomenal states are readily accessible to introspection. For instance, when I experience pain, this sensation is transparent to me, while the correlated brain state would at best be discernible to a specialized neuroscientist conducting brain scans. This is because aspects in DPRM are distinct and self-contained in concept, and there is a conceptual barrier between two aspects; thus, knowing one aspect of reality does not entail knowledge of the other aspect. Therefore, DPRM posits that fundamental reality has both physical and phenomenal aspects, suggesting that all facets of reality can be detected in parallel through either scientific means or introspective awareness. While the physical aspect is detectable through scientific investigation, the phenomenal aspect remains empirically hidden and is privately accessible only to conscious subjects. This implies that a comprehensive physical theory of the universe can only unveil the physical aspects of the world. What physics imparts to us is accessible through descriptions, while another aspect of reality is apprehended through introspective examination and first-person acquaintance, involving phenomenological investigations.

6. Concluding Remarks

This paper advocates for understanding PRM within a dual-aspect monism framework, where the mental and physical are viewed as two authentic aspects of a single entity. This dual-aspect interpretation elucidates the mental-physical dichotomy in a realist sense while upholding the doctrine of kind monism. It aligns with Russellian panpsychism's core tenets, i.e., i. acknowledging the structural and non-structural dichotomy, ii. holding that physical sciences reveal structural behaviors while the non-structural remains inscrutable, and iii. asserting that the phenomenal nature of this inscrutable aspect conforms to panpsychism. By adhering to these principles, the dual-aspect view extends PRM coherently, significantly advancing the metaphysical discourse on consciousness. However, akin to other forms of reductive

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panpsychism, dual-aspect PRM faces the combination problem — how fundamental microphenomenal entities give rise to unified macro-phenomenal consciousness experienced by humans. Addressing this challenge is crucial for all reductive forms of panpsychism, including PRM, and I hope further investigation into this issue will yield new insights from a dual-aspect monistic perspective.

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